# Building The Risk Resilient Organization Informed decision-making with confidence and clarity

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# Why has Risk Management become a Board/CEO priority?

#### Drivers and Benefits of Enterprise Risk Measurement

#### **ERM: A Board/CEO Priority**

#### **Exhibit 12: Levels of Commitment**

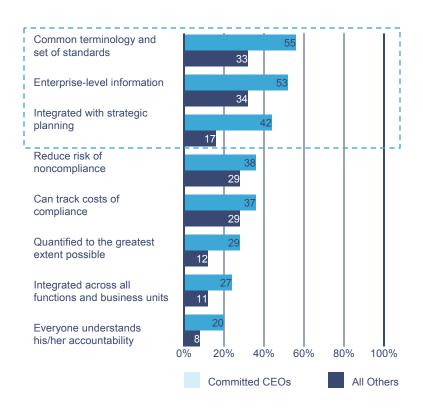
To what extent do you agree or disagree with each of the following statements regarding risk management?



#### **Strategic/Tactical Applications**

# Exhibit 17: Full Term Implementation When ERM is a CEO Priority

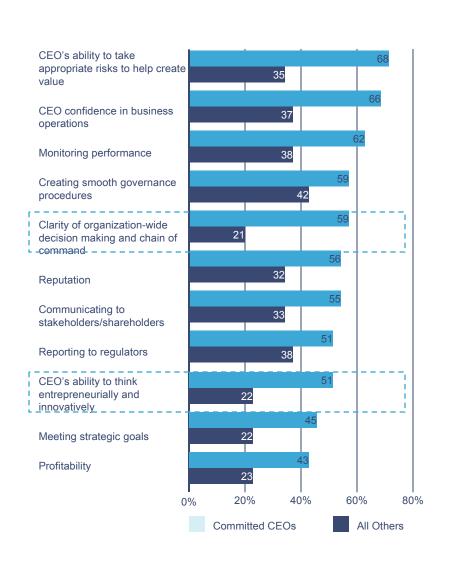
Percentage reporting strong or considerable positive impact



# The Key Driver of Strategic ERM is Value Creation

#### **Benefits of ERM**

When ERM is integrated in Strategic Planning % reporting strong or considerable positive impact



#### **Enterprise risk management provides**

- 1. Enhanced capabilities to align risk appetite and strategy; link growth, risk, and return;
- 2. Minimizes operational surprises and losses;
- 3. Identifies and manages cross-enterprise risks:
- 4. Provide integrated responses to multiple risks:
- 5. Seeks to permit a more informed risk based decision making capability.

Investors reward Corporations that continue to seek ways to deliver shareholder value growth.

Enterprise Risk Management is an integral and essential component of a risk and value based management framework.

Organizations face an accelerating rate of change AND demands from influencers for greater transparency and clarity.

"Our understanding of the world is eroding, and the relationship between what's happening now and what will come next is increasingly cloudy."

- Dan Ariely, Duke University Fuqua School of Business

- Stakeholders want more timely and relevant information --- and they have a much lower tolerance for inaccuracy or incompleteness.
- They want greater certainty in an uncertain world (as evidenced by the 9/11 Act's Voluntary Preparedness Certifications Framework)
- They are pressing management for greater accountability and discipline around risk-based decision making (for example, S&P's May 2008 announcement regarding Enterprise Risk)

"Real world decision-makers frequently appear not to evaluate uncertain events according to the laws of probability."

Nobel Prize, Information for the Public, 2002

# What CEOs are Saying About Risk

92%
Agree that information about risk is either *important* or *critical* to their long-term success

CEOs recognize the importance of risk information to the success of their organizations...

...but lack actionable information to allow for effective risk decisions with clarity and confidence But only 23% of them believe they have comprehensive information about risk to their business.

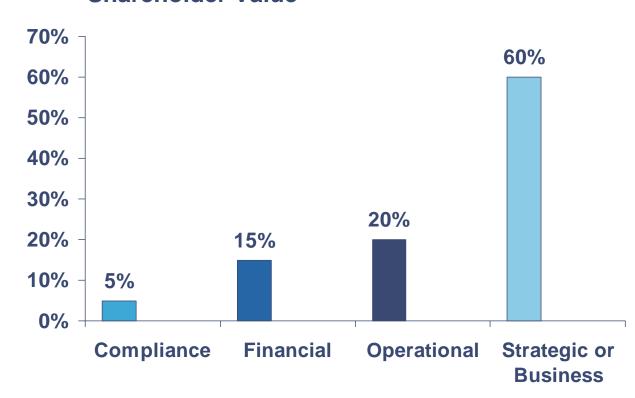
23%

Source: PricewaterhouseCoopers' 2009 CEO Survey

The "big" risks tend to be strategic in nature . . .

