



Building a Learning-Minded and **Enabling Culture**

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An integrated approach for sustainable growth

- Operating Dexterity



Increasing operation interdependency Changing forms of competitive forces Climate changes Changing workforce

Vision

Evolving Strategy & Roadmap

Targets and initiatives to Deliver environmental, social, and enterprise value.

Geopolitical uncertainties

Shifts in global economic landscapes

Local content

Changing demands and market dynamics

Growth and **Innovation**

- **Competency Alignment**
- **Strategic Learning and** development
- **Progressive motivation**
- Value, attitude, and behavior

PEOPLE FACTOR

Leadership Management **System**

- Organization adaptability
- Operational alignment
- **Progressive drivers**

ORGANIZATIONAL FACTOR

Process and Technology

- **Target Technology**
- **Process Safety**
- **Production Optimization**
- **Design and Integrity**

TECHNIAL FACTOR

- **Continuous improvement –minded**
- Pride and sense of belonging
- Forward thinking and looking
- Mindfulness
- **Openness and trust**
- **Operating Discipline**
- **Integrity and respect**
 - Innovation and collaboration Accountability and ownership

Leaders' Lens





Risks & Threats

Rewards & Profit

New Opportunities



Adaptive:

Being able to make decisions and execute them in real time based on information readily at hand in order to produce the best outcome at the time.



Change Requires Leadership and Management



The larger the change, the more leadership is required.

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Expectation, Order and Discipline

- Examples of Oil and Gas OE Management System



	Chevron	E ∕ x onMobil	Statoil	PETROBRAS
Health	Security of Personnel	Leadership & Accountability	Safety	Leadership & Accountability
Personnel Safety	Facilities & Design Construction	Risk & Asset Management	Security	Regulatory Compliance
Process Safety	Safe Operation	Facilities Design & Construction	Sustainability	Risk Assessment & Management
Security	Management of Change	Information / Documentation	People	New Projects
Environment	Reliability and Efficiency	Personnel & Training	Communication	Operations & Maintenance
Product Stewardship	Third Party Services	Operations & Maintenance	Risk Management	Management of Change
Projects	Environmental Stewardship	Management of Change	Finance & Controls	Procurement
Transport	Product Stewardship	Third Party Services	Procurement	Training, Education & Awareness
Contractor HSSE Mgt.	Incident Investigation	Incident Investigation	Ethics	Information Management
Social Performance	Community Stakeholder Engagement	Community Awareness & Preparedness	Management Information	Communication
HSSE & SP Management System	Emergency Management	Operations Integrity, Assessment, & Improvement		Contingency
	Compliance Assurance			Community Relations
	Legislative and Regulatory Advocacy			Accidents & Incident Analysis
				Product Stewardship
				Assessment & Improvement

