Using the Safety Perception Survey to Assess Your Organization's Safety Culture

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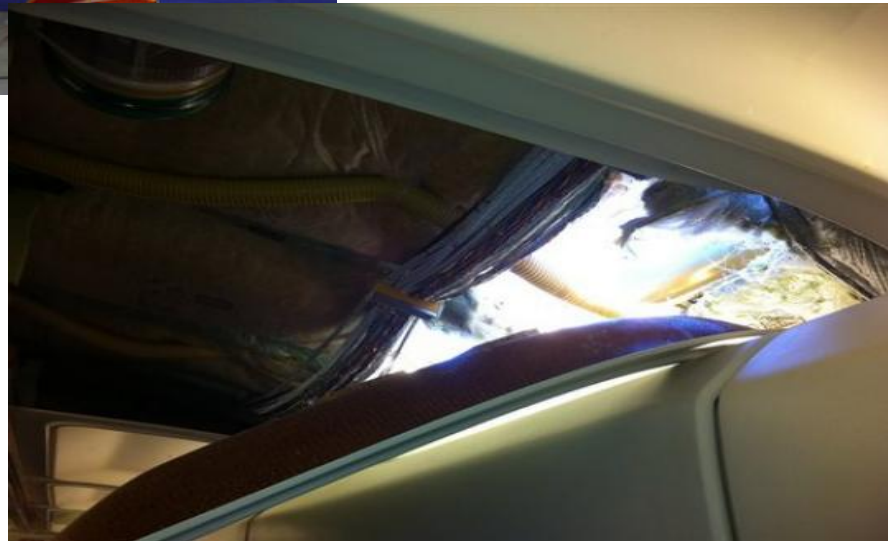DuPont Sustainable Solutions

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The miracles of science™

Agenda

- **Safety Contact**

- **Grounding**

  - **Definition of Culture**

  - **12 Elements**

  - **Bradley Curve**

- **Safety Perception Survey details (Mike Keesey)**

- **How is it used and what can we learn? (Bob Krzywicki)**

- **Q&A**

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Safety Contact - Listen to the Safety Instructions!

So what do we mean by "Safety Culture?"

"The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of an organization's health and safety management." *

In layperson's terms, it defines what people do when no one is watching.

* HSC (HEALTH AND SAFETY COMMISSION), 1993. Third report: organizing for safety. ACSNI Study Group on Human Factors. HMSO, London.

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To analyze client systems, DuPont breaks its world-class reference model into 3 major focus areas . . .

What does management do to lead employees to safety excellence?

Leadership

- Management Commitment
- Policies & Principles
- Goals, Objectives, & Plans
- Procedures & Performance Standards

What are the organizational structures that enable the pursuit of safety excellence?

What actions does the organization take on a regular basis to increase safety performance?

Structure

- Line Management Accountability & Responsibility
- Safety Personnel
- Integrated Organization Structure
- Motivation & Awareness

Processes & Actions

- Effective Communication
- Training & Development
- Incident Investigation
- Observations & Audits

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The DuPont Bradley Curve helps you understand where you are and where you want to go

Reactive
- Safety by Natural Instinct
- Compliance is the Goal
- Delegated to Safety Manager
- Lack of Management Involvement

Dependent
- Supervisor Control, Emphasis, and Goals
- Management Commitment
- Condition of Employment
- Fear/Discipline
- Rules/Procedures
- Value All People
- Training

Independent
- Personal Knowledge, Commitment, & Standards
- Internalization
- Personal Value
- Care for Self
- Practice, Habits
- Individual Recognition

Interdependent
- Help Others Conform
- Others' Keeper
- Networking Contributor
- Care for Others
- Organizational Pride