 According to recent studies of large cap companies, nearly 60% of the time, strategic or business "factors" are behind rapid declines in shareholder value.

# Risk Factors that Explain Rapid Declines in Shareholder Value\*



<sup>\*</sup> Data collected from *PricewaterhouseCoopers 2008 State of the Internal Audit Profession Study* 

PricewaterhouseCoopers Slide 8

# Pervasive Change in the Pharmaceutical Operating Model

#### Rough environment

- Legal framework must be altered
- Investment model does not work
- Prevention is an opportunity
- Pharma's reputation is an issue
- Need to participate in the debate on healthcare funding

#### Global dynamics

- Global market for medicines is growing
- Cannot rely on the US market
- Developing countries are attractive markets

#### Provide healthcare value through innovation

- Policy makers and payers increasingly control the prescribing decision
- Pharma must prove to payers its products provide value for the money
- R&D productivity must improve
- Patient compliance is an opportunity

armaceutical

Pharma 2020: The vision Which path will you take?\*



www.pwc.com/pharma

# Pharma 2020: Marketing the Future Companies will need to...

- Recognise the interdependence of the payer, provider and pharmaceutical value chains
- Invest in developing medicines the market wants to buy
- Adopt a more flexible approach to pricing
- Develop plans for marketing and selling specialist therapies
- Manage multi-country launches and live licensing
- Form a web of alliances to offer supporting services
- Create cultures that are suitable for marketing specialist healthcare packages
- Develop marketing and sales functions that are fit for the future

# Marketing strategies will be tailored for distinctive product characteristics

Mass-market medicines	Specialist therapies	Marketing implications
Treat common illnesses	Treat rare diseases and specific disease subtypes  Smaller target market Must generally be used with a diagrading to costs but improving company to costs but improving	
Relatively simple products	Very complex products	More scientifically educated sales reps
Typically prescribed by general practitioners	Prescribed by specialists	Needs much smaller sales force
Low price per dose	Very high price per treatment	Extensive proof of clinical efficacy Outcomes-based pricing
Usually oral formulations	Usually delivered by infusion or injection	Intensive patient education & monitoring Costs may be spread across different payment centres & budgets with different reimbursement procedures
Relatively easy to manufacture	Difficult to manufacture	Less vulnerable to generic competition
Easy to transport	Require special distribution & storage facilities	More expensive to ship & store
Generally kept in stock	Often delivered to order	More flexible supply chain essential

# The New Risk Environment – Transforming Organizations

	Traditional Pharma Company	Specialist Pharma Company
Strategy	Generation of new prescriptions	Collaborating with healthcare payers / providers to optimise healthcare resources Responsibility for compliance & persistence
Organization	Vertically integrated	Networked
Culture	Fragmented, with separation of disciplines & brands	Integrated across disciplines, brands & "product-service webs"
R&D	Restricted research agenda R&D silos Cumbersome decision-making processes Reward systems based on number rather than quality of candidate molecules	Comprehensive research agenda Internal/external networks, partnering & adaptive trials Nimble decision-making processes Reward systems based on collaboration & commercial awareness
Manufacturing	Narrow product range Batch-based, "made to forecast" manufacturing Six Sigma processes	Wide product range (including diagnostics, biomarkers & novel delivery technologies) Flexible, "assembled to order" manufacturing Unique manufacturing processes
Distribution	Traditional channels, primarily wholesalers Conventional distribution	Multiple channels, including direct distribution to patients or their healthcare providers Chilled-chain distribution and storage
Pricing	What the market will bear, rebates & discounting	Pay-for-performance
Marketing & Sales	Intensive detailing Based on differentiation of competing medicines	Negotiating with healthcare payers (& patient education programs supplied within overall healthcare package) Based on treatment of specific disease states

We predict a new regulatory environment, new auditing bodies and processes will be required

#### Lifecycle regulation

Life time monitoring of all treatments (Live License)

Single global regulator?

#### **Value for Money**

Payers / providers use
Cost-effectiveness /
HTA assessments for all
regulatory reviews plus
safety and efficacy

#### Resources

Regulators lack manpower for expanded range of studies.

