Value-added governance and controls: The need and application of strategic risk

Paul Campbell, Katie Pavlovsky and Jeff Suchadoll
Agenda

10:15 – 11:30
• Introductions, background and perspectives
• A brief survey
• Beyond Sarbanes-Oxley (SOX) – governance, risk and controls
• Challenges facing Finance
• Background on strategic risk

11:30 – 12:45  Lunch

12:45 – 2:00
• Case Study  1: Managing impact of commodity price moves
• Case Study  2: Planning/reacting to an environmental event
• Questions and discussion
Introductions, background, and perspectives

• Design and expectations for the session
• Practical experience and applications
• What has worked and what hasn’t
• Why this matters for you
A brief survey

How many people have ERM programs?
• Role and responsibility
• Awareness of issues
• Maturity of the organization
Beyond SOX – the value add of controls

• Impact of SOX to date
• Governance
• Impact of organization structure:
  – Silos, matrices and other
• Roles and responsibilities:
  – The RACI (responsible, accountable, consulted and informed) concept normally applies
• Risk:
  – Policy, measurement and management
  – Historic role of Enterprise Risk Management (ERM) vs. Strategic Risk Management
• Controls:
  – Financial vs. operational
Challenges facing Finance on ‘certain’ events

• The opacity of events

• Clarity of role:
  − Delivering messages vs. making operational decisions
  − The fate of the messenger

• Need to be informed on many things (everything) and when this happens

• Breakdown between traditional strategic planning and actual operations

• Regardless of challenges, organizational issues, etc.:
  − Finance is in a position of influence
  − Controlling delivery of information provides for mitigation of institutional memory risks

• Addressing these challenges with Strategic Risk Management
Strategic risk: Traditional ERM programs need to evolve

Today’s business environment is constantly evolving and highly volatile, driven largely by innovation and technological advancement. Traditional ERM functions have shortcomings in this environment.

- **Failure to Prevent Surprises**: Reputational and strategic risks continue to occur and were not on the ERM “radar”
- **“False Precision”**: Over-emphasis on developing a heat map and quantifying risks vs. order of magnitude of impact to the business
- **Lack of Effectiveness**: Focused largely on the internal “known” risk universe where developing partnerships with business units was not top of mind. Even with ERM in place, known risks such as compliance events and recalls cost companies billions of dollars
- **Value for the Investment**: Programs evolved into “chasing down” the business for data vs. becoming risk management “centers of excellence”
- **Value for Decision Making**: Information was largely retrospective and did not support future decision making or provide strategic risk insights

Today’s risk programs should evolve into a Strategic Risk Management program that includes **uncovering unknown or emerging risks** through advanced sensing tools and evaluating strategic impacts through innovative scenario planning and quantification methods.
An approach for addressing strategic risks

- **Business Model Assessment:**
  - Key value drivers
  - Strategic assumptions
  - Macro trends
  - Threat analysis

- **Data Discovery:**
  - Advanced sensing tools
  - Decipher trends from data

- **Scenario Planning Refresh:**
  - Structured workshop
  - Remove corporate and cognitive bias
  - Generate narratives on potential futures
  - Develop scenario maps to test business disruptors

- **Company Impact Analysis:**
  - Advanced modeling tools
  - Quantify scenario impacts to business model

- **Strategic Optionality:**
  - Teaming to develop strategic responses
  - Evaluate responses - scenario planning, modeling and war gaming

- **Risk Governance:**
  - Integrate across strategy, operations, reporting, and IT
  - Mitigation of cognitive and organizational biases

- **Risk Monitoring:**
  - Institute risk monitoring roles and responsibilities
  - Leverage advanced risk sensing tools and techniques
  - Develop reporting structure and timing

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Assess the current state

Systematic approach to identifying the business value drivers and assumptions and evaluating those assumptions through a detailed review of emerging trends that could challenge those assumptions.