Safety Performance Injury Rate

Reactive

Dependent

Independent

Interdependent

Safety Culture

Weaker Safety Culture   *Stronger Safety Culture*

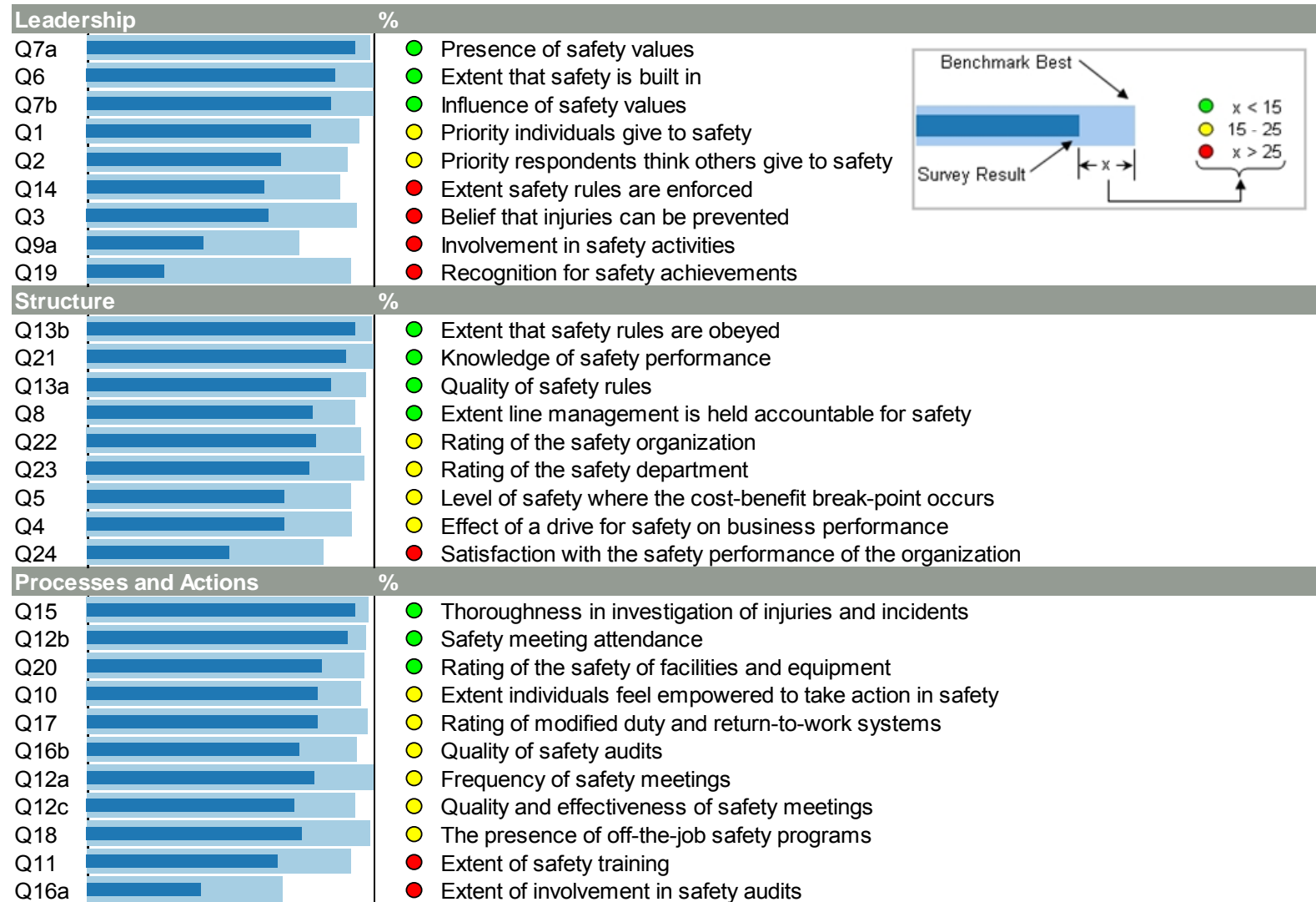**DuPont Sustainable Solutions**

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Measuring Culture with the DuPont Safety Perception Survey

➢ **What is the survey tool?**

➢ **What does the survey tool reveal?**

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Overall Survey Results vs. Benchmark Best, sorted by strength

Leadership	%	
Q7a	🟢	Presence of safety values
Q6	🟢	Extent that safety is built in
Q7b	🟢	Influence of safety values
Q1	🟡	Priority individuals give to safety
Q2	🟡	Priority respondents think others give to safety
Q14	🔴	Extent safety rules are enforced
Q3	🔴	Belief that injuries can be prevented
Q9a	🔴	Involvement in safety activities
Q19	🔴	Recognition for safety achievements

