



a **spotlight** presentation

Strategies for Supply Chain Risk Management

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Supply Chain Risk Leadership Council
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■ Agenda

What do we mean by “Supply Chain Risk Management”?

- Define our philosophy and “vocabulary”

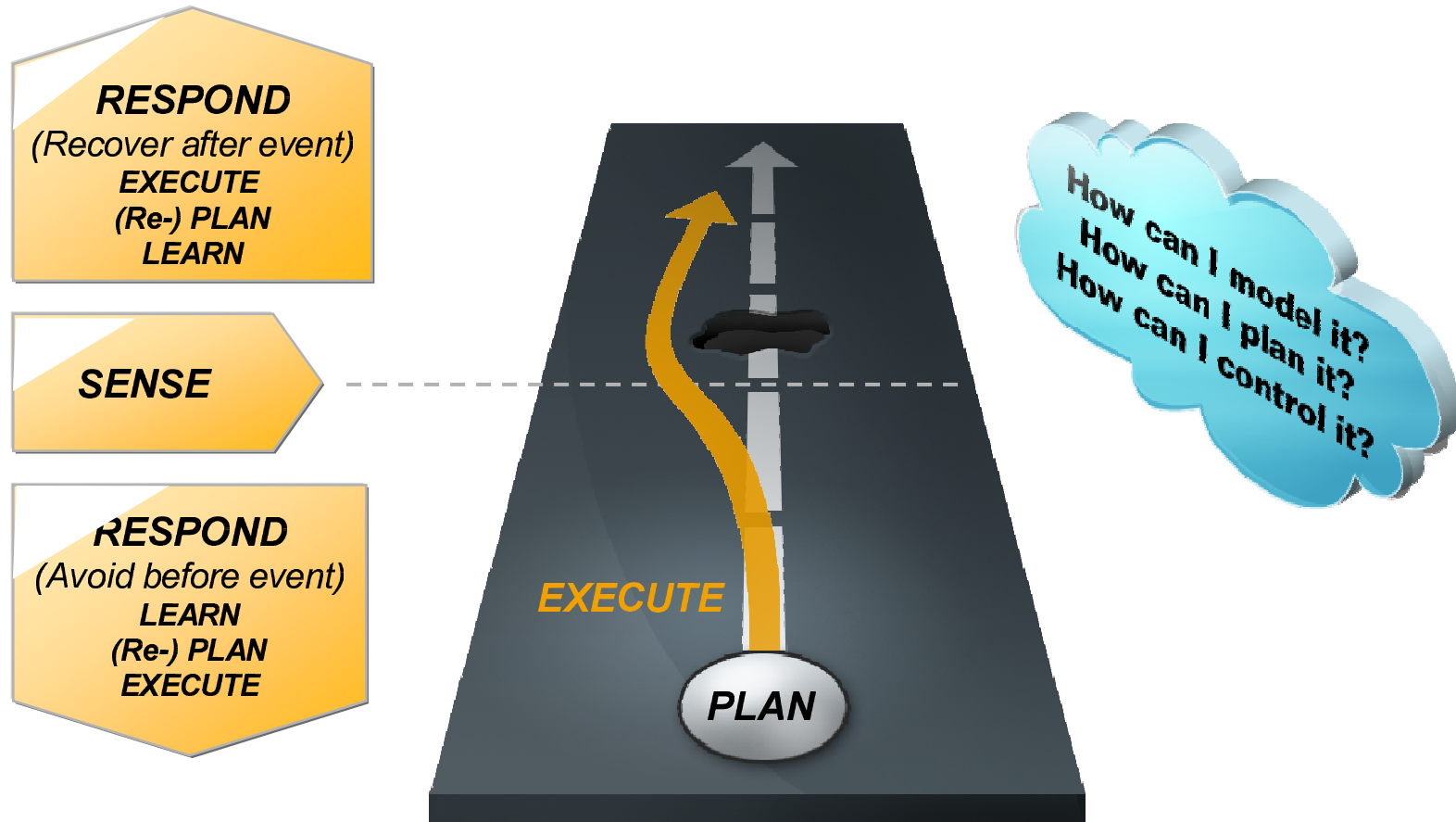
What are the top challenges to manage Supply Chain Risk?

- 3 key problem areas

Considerations to address those challenges

- How you can participate / collaborate

The Basics are Still Relevant: Closed-Loop SCM



What is the RIGHT level of Risk Management YOU need?