Relevant trends and uncertainties
identified through research, discussions and advanced risk sensing tools and techniques

<table>
<thead>
<tr>
<th>Weak</th>
<th>Unfavorable</th>
<th>Low</th>
<th>Regional</th>
<th>Few</th>
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<tbody>
<tr>
<td>Strong</td>
<td>Favorable</td>
<td>High</td>
<td>Global</td>
<td>Many</td>
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Top trends and uncertainties prioritized
with the help of a cross-functional team of leaders

Key Trends and Uncertainties Report
Workshop Pre-Read

Energy transformation

The U.S. energy system is transforming in response to multiple factors, including energy security, increasing demand, cost, safety, advances in technology, and the need to lower greenhouse gas (GHG) emissions. Vital to energy costs will have profound impacts on business, both directly and indirectly.

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Scenario Planning Workshops:
Provides a structured framework for planning teams which removes corporate and cognitive biases and generates new creative narratives on potential futures which meet the five criteria for good scenarios.

- **Challenging** to today's conventional wisdom, not just variations on the same theme
- **Balanced** strikes a good psychological balance between positive and negative outcomes (at first glance)
- **Divergent** together, the scenarios 'stretch' the thinking in different directions
- **Plausible** each scenario could actually happen in some form or in some segment of the market
- **Relevant** to the key strategic issues at hand

Scenario maps provide plausible future narratives based on opposing ends of the spectrum of two critical uncertainties.

**Illustrative Scenario Map**

- **Dominance of Fossil Sources**
  - World economic growth with few political conflicts promotes an increased energy demand, which is largely supplied by oil, whose competitiveness is driven by the production of non-conventional resources, while alternative sources of energy do not surpass their technological barriers

- **Sustainable Globalization**
  - World economic growth with less political conflicts generates a significant increase in demand for energy, which is captured largely by alternative sources, made more competitive because of more favorable regulations and more developed technologies such as nuclear energy and electric cars

- **Decline of Oil**
  - Reduced demand for energy, generated by global economic slowdown and enhanced by political conflicts, is met largely by natural gas, which presents itself as a globally available source at competitive price, increasing its share in the world energy mix over oil and coal

- **Hegemony of Traditional Producers**
  - Low global growth causes energy demand to be met largely by cheaper oil, favoring fields with reduced cost of exploration and production, and mainly controlled by OPEC countries, to the detriment of non-conventional sources

- **Orderly Growth**

- **Confrontational Stagnation**

Four scenarios describe the potential future landscape providing plausible and challenging views of the future.
Risk quantification & strategic optionality

Quantify market reactions and resulting company impacts under selected scenarios using advanced analytics and modeling platforms. With this insight, the company can identify risks and evaluate alternatives to refine its strategy.
Define the future state: Strategic risk program governance

An integrated risk program harmonizes the assets currently used to manage risk into a series of complementary activities looking at different types of risk from different angles, across different parts of the business.

**Strategic Risks**
- Proactively identify risks that undermine the company’s ability to achieve or maintain exceptional performance. Includes risks to existing strategies or new risks related to emerging trends.

**Business Risks**
- Execute a consistent, pragmatic process to manage risks across operational areas while elevating those with enterprise impact.
  - Customers
  - Supply Chain
  - Marketing
  - HR
  - EH&S
  - IT
  - Finance
  - Legal

**Crises, Incidents/Issues**
- Prepare, respond, and recover from issues, incidents, and crises to limit business disruptions, reputational damage, and value destruction.

**Governance**
- Use risk information to make better decisions that balance value creation and value protection.

**Strategic Risk Portfolio Management**
- Harmonize information from diverse sources to create a holistic view of risk while offering consultation to help the business create and protect value through:
  - Risk analytics
  - Facilitation of assessments
  - Training and mentoring
  - Monitoring of trends, risk indicators

**Risk Champions**
- Drives program within business units
- Creates accountability for managing top risks

**Enabling Methods & Technology**
- Create tone at the top with regard to risk mgmt.
- Prepare and guide business to embed risk into operations
- Create tools to facilitate risk-informed decisions