Structure	%	
Q13b	🟢	Extent that safety rules are obeyed
Q21	🟢	Knowledge of safety performance
Q13a	🟢	Quality of safety rules
Q8	🟢	Extent line management is held accountable for safety
Q22	🟡	Rating of the safety organization
Q23	🟡	Rating of the safety department
Q5	🟡	Level of safety where the cost-benefit break-point occurs
Q4	🟡	Effect of a drive for safety on business performance
Q24	🔴	Satisfaction with the safety performance of the organization

Processes and Actions	%	
Q15	🟢	Thoroughness in investigation of injuries and incidents
Q12b	🟢	Safety meeting attendance
Q20	🟢	Rating of the safety of facilities and equipment
Q10	🟡	Extent individuals feel empowered to take action in safety
Q17	🟡	Rating of modified duty and return-to-work systems
Q16b	🟡	Quality of safety audits
Q12a	🟡	Frequency of safety meetings
Q12c	🟡	Quality and effectiveness of safety meetings
Q18	🟡	The presence of off-the-job safety programs
Q11	🔴	Extent of safety training
Q16a	🔴	Extent of involvement in safety audits

Benchmark Best

Survey Result

🟢 x < 15
🟡 15 - 25
🔴 x > 25

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Benchmark Best

Our Benchmark Best sites are manufacturing sites in the oil, textile, electrical, and chemical industries. To be considered Benchmark Best, a site must meet the following size and safety performance criteria:

- $\geq$ 160 employees at the location and had a statistically significant survey response rate

- No employee or contractor fatalities in the last 5 years

- 5 year employee LWIFR $\leq$ 0.25 with no single year employee LWIFR > 0.50. LWIFR is based on 200,000 hours.

- 5 year employee TRIFR $\leq$ 1.00. TRIFR is based on 200,000 hours.

On-site assessments by DuPont Sustainable Solutions are required to verify that their Safety Leadership, Structure, and Processes and Actions are World Class.

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The results can be compared by Job Category