Factors That Influence Risk Management (and SCM Strategy)

Industry / Business model volatility

- Structure
- Products

Position in end-to-end supply chain

- Bullwhip effect

Compliance

- External: Regulatory Standards
- Internal: Policies and Processes

Functions / Processes

- Maturity / Stability

Culture

- Region / Company

Strategic
(Design for Risk)

How can the CFO/CRO help prioritize risk and the resources to manage it?

Tactical
(Plan for Risk)

Which avoidance and recovery strategies should I choose?

Execution
(Sense and Respond to Risk)

Do I know where my risk events are happening?

Globalization Creates Both Opportunity and Risk



Strategic

Should I increase R&D spend to counter shrinking product lifecycles?

Should I make sales reps / channels accountable for forecast accuracy by product?

Tactical

Should I make a forward-buy on a component to protect against volatility?

What processes can I implement to protect my IP in a contract mfg environment?

Can I shift compliance responsibility to my suppliers for country-specific disposal rules?

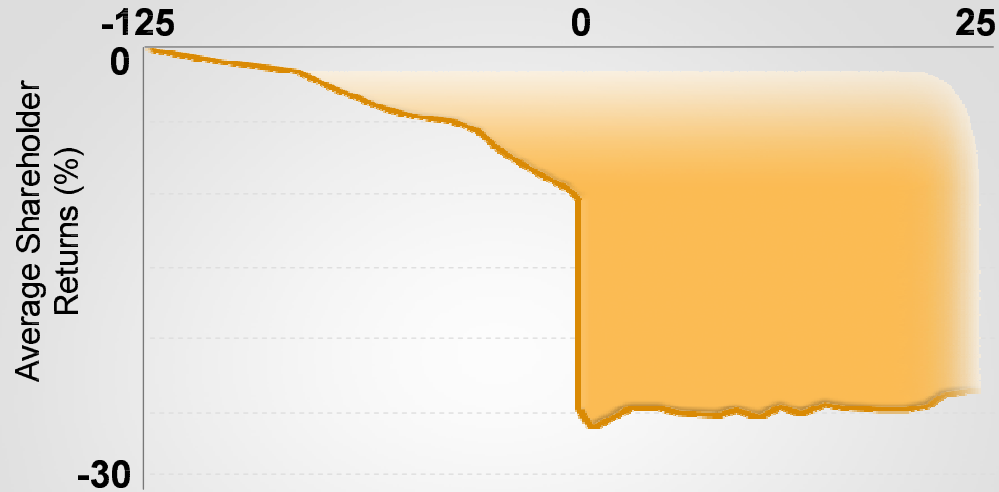
Execution

Can I rank my carriers by level of compliance to my logistics contracts?

Are we seeing a higher level of support requests than anticipated?

Supply Chain Risks Have Significant Impacts

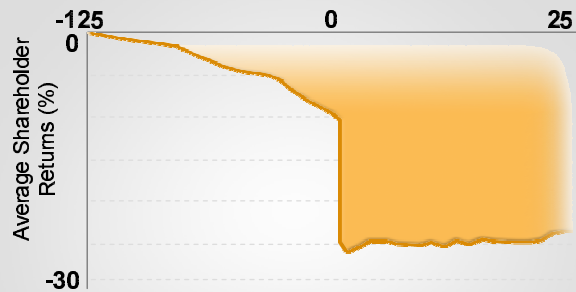
Stock Price Declines 25% After The Announcement Of A Supply Chain Glitch



Source: Prof. Vinod Singhal, DuPree College of Management, Georgia Institute of Technology

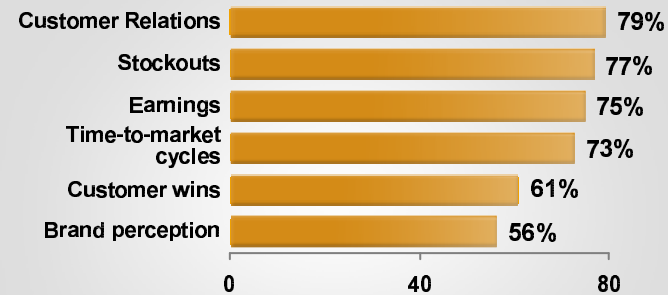
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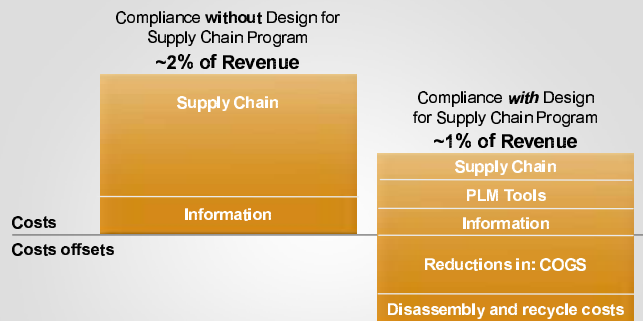
Source: Prof. Vinod Singhal, DuPree College of Management, Georgia Institute of Technology