Expectation, Order and Discipline

- Examples of Oil and Gas OE Management System



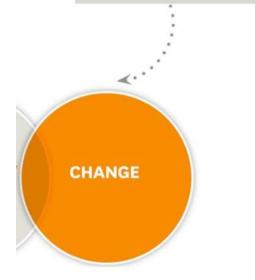
	DUKE ENERGY _®	RioTinto	■ BASF The Chemical Company	SUNCOR	PotashCorp Helping Nature Provide	
	Roles, Responsibilities and Accountabilities	Legal and other requirements	Environmental Protection	Leadership & Accountability	Leadership & Accountability	
	Risk Management	Hazard identification and risk management	Process Safety	Risk Management Legal Requirements and	Risk Assessment and Risk Management	
		HSEQ Management improvement planning	Emergency Response	Commitments	.People, Training and Performance	
	Emergency Preparedness and			Goals Targets and Planning		
	Response	Organizational resources, accountabilities and responsibilities	Product Stewardship	Management of Change	Working with Contractors and Service Providers	
	Compliance Management	Training, competency and Occupational Health awareness		Structure, Responsibility and Authority	Facilities Design and Construction	
	Contractor, Supplier and Partner Relationships	Supplier and contractor management	Occupational Safety	Learning and Competence	Operations and Maintenance	
				Asset Life Cycle	operations and maintenance	
	Stewardship and Community Relations	Documentation and document control	Transportation and Distribution Safety	Operations and Maintenance Controls	Management of Change	
	Goal Setting and Performance	Communication and consultation	Communication	Contractor Management	Information and Documentation	
	Measurement Incident Reporting and Investigation	Operation control	Security	Data, Document and	Customers and Products	
		Management of alcomo	Information Manage	Information Management	Community and Stakeholder Awareness	
	Assessment and Management System	Management of change		Emergency Management	Emergency Management	
	Review	Business resilience and recovery		Communication and Stakeholder Relations	and Crisis Communications	
		Measuring and monitoring		Quality Assurance	Incident Analysis and Prevention	
		Non-conformance, incident and action management		Incident Management	Assessment, Assurance, Compliance Audit and Continuous Improvement	
		Data and records management		Audits and Assessments		
		Performance assessment and auditing		Corrective Actions		
Copyright © 2013 IHS Inc. All Rights Ro		Management review		Management review	7	



Change Requires Leadership and Management

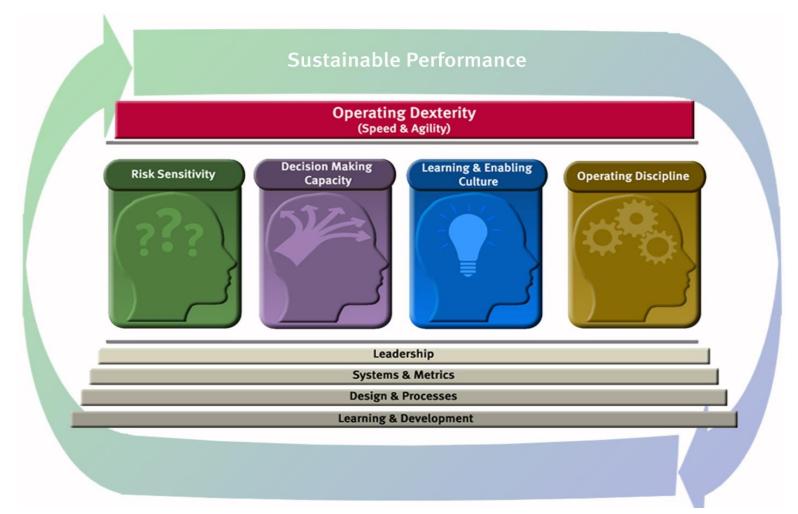
LEADERSHIP

- · Establishing direction
- Aligning people
- · Motivating and inspiring





Operating Dexterity: The Ability to Adapt







- Risk Sensitivity: What risks or threats are created by the change or are hidden within the complexity of the operating system?
- Decision Making Ability: Can individuals within your organization make the best decision in real time based on information at hand at the time?
- Learning and Enabling Culture: Are individuals within your organization have the desire to learn, given the opportunity to learn, and empowered to exercise what they learn?
- Operating Discipline: Have individuals within your organization mastered their tasks and will they perform their tasks the right way every time?



Where Do You Start?

DuPont Conference Board Safety Survey

"Learning is the most distinct characteristic of the top performance companies."



2. Engage Grassroots Leaders

The 2012 the Conference Board - World Class Safety Survey of Top Executives [N=115] Please select the top three attributes that you think a world-class safety organization must have.