Job Category Comparison: Leadership

Priority individuals give to safety Q1
Priority respondents think others give to safety Q2
Belief that injuries can be prevented Q3
Extent that safety is built in Q6
Presence of safety values Q7a
Influence of safety values Q7b
Involvement in safety activities Q9a
Extent safety rules are enforced Q14
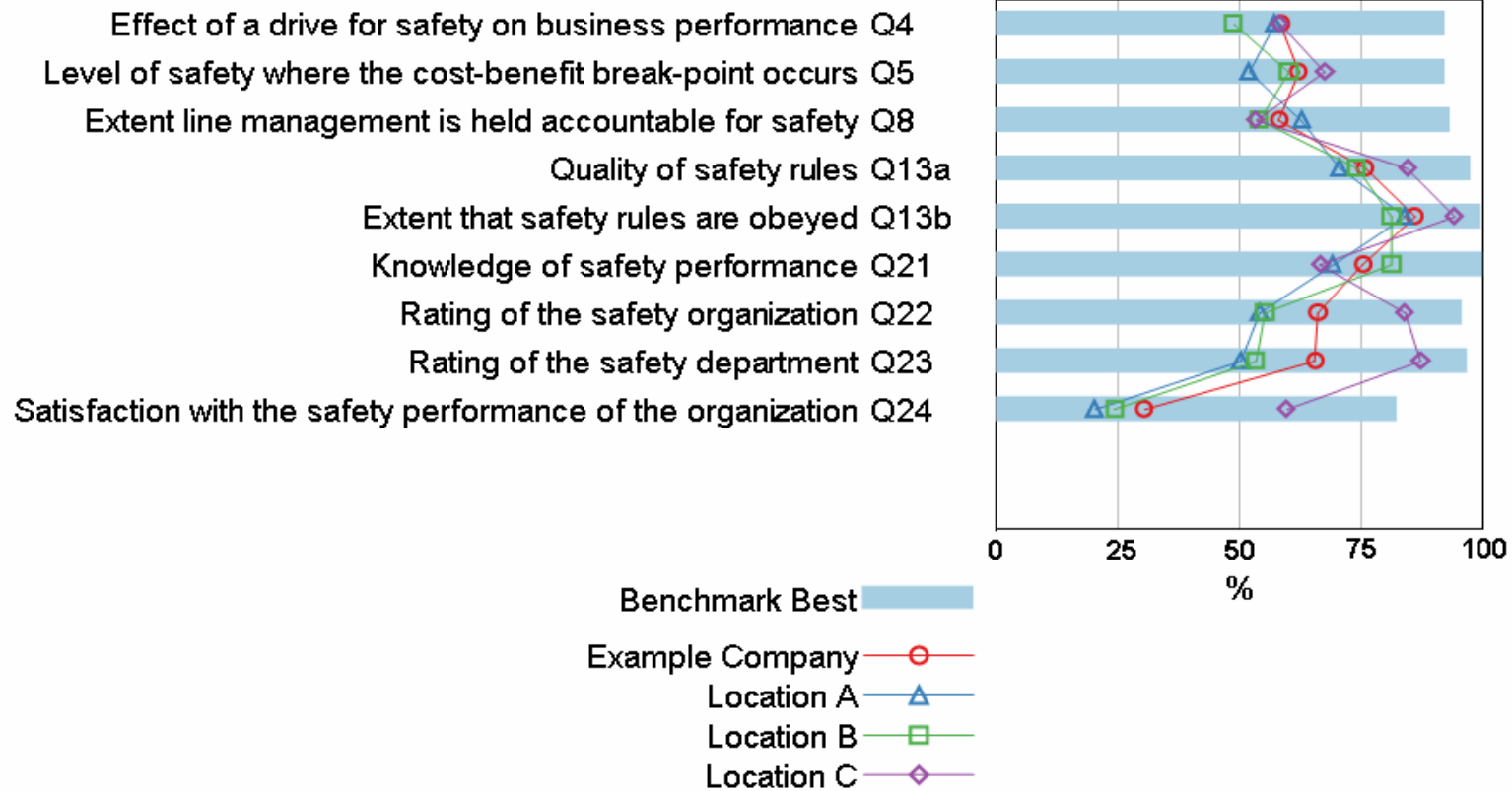Recognition for safety achievements Q19
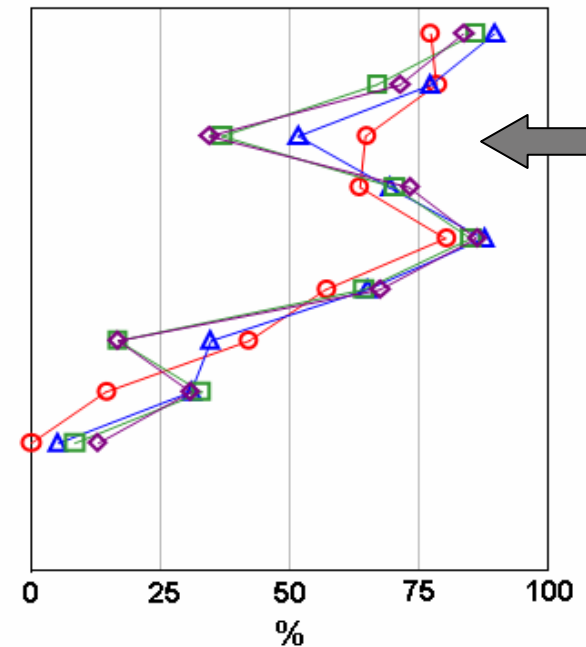
Managers ○
Supervisors △
Hourly Workers □
Professionals ◇

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And by Location, Business Unit, or Function
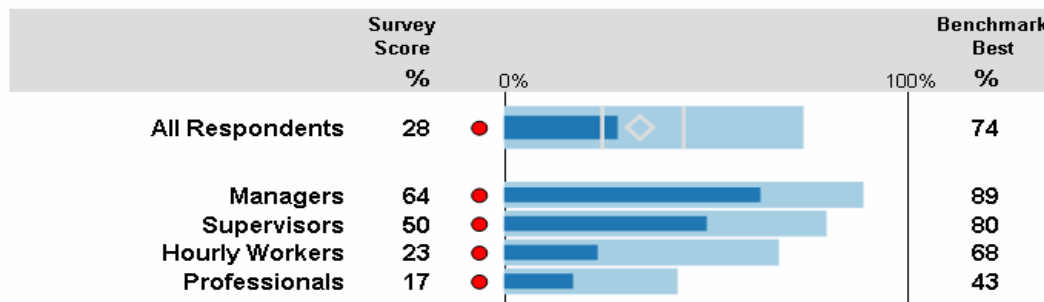

Survey Comparison by Location: Structure

Detailed results and comparison to Benchmark Best for each question

Question 9a: In the past year, how active were you in safety improvement activities such as serving on a committee, participating in an incident investigation, or helping put together safety rules?