Supply Risks are Effecting all Key KPIs Impact of Supply Outages and Risks



Source: Aberdeen Group, September 2005

Green Compliance Costs 2% of Revenue, Could be Completely Offset



Source: AMR Research, 2006

Economist Intelligence Unit:

“During the past 12 months, one in five of the companies surveyed had suffered significant damage from a failure to manage risk and over half had experienced at least one near miss.”

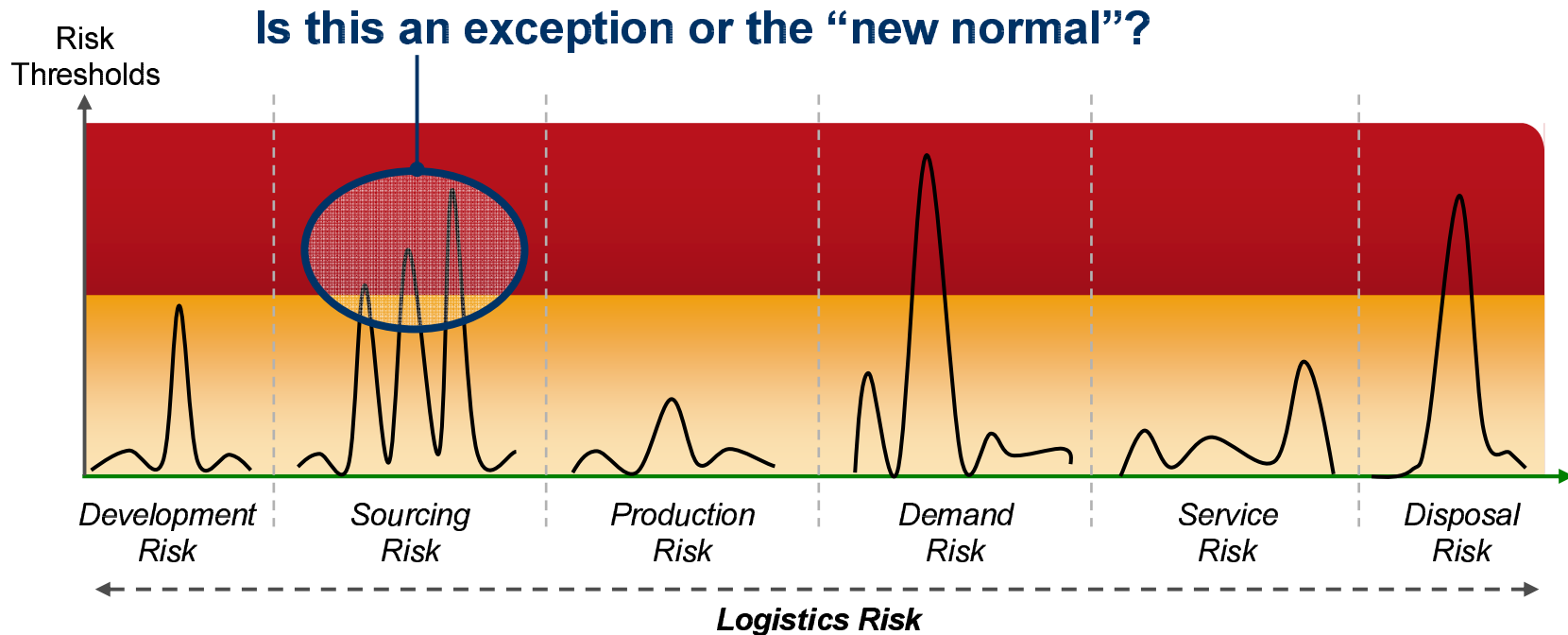
Source: Taking Risk On-board, 2006

Where Are the Risk Events / Vulnerabilities?

Strategic

Tactical

Execution



“What we don’t know”

- Where is it happening?
- When is it happening?
- How often is it happening?
- Etc.