Attributes	Reactive	Dependent	Independent	Interdependent
Has critical attention to and constructive communication on culture, attitude, behavior, and expectations		2	3	4
Has a culture that people would point out safety issues and behaviors without hesitation		1	1	1
Has a disciplined workforce with good decision making ability to manage unexpected events		3	3	5
Sensitive to emerging organizational and operational issues that may affect safety		6	6	8
Embrace both top and grass-roots leadership to drive safety		4	2	2
Align and reinforce safety core values with learning and development strategy		7	5	3
Focus on process excellence for managing changes in technology, subtle changes, and personnel		8	6	5
Management demonstrates a sense of social responsibility and encourages partnerships with local organizations to promote safety		6	8	7

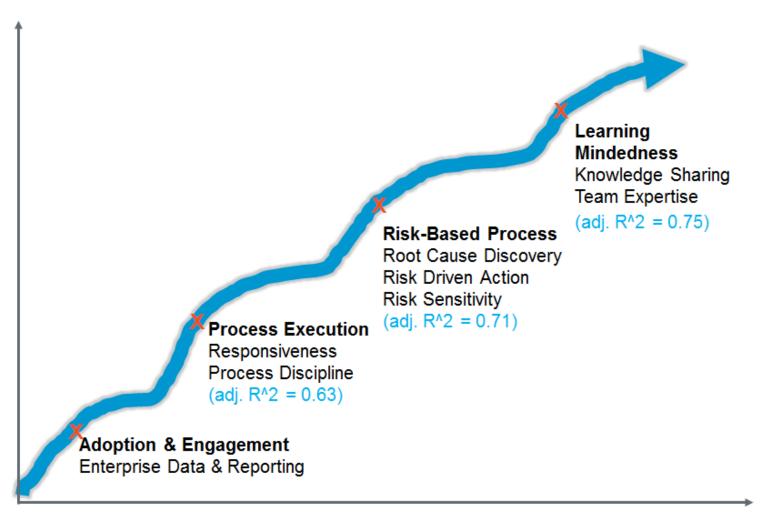
IHS Research Team Multiple-Company Studies

"Math-proven progressive predictive modeling indicates "learning-mindedness" as the critical attribute for high maturity organizations."



Progressive Predictive Modeling

covering over 1.2 billion work hours with more than 84,000 incidents in the Energy Industry





Developing a Learning-Minded Culture

The power of genuine and humble inquiries

 be curious, ask questions to leverage the power of data and collective knowledge and experiences

Peter Senge

"People don't resist change. They resist being changed."



What questions did you ask in the past?
Are there better ways to ask those questions?
Did you get the answers you want?
Or did you rather get the answers you need?
What were the reactions you get?



1. What do the Grassroots Leaders think?

Who are they?

- They are the everyday leader and the social powerhouse.
- They are the means to reduce the power distance and relational risk.
- They are perceived by peers as:
 - Credible, honest, Respected and courageous
 - Front line independent thinkers
 - Trusted for knowledge and judgment

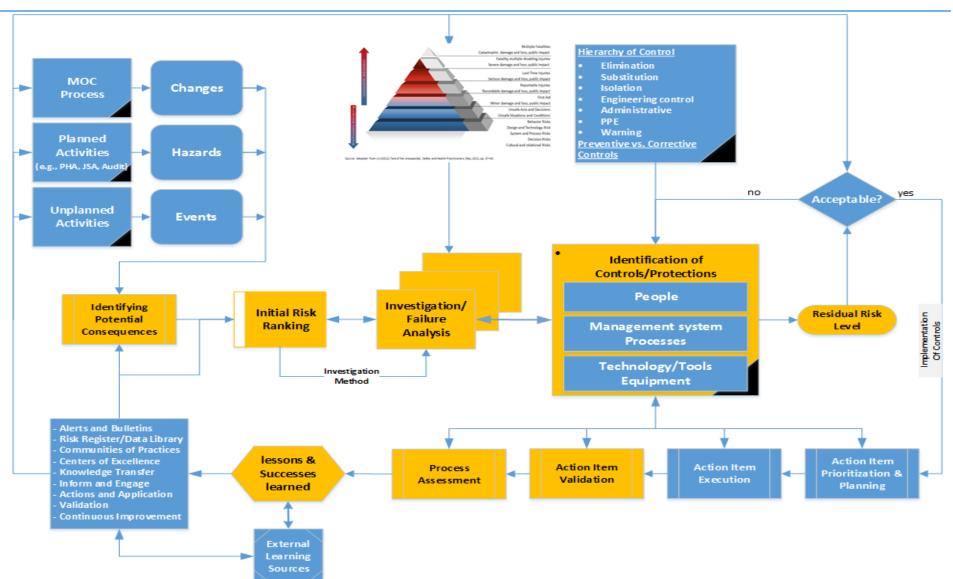
What questions do they have for you?