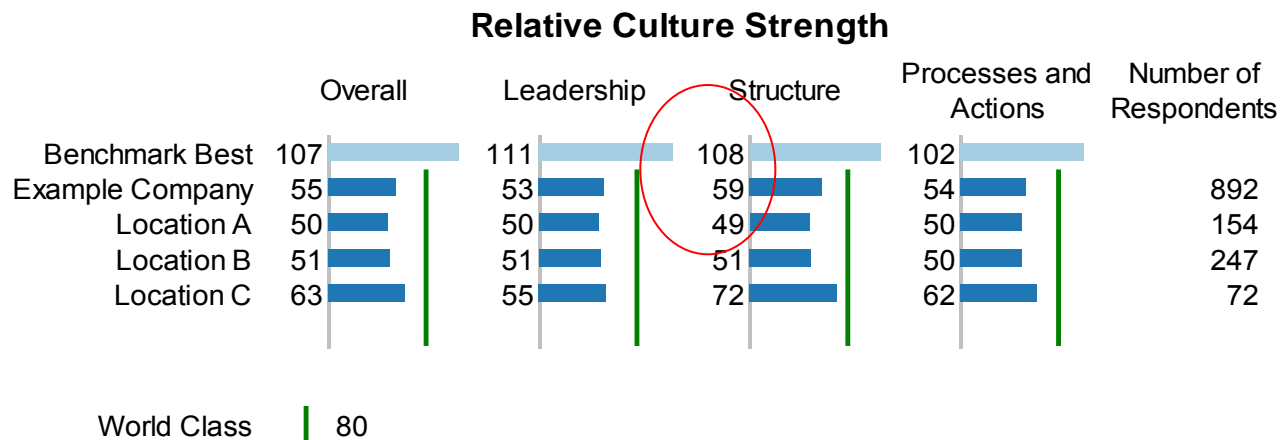**Percent of respondents who say they are deeply or quite involved in safety activities:**

	Survey Score %		Benchmark Best %
All Respondents	28	●	74
Managers	64	●	89
Supervisors	50	●	80
Hourly Workers	23	●	68
Professionals	17	●	43

All Responses

Percent of Respondents:	Managers %	Supervisors %	Hourly Workers %	Professionals %	All Respondents %
Deeply <	9	0	3	10	6
Quite <	55	50	21	7	22
Moderately	18	33	28	38	31
Not Very Much	18	0	31	34	28
Not At All	0	17	18	10	13
Count of Responses Above:	11	6	39	29	85

< Indicates what response or responses are grouped together for Benchmarking.

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Survey Comparison

Relative Culture Strength

	Overall	Leadership	Structure	Processes and Actions	Number of Respondents
Benchmark Best	107	111	108	102	
Example Company	55	53	59	54	892
Location A	50	50	49	50	154
Location B	51	51	51	50	247
Location C	63	55	72	62	72

World Class   80

Overall Relative Culture Strength is a proprietary score that includes all of the questions from the Safety Perception Survey. The Leadership, Structure, and Processes and Actions scores are based on questions in those categories.

