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The Enterprise Risk Management Tune-Up

Financial Executives International Annual Conference

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“Doubt is not a pleasant condition but Certainty is an absurd one.”

– Voltaire

“He will be fooled into thinking he is greater than fate, he will mock death, and he will think he is above wisdom, grace, and fear. As you all know, overconfidence is man’s greatest enemy.”

– Shakespeare

Agenda

Part I — The Risk Decision Conundrum

Part II — Emerging Risk Management Trends

Part III — Practical Steps for Risk-Based Decisions

Part IV — Questions & Answers

Part I – The Risk Decision Conundrum

What is Risk?

What is Risk?	A risk is something that impacts and/or prevents an organization's ability to meet it's objectives.

"From a rational perspective we should only make decisions that are in our best interest ("should" is the operative word here). We should be able to discern among all options facing us and accurately compute their value – not just in the short term but also in the long term – and choose the option that maximizes our best interests."

Dan Ariely, *The Upside of Irrationality*

BUT…….

Risk Management Failures – Lehman Brothers

Risk Management Failures – Lehman Brothers

Risk Management Implications

- The court appointed receiver report on the failure of Lehman Brothers provides some interesting insight into the final months of the firm's existence
- Most notable are the firm's efforts to shift massive exposures off of its balance sheet to prevent credit rating downgrades
- At the same time, the firm ignored its own risk management limits as it continued to pursue a high growth strategy. Here is what the examiner noted in the report

  – In 2006, Lehman made the deliberate decision to embark upon an aggressive growth strategy, to take on significantly greater risk, and to substantially increase leverage on its capital. In 2007, as the sub-prime residential mortgage business progressed from problem to crisis, Lehman was slow to recognize the developing storm and its spillover effect upon commercial real estate and other business lines. Rather than pull back, Lehman made the conscious decision to "double down," hoping to profit from a counter-cyclical strategy. As it did so, Lehman significantly and repeatedly exceeded its own internal risk limits and controls.

Risk Management Failures – Lehman Brothers

Risk Management Failures - BP

Risk Management Failures - BP

Risk Management Failures - BP

Background

- The Deepwater Horizon oil spill occurred in the Gulf of Mexico which flowed unabated for three months in 2010
- It is the largest accidental marine oil spill in the history of the petroleum industry
- The spill stemmed from a sea-floor oil gusher that resulted from the April 20, 2010, explosion of Deepwater Horizon, which drilled on the BP-operated Macondo Prospect well
- The explosion killed 11 men working on the platform and injured 17 others
- On July 15, 2010, the leak was stopped by capping the gushing wellhead, after it had released about 4.9 million barrels (780,000 m3) of crude oil
- An estimated 53,000 barrels per day (8,400 m3/d) escaped from the well just before it was capped
- It is believed that the daily flow rate diminished over time, starting at about 62,000 barrels per day (9,900 m3/d) and decreasing as the reservoir of hydrocarbons feeding the gusher was gradually depleted