If you have their full attention and completely trust for a day, what would you like to know from them?

2. In the Everyday Life



- Where are the weak links? Where are the opportunities?



3. How Do You Process Information?

- ✓ What questions will you ask?
- ✓ What conversation would you like to start?



Toterable Failure No preparation Toterable Failure No preparation The for Equipment needs improvement Instruction needs improvement Independent review needs improvement Situation not covered. When gravision used Improvement Independent review needs improvement Situation not covered. When gravision used Improvement Independent review needs improvement Situation not covered. When gravision used Improvement Independent review needs improvement Situation not covered. When gravision used Improvement Independent review needs improvement Independent Indepen

Handling Enforcement needs improvement No check-off Walk-through needs improvement No PM for Equipment Procedure not available or inconvenient to use Inspection not required Practice/repitition needs improvement Equipment/Parts Defective Quality ControlMonitoring alertness needs improvement PM for Equipment needs improvement Housekeeping needs improvement Problem not anticipated Continuing training needs improvement Corrective action needs improvement Tolerable Failure Task not analyzed Details need improvement Errors not detectable

Root Causes of Fire and Explosion

Not quastled Charge Specifications Weeting resides using an United Processing Specifications of Control Contr

Inspection not required

Communications of SPAC needs improvement
Independent review needs improvement
Independent review needs improvement
Independent review needs improvement
Specs Need Improvement Work package permit needs improvement
Cramped quarters Walk-through needs improvement Work package permit needs improvement
Followed incorrectly Crew teamwork needs improvement Work package permit needs improvement
Controls need improvement
Insury PM for Equipment needs improvement Problem not anticipated
Manufacturing Pre-job briefing needs improvement
Continuing training needs improvement
Communications system needs improvement
Corrective action not yet implemented
Storage
Situation not covered
Not static enough Repeat base not used
More than 1 action/state Teams selection needs improvement
Corrective action needs improvement
Tools/instruments need improvement
Corrective action nee

Ev Root Cause (RootCause (Copy of Hess_BigDataDump_2010_2014-Feb09_2015_processing)). Color shows sum of Number of Records (RootCause (Copy of Hess_BigDataDump_2010_2014-Feb09_2015_processing)). Size shows sum of Number of Records (RootCause (Copy of Hess_BigDataDump_2010_2014-Feb09_2015_processing)). Details are shown for Ev Root Cause (RootCause (Copy of Hess_BigDataDump_2010_2014-Feb09_2015_processing)). The data is filtered on EvCustActSevently - Personal Injury (RootCause (Copy of Hess_BigDataDump_2010_2014-Feb09_2015_processing)), which keeps Null, Sevently 1, Sevently 2 and Sevently 3.