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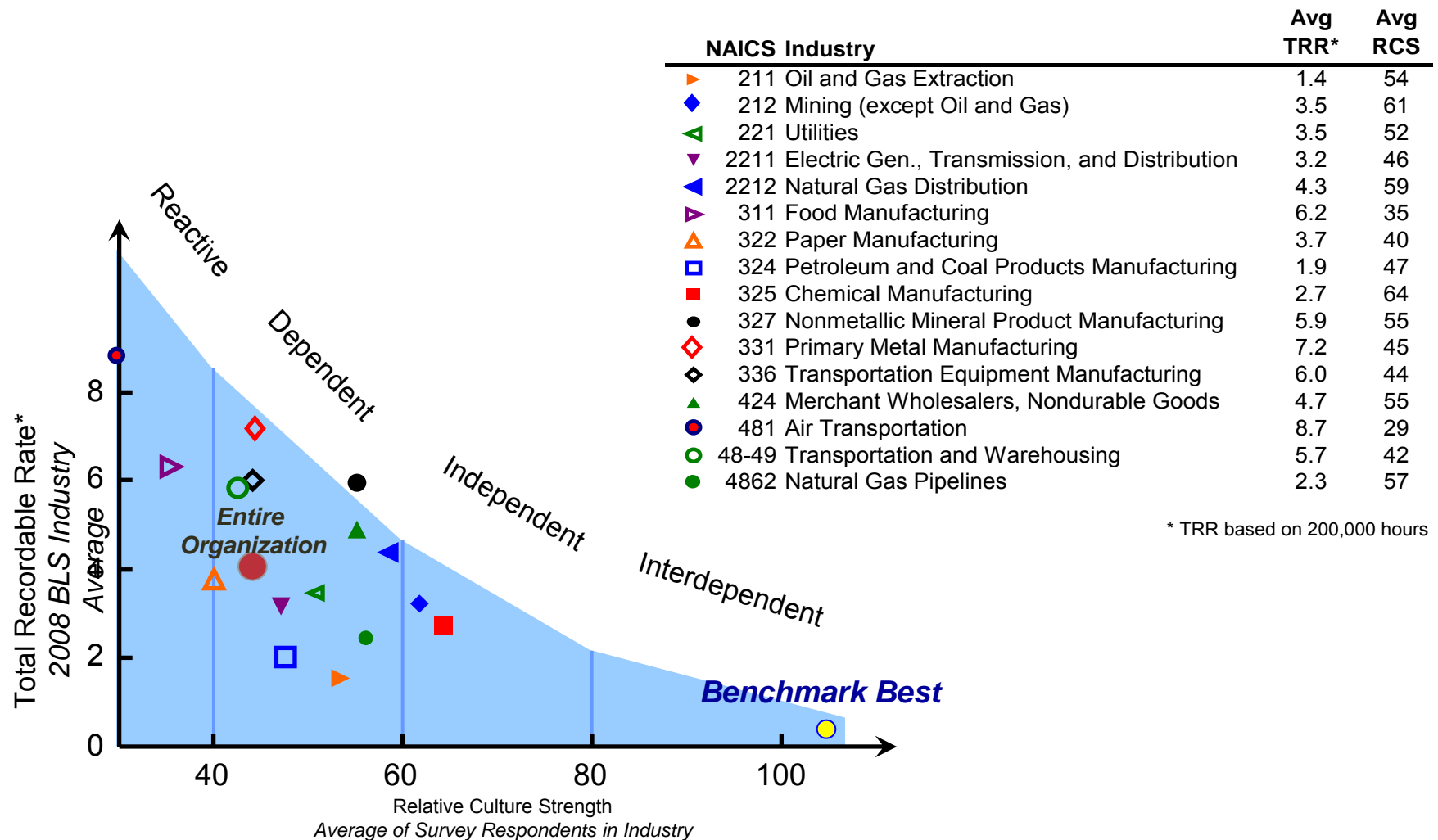
Our Database of Survey Results

- **693,000+ Survey Responses**

- **51 Industries**
  broad range including: energy, food, paper, chemicals, manufacturing and transportation

- **41 Countries**

- **3,450 locations**

- **Benchmarks updated annually**

- **11+ years of Data**

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Compare results to Industry Average

	NAICS	Industry	Avg TRR*	Avg RCS
▶	211	Oil and Gas Extraction	1.4	54
◆	212	Mining (except Oil and Gas)	3.5	61
◁	221	Utilities	3.5	52
▼	2211	Electric Gen., Transmission, and Distribution	3.2	46
◀	2212	Natural Gas Distribution	4.3	59
▷	311	Food Manufacturing	6.2	35
△	322	Paper Manufacturing	3.7	40
□	324	Petroleum and Coal Products Manufacturing	1.9	47
■	325	Chemical Manufacturing	2.7	64
●	327	Nonmetallic Mineral Product Manufacturing	5.9	55
◇	331	Primary Metal Manufacturing	7.2	45
◇	336	Transportation Equipment Manufacturing	6.0	44
▲	424	Merchant Wholesalers, Nondurable Goods	4.7	55
●	481	Air Transportation	8.7	29
○	48-49	Transportation and Warehousing	5.7	42
●	4862	Natural Gas Pipelines	2.3	57

* TRR based on 200,000 hours

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Comments from the survey provide more insights into the Safety Culture

Hourly Worker, Location B: "I think safety needs to be enforced at all levels. Some managers think 'work first'. Safety doesn't matter so much to them. It's 'ok' to 'bypass' the safety 'rule' for this one project."