Need to capture risk events via an event management platform / repository

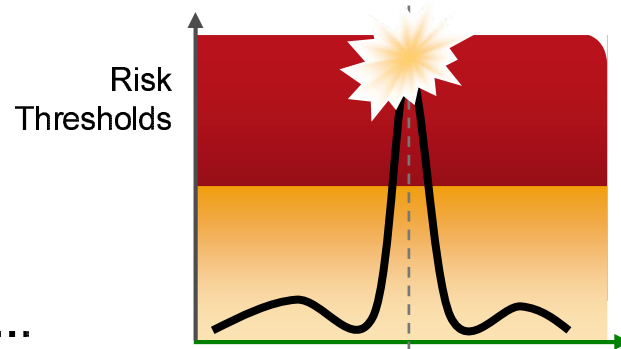
What Are the Best Avoidance and Recovery Strategies?

Strategic

Tactical

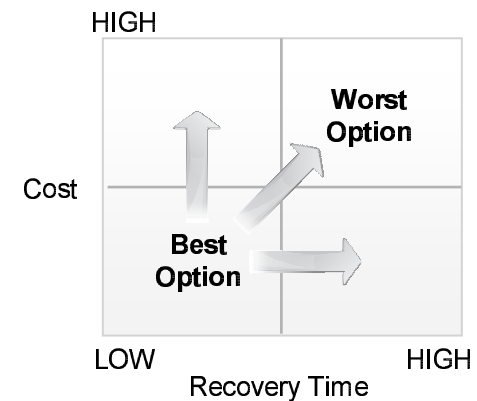
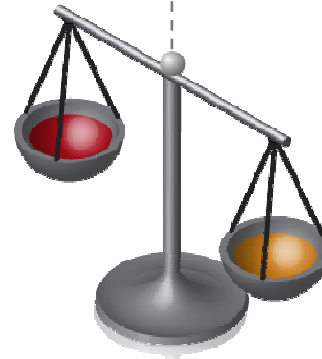
Execution