**Internal Audit**
- Provides assurance that risk responses are working as planned
- Use risk assessment results to guide annual audit strategy
### Strategic risk management programs: Success factors

<table>
<thead>
<tr>
<th>People</th>
<th>Mandate, Organization Design &amp; Process</th>
<th>Culture</th>
<th>Tools &amp; Techniques</th>
<th>Enabling Technology</th>
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<tbody>
<tr>
<td>• Data analytics and research skills including financial modeling</td>
<td>• Executive leadership/ board establish common risk process</td>
<td>• Visible and consistent role modeling of desired behaviors and standards by leadership</td>
<td>Identification and assessment tools:</td>
<td>• Data analytics software for both structured and unstructured data (for insights and ongoing monitoring)</td>
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<tr>
<td>• Knowledge of business model, strategies and industry</td>
<td>• Board oversight of top risks and overall risk management program</td>
<td>• Transparency of risks identified to a strategy or initiative</td>
<td>• Scenario Planning</td>
<td>• Ongoing monitoring platform</td>
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<td>• Ability to develop and deliver training</td>
<td>• Management level risk committee(s) discuss strategic and emerging risks, mitigation, and initiatives</td>
<td>• Continuous and constructive <strong>challenging of actions and preconceptions at all levels of the organization</strong></td>
<td>• Assumption Testing</td>
<td>• Training platform</td>
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<tr>
<td>• An awareness of organizational and decision making biases</td>
<td>• Mandate for risk to be assessed prior to strategy/initiative being approved</td>
<td>• War-Gaming</td>
<td>• <strong>Risk Sensing</strong></td>
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<td>• Access to <strong>external experts across industries for ‘outside-in’ perspective</strong></td>
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### Identification and assessment tools:
- **Scenario Planning**
- **Assumption Testing**
- **War-Gaming**
- **Risk Sensing**

### Enabling Technology:
- **Data Analytics Output**
Lunch Break
Case study 1
The rise and fall of commodity prices (and careers)

• Historical background related to hedging markets:
  – Commodity type and natural position aren’t critical to the concept
  – Both consumers and producers have symmetrical exposures

• What goes wrong:
  – You (or your company) makes the “wrong bet”

• The application of value added controls and risk management:
  – The risk policy and governance model enable the decision making process
  – Managing the actions/reaction/understanding to the “bet”
  – RACI clarity is critical

• Your experiences
After three years of $100+ oil prices, many companies lessened the focus on developing robust planning and hedging strategies. A market view predominated and, given the sudden and unexpected shift, many companies were ill-prepared for the sudden and dramatic price drop.

**Illustrative Responses**

“No one could have seen this coming”

“We didn’t want to lock in losses”

“The upside was too great to forgo”

“We didn’t want to make a mistake”
The value add is that risks are addressed with clearly defined, quantifiable, and market compatible objectives and tolerances...

<table>
<thead>
<tr>
<th>Cost (margin) objective</th>
<th>• Manage the energy portfolio so the organization’s energy costs (margins) do not exceed/fall below $X million at a X confidence interval.</th>
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<tbody>
<tr>
<td>Hedge loss objective</td>
<td>• Manage executed hedges (placed in order to achieve the cost/margin objective) so that hedge losses do not exceed $X million at a X confidence interval.</td>
</tr>
<tr>
<td>Option budget</td>
<td>• Set aside $X million in an options budget to manage the tension between #1 and #2 so that hedge strategy is market-compatible.</td>
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The objective of the hedge program is NOT to make money (i.e., profit/loss) or to be speculative (“I think prices are going down, so I’m not going to hedge.”)
Application of these controls and risk processes allow a company to efficiently and effectively execute a hedge program – the absence of one or more is problematic.
Using RACI to manage opacity risk
Who is responsible, accountable, consulted and informed – and when

• Who needs to be informed when prices fall 5%? 15%? 50%?:
  − Who needs to be informed when a company is at 80% of a risk limit? 90%?
  − Expenses will be increasing by X%, but revenue will be dropping by Y%

• Who should be consulted if the potential changes will impact:
  − Monthly operating budget?
  − Draw down on credit facilities?
  − Quarterly financial results?