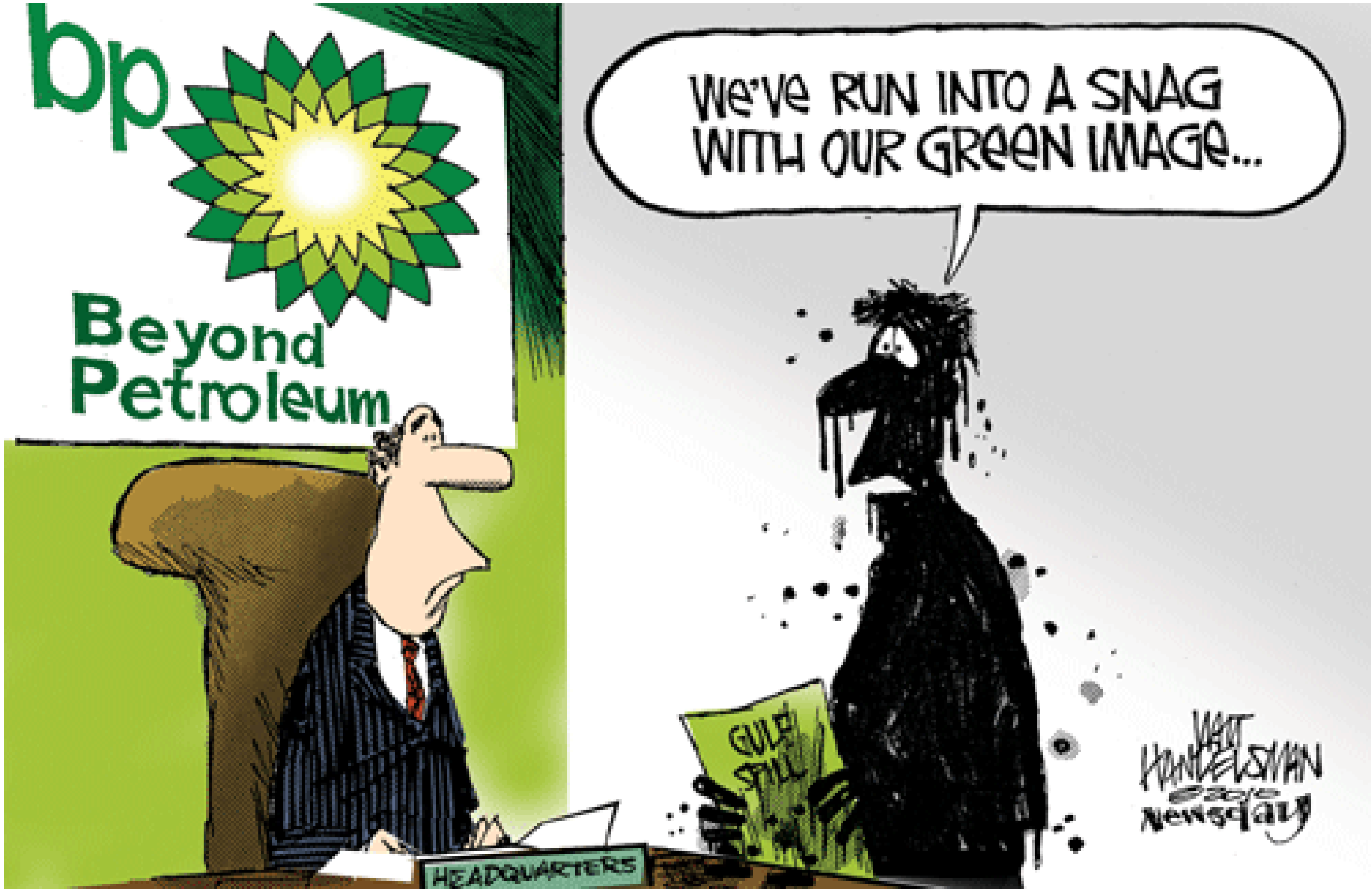
Risk Management Failures - BP

Risk Management Failures - BP

Risk Management Implications

- "*The oil and gas business is inherently risky*" *Dr. Obvious*
- Tony Hayward's (CEO) statement in BP's 2009 annual report reflects the recognition of risk:
  - "Risk remains a key issue for every business, but at BP it is fundamental to what we do. We operate at the frontiers of the energy industry, in an environment where attitude to risk is key. The countries we work in, the technical and physical challenges we take on and the investments we make – these all demand a sharp focus on how we manage risk."
- In spite of all its efforts to manage risk, BP has more than its share of operational incidents from the explosion at its Texas City refinery to the temporary shut-down of Prudhoe Bay production
- Is BP just unlucky? Or has the oil industry become susceptible to the activity trap by relying on generally accepted risk management practices that may not work in today's environment?
- The questions to ask:
  - Is that there is a large and ever growing gap in the ability of large global corporations to identify, alter and manage operational risks
  - Are current corporate governance, enterprise risk and operational risk practices too immature to proactively identify and support decision making about risk appetite?

Risk Management Failures - BP



Why Does Risk Management Fail?