Avoidance...
BEFORE the event



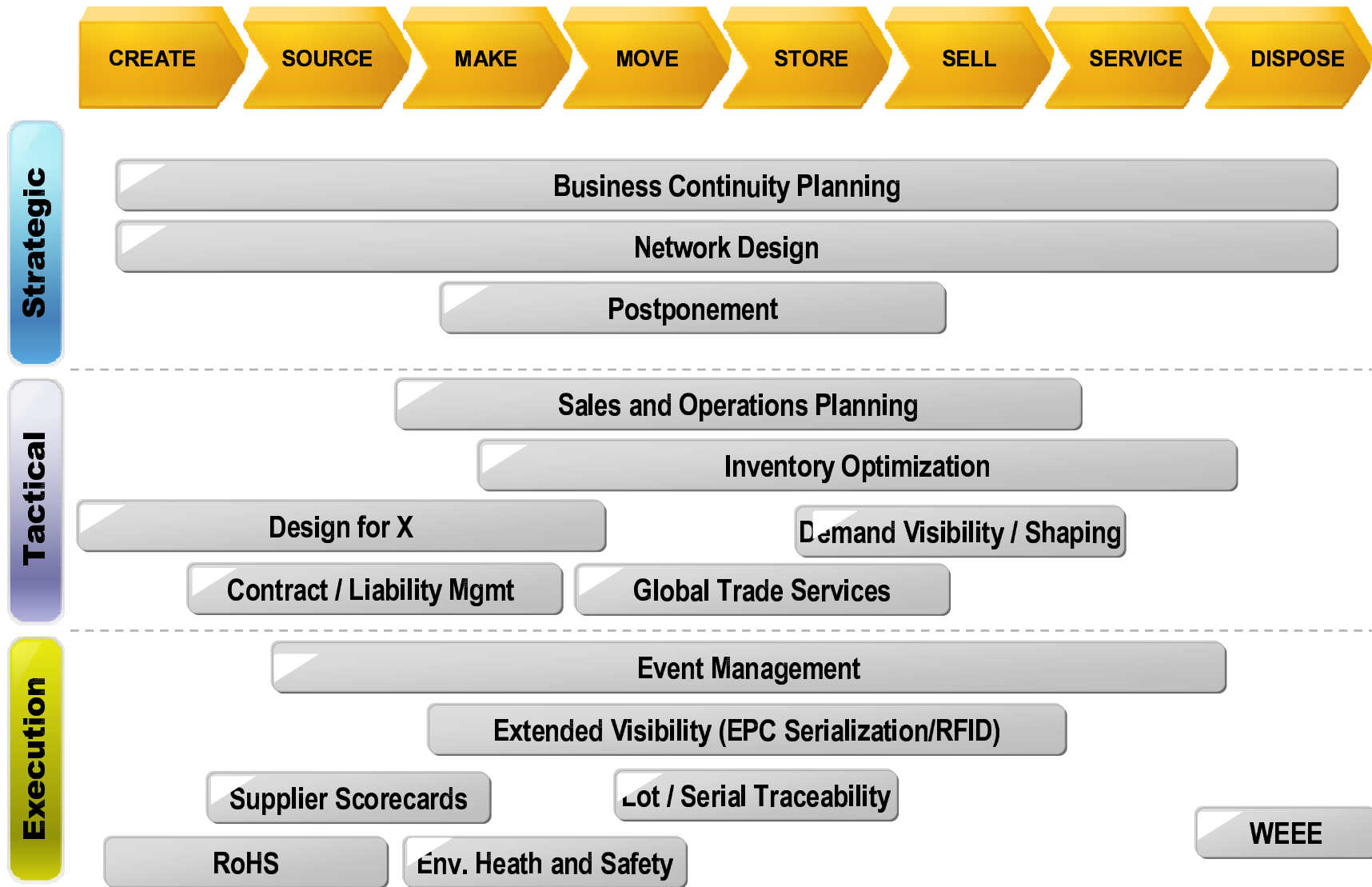
Recovery...
AFTER the event

- Eliminate risk
- Transfer risk
- Share risk
- Etc.



Need for a disciplined approach to develop, evaluate, rank, and deploy risk mitigation strategies