Supervisor, Location C: "A few years ago we had a very good safety program and Safety Dept. in place. Due to cut backs the Safety Dept. has been drastically reduced and the current safety program has become nonexistent."

Manager, Location A: "It seems while there is a focus on safety, we have annual reviews of policies and procedures, but the frequency of safety reviews has diminished."

Professional, Location A: "New employees are not being trained the way they have been previously, hence there is less awareness and focus, even by management."

Hourly Worker, Location B: "No one takes it seriously until there is a problem. That is when the problem is pinned on one person instead of all of the people involved in the process."

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The Goal is Zero

The Path is Via Strengthening Safety Culture
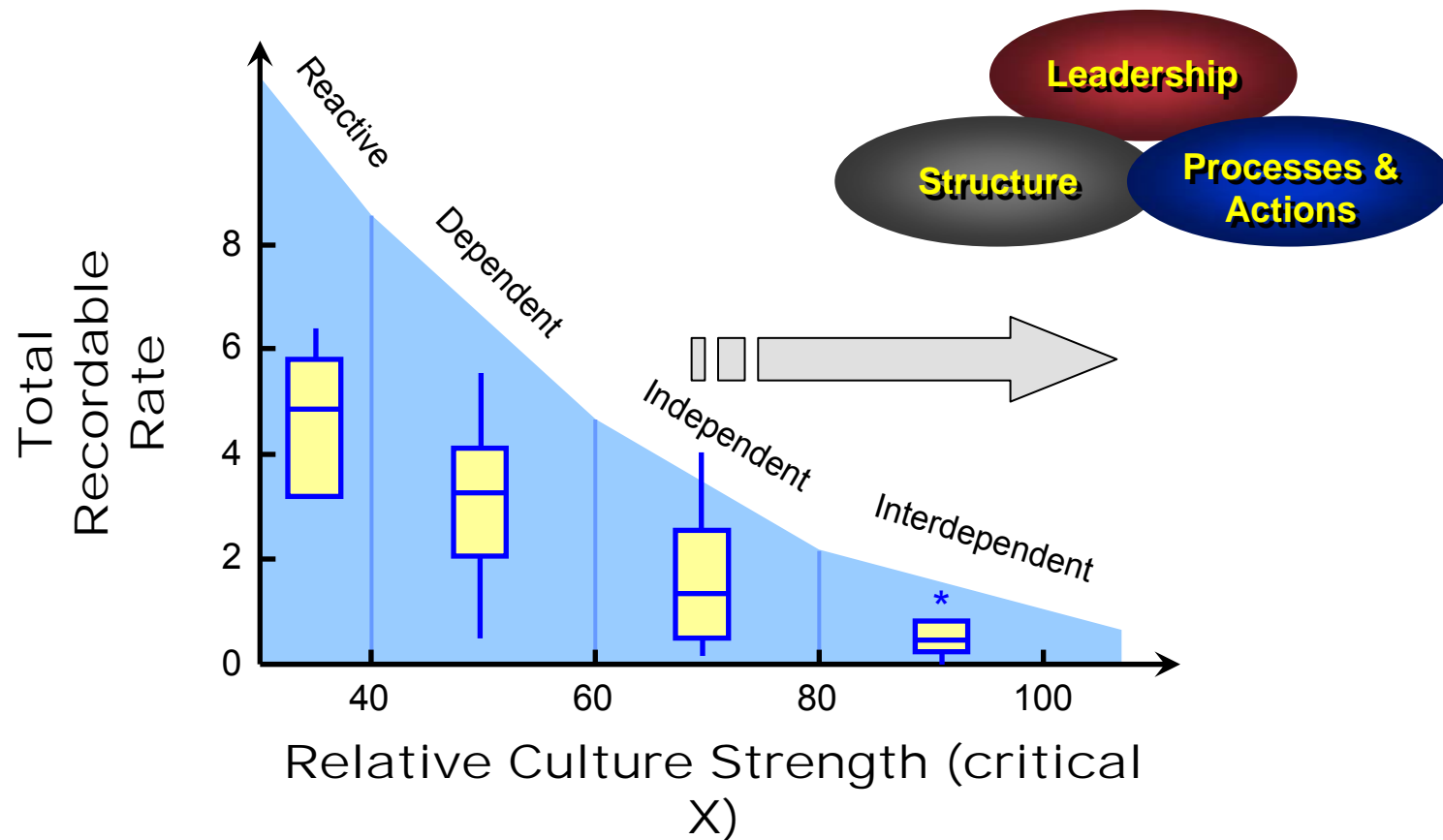
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Traditional safety improvement tactics versus initiatives to improve safety culture