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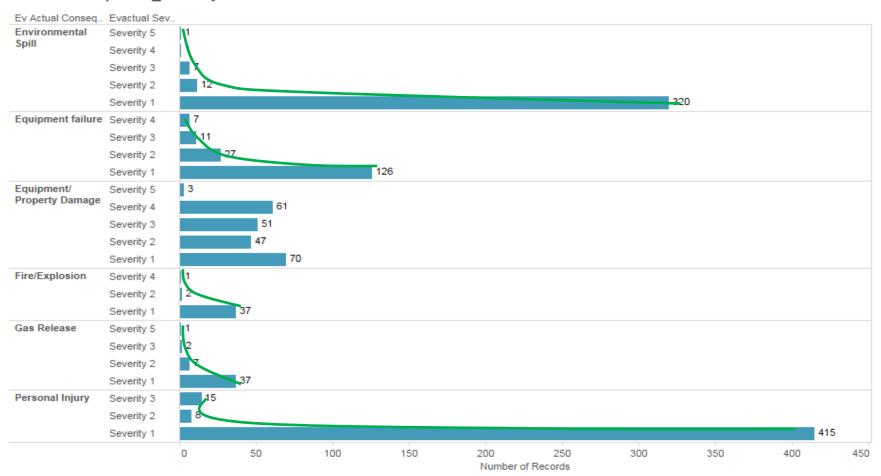
Number of Records

Number of Records

What are the critical messages? What does not look right?



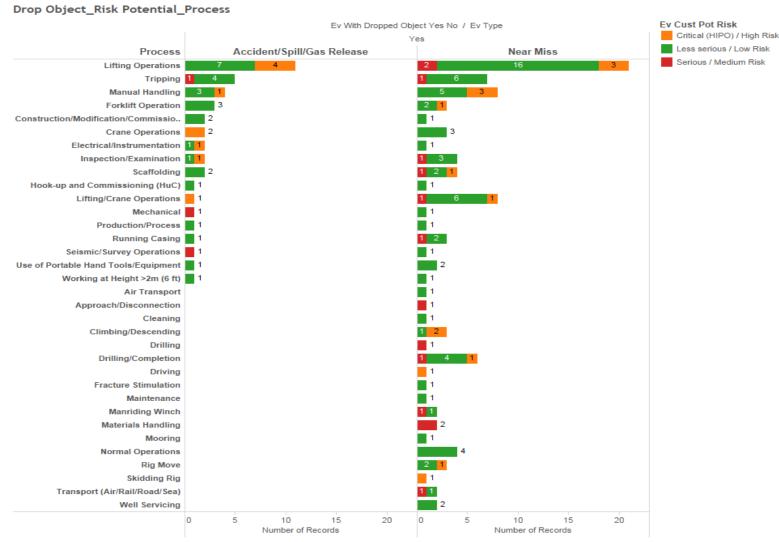
Actual Consequence_Severity Level



Sum of Number of Records for each Evactual Severity broken down by Ev Actual Consequence Type. The view is filtered on Evactual Severity and Ev Actual Consequence Type. The Evactual Severity filter keeps Severity 1, Severity 2, Severity 4 and Severity 5. The Ev Actual Consequence Type filter excludes Company Reputation, Production / Productivity Loss and Vehicle Incident.

What does this mean to operations? What changes can be made?







4. How Do You React to Failure?

The Truisms that Impact All of US

At the Individual Level -

- The human operate out of habit most of the time.
- Our conscious processing capacity is extremely limited and even less when stressed.
- People adapt and absorb small or moderate changes into norm.
- Negative emotion far outweighs their positive counter parts in their impact to our information processing capacity. Trust is difficult to build, but easily undermined.
- People do not resist change, they must exercise their willpower to change and sustain it.





Error is Reality and Failure Does Happen



Focus on the story. Construct the story accurately

Prepare for learning

Embrace the messengers (don't shoot them)

Learning minded

Acknowledge limits

- Creating a non-threatening environment

Invite participation

Engage. Motivate.

Set boundaries and hold people accountable

Clear expectations and purposes.





- Simple changes can make a process much more complex
- Decision-making in real-time is not easy; team decision in real-time is even more difficult
- We process information and learn differently
- If changes are forced (onto me), learning is compromised
- Learning is happening every day anyway
- As leaders, we often look at things from the top. The minor (may seem negligible) changes happen all the time – some for the better and some for the worse – but as a leader, you often do not have the visibility
- Learning requires an open platform where perspectives can be shared, without fear.

Questions? Thanks!





For additional information:

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