Risk Management Strategies

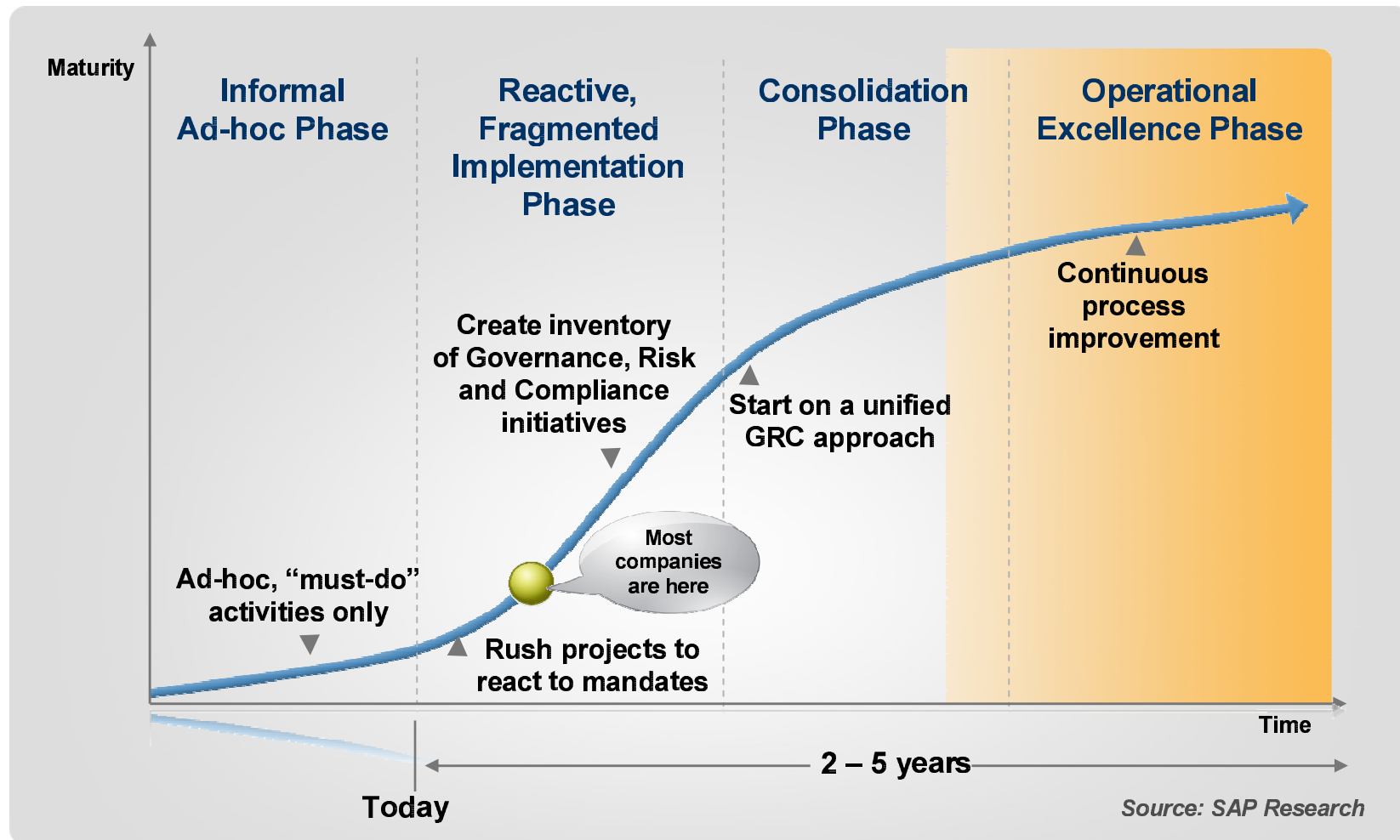


How Do I Get Funding and Support from the CFO / CRO?

Strategic

Tactical

Execution



Get Agreement on Risk Appetite and Thresholds for Supply Chain

Strategic

Tactical

Execution

Plan



Establish risk appetite and thresholds

- For each supply chain initiative, identify compliance requirements: environmental, financial, corporate, customer, supplier
- Develop KPI targets and thresholds based on risk appetite
- End result: Executive agreement on boundary conditions that support corporate risk appetite and compliance

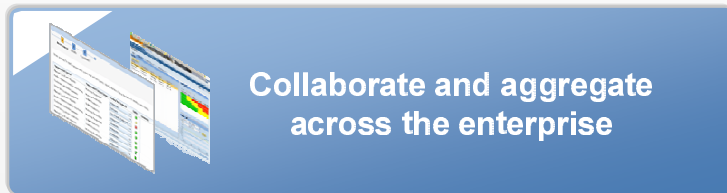
Identify and Assess All Key Supply Chain Risks

Strategic

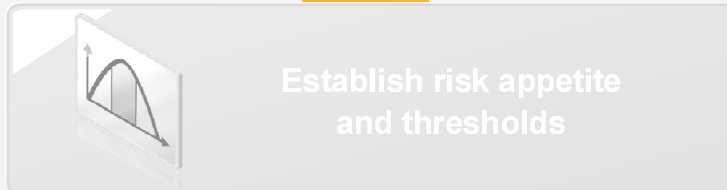
Tactical

Execution

Identify &
Analyze



Plan



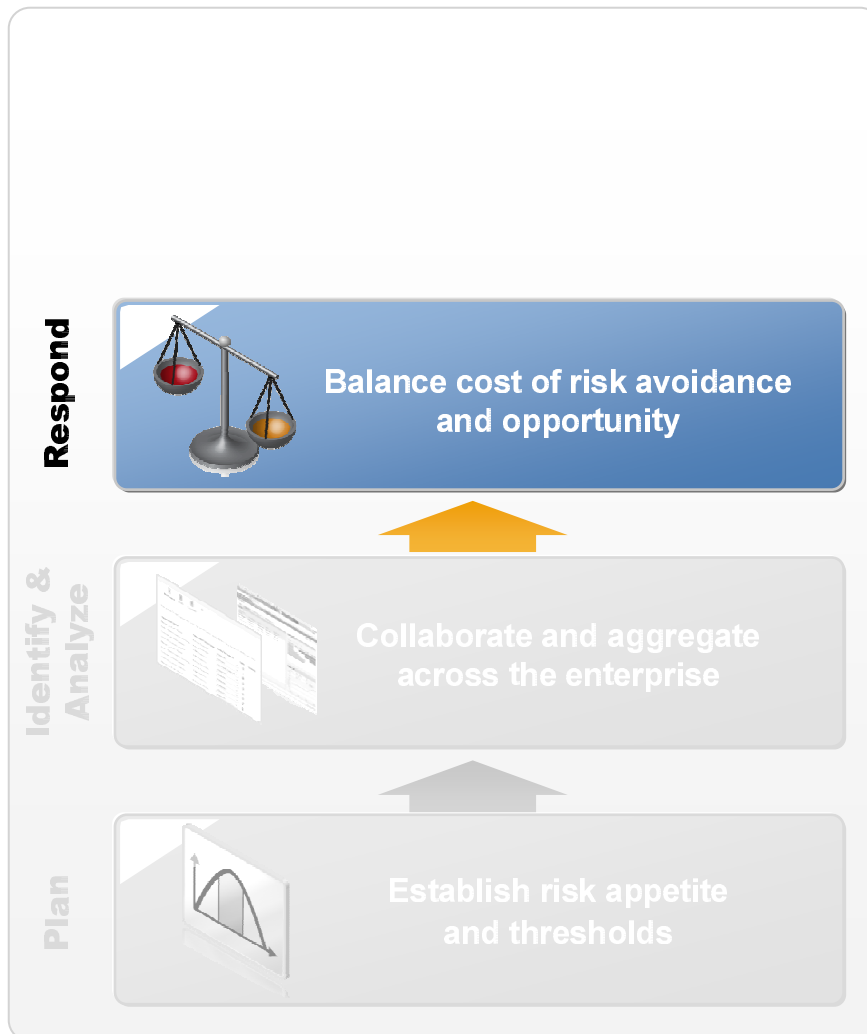
- Perform supply chain risk assessment (leverage loss-incident repository, BOM analysis, audits, etc.)
- Quantify each risks: type, impact, probability (leverage repository), timeframe, and mitigation strategy/costs
- Feed supply chain vulnerability maps into enterprise-wide risk maps