Traditional Improvement Tactics

- Attacking high frequency/severity events (e.g. S/T/F)
- Addressing causal factors (e.g. PPE inadequate)
- Addressing root cause (training, systems, procedures)
- Safety stand-downs
- Signage

Is this how you feel sometimes?

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Improving culture

Strong Leadership
- Visible, demonstrated commitment
- Clear, meaningful policies and principles
- Challenging goals and plans
- High standards of performance

Appropriate Structure
- Line management accountability
- Supportive safety staff
- Integrated committee structure
- Performance measurement and progressive motivation

Focused Processes and Actions
- Thorough investigations and follow-up
- Effective audits and re-evaluation
- Effective communication processes
- Training & safety management skills

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Revenue – Cost = Profit

No Conclusive Evidence that Good Safety <u>Assures</u> Profitability,

However…

Safety can have a Significant Positive or Negative Impact on Cost!

AND

The Strength of your Safety Culture is Directly Correlated to the Frequency of Events and Associated Costs!

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What do I work on first to move the culture needle?

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🔴 x > 25

Survey Result

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Can knowing the state of your culture make a difference in your business?
A case study..........

April 20: $60.48

January 14: $49.25

June 22: $27.02

BP Closing Price axis: 65, 60, 55, 50, 45, 40, 35, 30, 25

Months: Jan-10, Feb-10, Mar-10, Apr-10, May-10, Jun-10, Jul-10, Aug-10, Sep-10, Oct-10, Nov-10, Dec-10, Jan-11, Feb-11, Mar-11, Apr-11
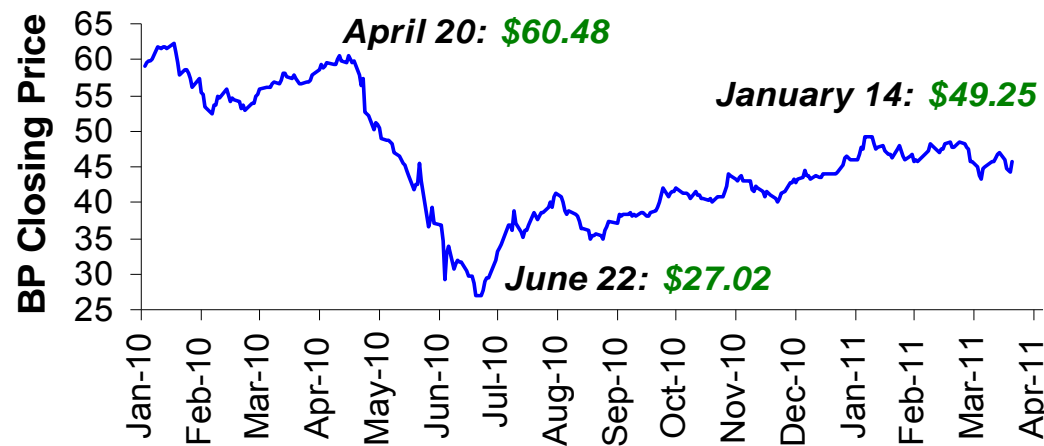
Is your organization resilient enough to absorb a comparable financial shock and restore business continuity?

Knowing the state of your safety culture can mean the difference not only in cost/savings and profitability but it can also have implications for survival!

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Summary: What have we learned….
It's the CULTURE

- A sustained improvement in safety performance comes from working on the weak areas of your culture

- Trailing metrics are still valuable from a trending standpoint but offer little "actionable intelligence"

- Shift accountability from trailing metrics to strengthening cultural elements

- Must "move the needle" in all three domains – Leadership, Structure, Processes and Actions

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