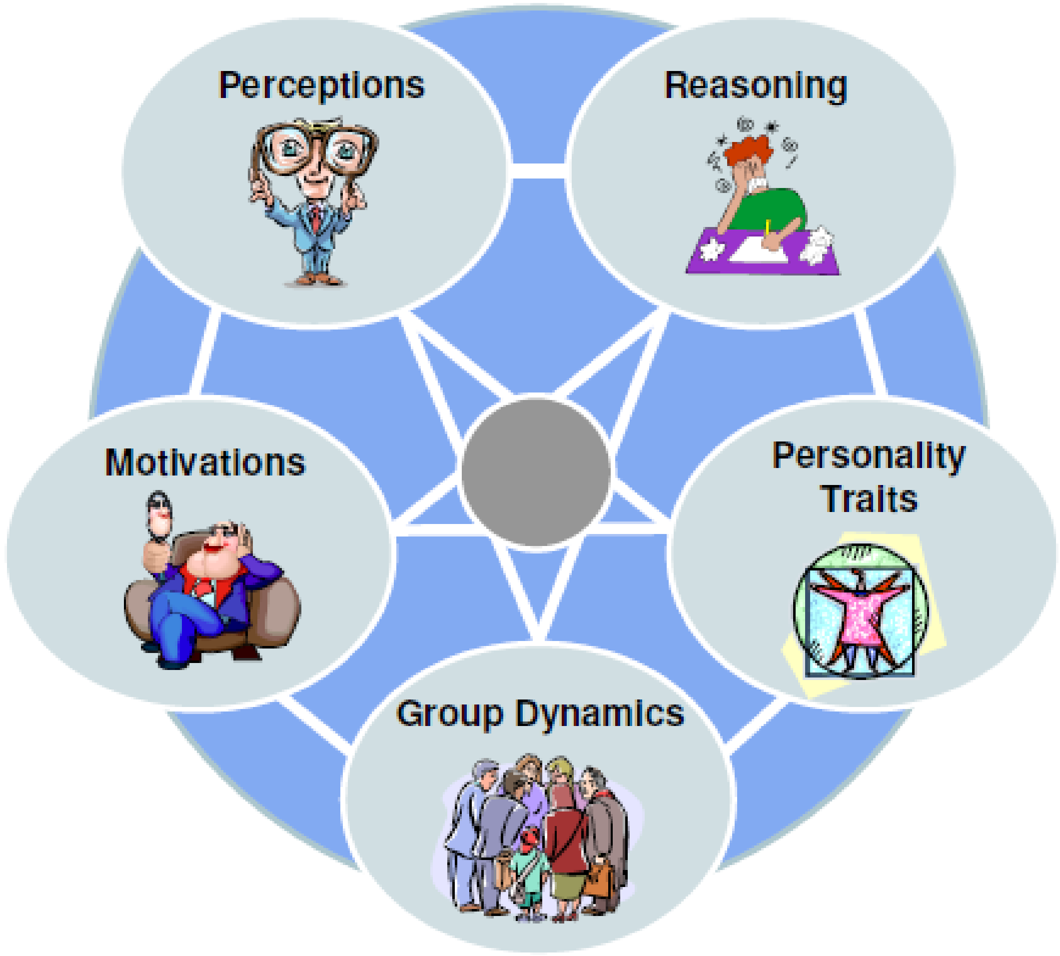
- Organizations seek discipline, focus and results through strategic planning and performance management – the rational thought process….however:
  - Humans respond favourably to short-term gratification and rewards – incentives and disincentives dictate risk-taking behaviour
  - Organizations struggle with the "truth vs. fallacy" syndrome in terms of the engaging conversation about potential future events with positive and negative consequences
- Epistemic arrogance is pervasive:
  - "There is a certain category of fool—the overeducated, the academic, the journalist, the newspaper reader, the mechanistic "scientist", the pseudo-empiricist, those endowed with what I call "epistemic arrogance", this wonderful ability to discount what they did not see, the unobserved." Nassim Taleb
- Humans naturally underestimate/disregard or overestimate/overreact to high impact events with low likelihood of occurrence
- Decision processes are heavily influenced by pre-concious brain activity, hormone levels and emotions

Part II – Risk Management Trends

Emerging Risk Management Trends

Current State	Drivers of Change	Emerging Trends
Focus on process and controls	Recognition of the significant limitations associated with this approach	Focus on behavioural decision-making
Focus on risk profiling and assessment	Failure of this approach to lead to improved organizational planning and decision making	Focus on integrating “risk thinking” and analysis into planning and execution
Focus on quantification of risk exposures	Recognition that over-reliance on “scientific” quantitative analysis	Focus on developing a proactive “risk aware” culture
Focus on developing organizational structure and accountabilities for the management of risk	Director liability and insurability of risk	Focus on the fiduciary role of the Board, social responsibility and reputation/brand