Choosing the Most Critical Risks and the Resolution Strategies

Strategic

Tactical

Execution



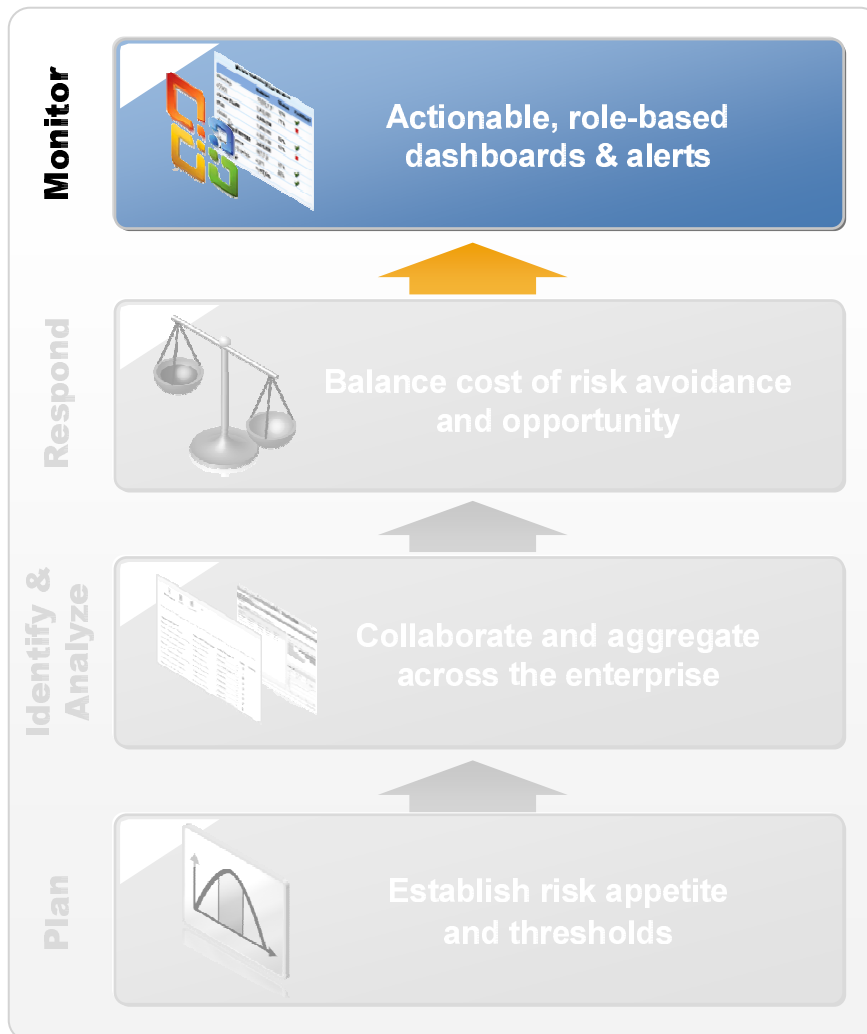
- Risk inter-dependencies identified (e.g. demand fluctuations and exchange-rate hedging)
- Highest priority risks are selected based upon risk-adjusted return on capital
- Optimum avoidance and recovery strategies are executed