• Who is responsible for making the final decision to change a hedging strategy?:
  − Who needs to be consulted or informed
Information and communication
What is appropriate for the controller, CFO, CEO, board?

The risk policy should define who receives what information

- Forward curves
- Volatilities
- Correlations
- Transactions
- Physical positions
- Position reporting
- Risk reporting
- Monitoring vs. risk tolerances
- Mitigation plans
- Compliance tracking
Benefits of seeing around the corner

- A more integrated picture
- Ability to stress-test portfolio and understand trade-offs of risk mitigating activities
- Early warning when things could go wrong
- Data, reports, and detail needed to answer management, stakeholder or regulatory questions
- Avoiding the career impact of “the surprise”
Case study 2 – the looming environmental event

Scenario Overview: An upstream company with midstream assets is growing by acquisition. After receiving multiple non-compliance violations, the State regulator threatened to shut down operations.

Challenges & Considerations

<table>
<thead>
<tr>
<th>Environmental Exposures</th>
<th>Strategic Risk Considerations</th>
<th>Governance Considerations</th>
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<tbody>
<tr>
<td>1. Challenging to identify, assess and measure likelihood/severity of event</td>
<td>1. Visualize disruptive possibilities:</td>
<td>1. CEO communications</td>
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<tr>
<td>2. Risks may not be sufficiently elevated at Enterprise assessment and resourcing</td>
<td>a. Identify signals of emerging developments</td>
<td>2. Dedicated roles and responsibilities/reporting lines</td>
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<tr>
<td>3. Enforcement evolving from localized/event driven fines and penalties to operational restrictions (pipeline push through, revoking permits, etc.)</td>
<td>b. Define trends</td>
<td>3. Training</td>
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<tr>
<td>4. Impact of environmental event reaches beyond the event in and of itself:</td>
<td>c. Validate</td>
<td>4. Incident tracking and corrective action</td>
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<tr>
<td>a. Regulatory</td>
<td>2. Consider emerging technologies and how they be enablers or create risk</td>
<td>5. Management review and resource allocation</td>
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<tr>
<td>b. Operational</td>
<td>3. Risk dashboards and scenario analysis</td>
<td></td>
</tr>
<tr>
<td>c. Financial</td>
<td>4. Analyze potential business impacts with advanced analytical tools and methodologies</td>
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<tr>
<td>d. Technological</td>
<td>5. Evaluate risk and opportunities associated with emerging trends</td>
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<tr>
<td>e. Strategic</td>
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Enabling tools – data discovery

Leverage data discovery platforms which combines industry subject matter resources and advanced analytic methods to gather disparate sources of data, synthesize it for trend identification, and monitor it to identify emerging risks and opportunities.

- **DUE DILIGENCE SERVICES**
  Due diligence informs the client as to the nature of who their subcontractors, suppliers, and business partners.

- **INSIDER THREAT ASSESSMENT**
  An assessment to evaluate how extant and potential insider threats are prevented and mitigated by leadership within the company.

- **PHYSICAL SECURITY EVALUATION**
  Geospatial information, perimeter screening, and entrance and exit procedures are evaluated to mitigate outside interference.

- **SOCIAL MEDIA MONITORING**
  Social media is monitored for reputational concerns, unwanted political advocacy, shareholder activism, or terrorist threats.

- **REGULATORY COMPLIANCE**
  Business partners, suppliers, and contractors are persistently monitored for regulatory compliance issues.

- **ENVIRONMENTAL ISSUE MONITORING**
  Specialized data sources are monitored for environmental issues that could negatively affect production, delivery, or reputation.
Enabling tools - dashboard

Custom dashboards provide enhanced reporting visuals to assist companies in identifying emerging trends and risk events in proximity to specific assets.
Enabling tools – war gaming
Questions and discussion
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