Behavioural Factors Influence Risk Decisions



Source: Dr. Carl Spetzler, Strategic Decisions Group, Standford University

Biases Influence Risk Decisions

Decision Making Biases

Pattern Recognition
Confirmation Bias
Recency Bias
False Analogies
Champion Bias

Action-Oriented
Excessive Optimism
Overconfidence
Competitor Neglect

Stability
Anchoring Bias
Loss Aversion
Sunk Cost Fallacy
Status Quo Bias

Interest
Misaligned Incentives
Inappropriate Attachments
Unclear Corporate Goals

Group Dynamics
Group think
Sunflower Management

Note: See Appendix A for further details

Part III – Practical Steps for Improving Risk-Based Decisions

“Top Ten” Practical Steps

1. Introduce risk-based strategic planning

2. Tune-up and align the ERM framework with behavioural and risk culture concepts

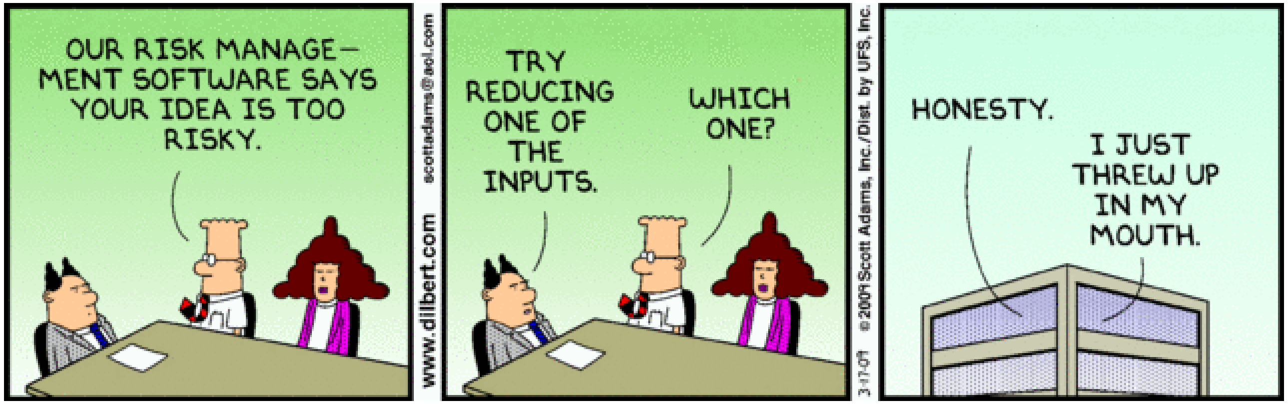
3. Lead by example and incent the organization to adopt a healthy risk culture

4. Change the governance structure to give the Board enough time to have the engaging risk conversation

5. Re-align the incentive scheme to reinforce positive risk beliefs, values, attitudes and behaviours and severely sanction negative ones

“Top Ten” Practical Steps (Cont’d)

6. Run weekly risk “Chalk Talks” with senior management, functional leads & major project leads:
   - Mitigation updates on high exposure risks & emerging risks
7. Conduct psychological and physiological assessments of key Board members, senior execs and critical subject matter experts to determine their risk taking profile
8. Assess the decision-making approach and culture of the senior exec team and the Board
9. Shift the discussion and debates about risk from the “quarterly ritual” to real time, highly engaged and passionate risk conversations – “park your guns at the door” sessions
10. Hire behaviouralists, contrarians and “street smart” risk-minded individuals who will positively challenge the risk status quo and decision-making biases



Part IV – Questions & Answers

Thank you

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Appendix A – Decision Making Biases

Decision Making Biases

Action Oriented Biases – drive decision makers to take on too much risk:

- **Excessive Optimism** – Tendency to be over-optimistic about outcome of planned actions
- **Overconfidence** – Tendency to overestimate expertise and insight relative to others
- **Competitor Neglect** – Tendency to plan without adequate consideration of actions of competitors

Interest Biases – arise in the presence of conflicting incentives (monetary and non-monetary):

- **Misaligned Incentives** – Incentives for individuals to seek outcomes non aligned with corporate objectives or shareholder value
- **Inappropriate Attachments** – Emotional attachment to people or elements of business creating misaligned interests
- **Unclear Corporate Goals** – Disagreements with respect to corporate goals or the hierarchy of those goals

Decision Making Biases *(Cont'd)*

Group Dynamics – arise from general preference for harmony over disagreement or conflict:

- **Group think** – Focus on achieving consensus at the cost of a realistic appraisal of proposed decisions
- **Sunflower Management** – Tendency for groups to align with the views of the senior leader or leadership team

Stability Biases – drive decision makers toward inertia even in the presence of uncertainty (risk):

- **Anchoring Bias** – Tendency for decision makers to root themselves to an initial value even where value is determined randomly
- **Loss Aversion** – Tendency for decision makers to place a premium on losses and discount gains of the same magnitude
- **Sunk Cost Fallacy** – Tendency for decision makers to factor unrecoverable historical costs into decisions about future actions
- **Status Quo Bias** – Inherent preference for the status quo in the absence of pressure for change

Decision Making Biases *(Cont'd)*

Pattern Recognition Biases – drive decision makers to identify patterns even in random events:

- **Confirmation Bias** – Tendency for decision makers to overweight information that supports their position and underweight information inconsistent with that position
- **Recency Bias** – Tendency for decision makers to place a premium on most recent information or most memorable historical event
- **False Analogies** – Tendency for decision makers to utilize comparisons with situations that are not directly comparable
- **Champion Bias** – Tendency for decision makers to evaluate a proposal based on the track record of the proposal champion rather than the merits of the proposal

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