Build Proactive Monitoring into Your Current Business Processes

Strategic

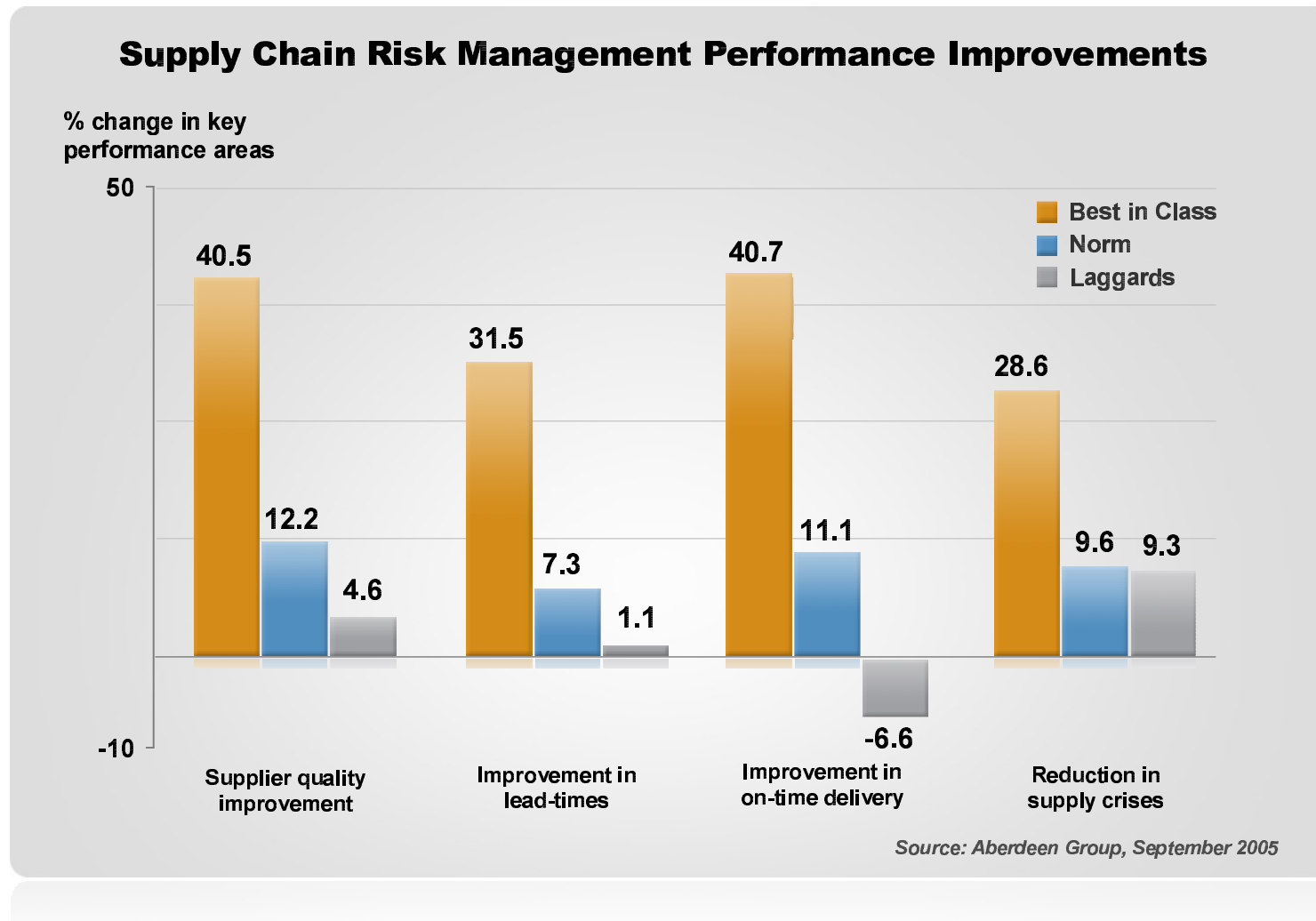
Tactical

Execution



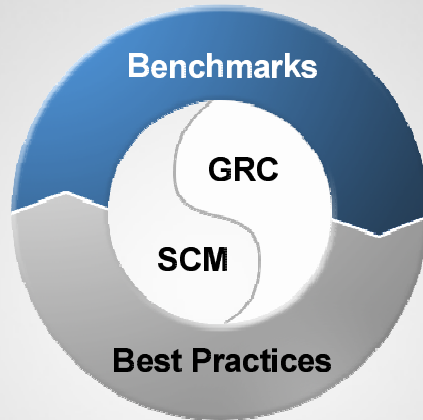
- Requires supply chain risk scorecards
- Incorporate risk management into your current (including manual) supply chain processes and include previously disconnected partners
- Set up process controls to achieve continuous monitoring

Benefits of Best-in-Class Supply Chain Risk Management



Supply Chain Risk Management Is a Focus for SAP

SAP is Investing Heavily



Embed Risk Mgmt in Existing Processes



Strategic ISV and SI Ecosystem



Thank You for Your Time

Questions



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