Greater need / use of specialist panels or "notified bodies" ~ medical devices

Qualified auditors

#### **Access**

Regulators use risk benefit analyses not average outcomes. Complexity will increase

### **Transparency**

Public will demand independent verification of **all** clinical data

MHRA 'Sentinel' EudraCT

Emerging risks transcend boundaries of business and society with large scale impact in ways that can be challenging to predict and manage

 The World Economic Forum Risk Network proposes an identification and assessment of such risks:

#### **ECONOMIC**

1	Food price volatility
2	Oil and gas price spike
3	Major fall in US\$
4	Slowing Chinese economy (6%)
5	Fiscal crises
6	Asset price collapse
7	Retrenchment from globalization (develope
8	Retrenchment from globalization (emerging

Underinvestment in infrastructure

#### **GEOPOLITICAL**

11	International terrorism
12	Collapse of NPT
13	US/Iran conflict
14	US/DPRK conflict
15	Afghanistan instability
16	Transnational crime and corruption
17	Israel-Palestine conflict

Regulation cost

#### Violence in Iraa Global governance gaps

#### ENVIRONMENTAL

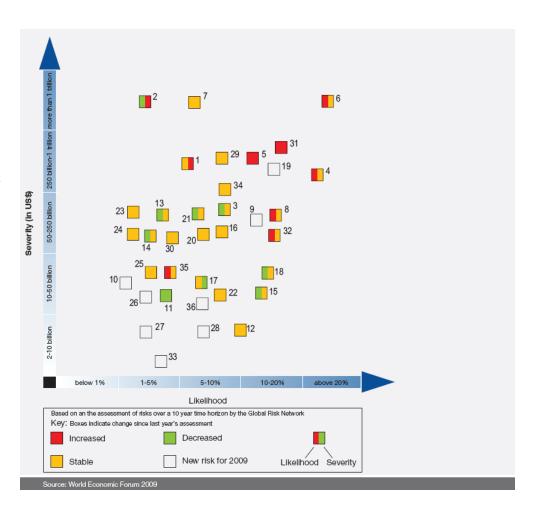
20	Extreme climate change related weather
21	Droughts and desertification
22	Loss of freshwater
23	NatCat: Cyclone
24	NatCat: Earthquake
25	NatCat: Inland flooding
26	NatCat: Coastal flooding
27	Air pollution
20	Diodiversity loss

#### SOCIETAL

29	Pandemic
30	Infectious disease
31	Chronic disease
32	Liability regimes
33	Migration

34	Oli preakdown
35	Emergence of nanotechnology risks
0.0	D 1 6 10

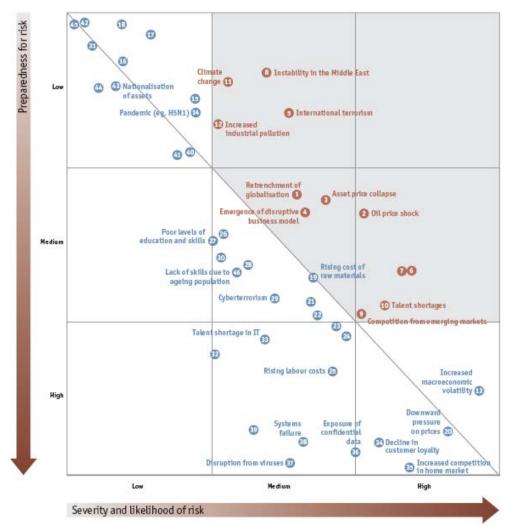
Data fraud/loss



Investment in preparedness to emerging risks is often lacking due to a lack of effective consideration of these risks in planning and budgeting processes

The grey shaded area denotes the risks that appear to have a medium/high combined severity and likelihood, yet low/medium allocation of resources, e.g.,

- Instability in the Middle East
- International terrorism
- Retrenchment from globalization
- Asset price collapse
- Oil price shock



Source: The Economist Intelligence Unit survey, 2008

January 2009

# The Challenge: How do organizations respond given this environment?

- Organizations will run out of resources long before they run out of risks.
- In many commercial organizations, the core challenge is to take risk management from the esoteric and theoretical to the practical and tactical.
- Current practices are focused on containment, mitigation and prevention – not empowerment or enablement.
- While need for change is clear, the value proposition is difficult to articulate and measure.

"Our biggest risk is that we take far too few big risks. Risk aversion within large multi-nationals ranks among the primary barriers to growth."

Global science/technology manufacturing

PricewaterhouseCoopers Slide 16

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# The Challenge

#### Many companies experience:

- Inadequate risk information to support confident decision making
- Incomplete understanding of current risk profile
- Overreaction to known risks creating an overly risk averse culture
- Over spending tactically and under investing strategically in risk monitoring and management systems
- Fragmented (organizations and processes) approach to managing risk making it difficult to manage truly enterprise-wide risks efficiently
- Inconsistent approach to identifying, analyzing and responding to risks across business lines and functional areas
- A reactive culture of crisis management rather than a proactive focus on value creation

Risk Management can enable companies to survive and prosper by becoming "risk resilient"

# The Future State: The Risk Resilient Organization

Risk Resilient Organizations enable **informed decision-making** with **confidence and clarity**, regardless of business climate or conditions.

#### **Characteristics of a Risk Resilient Organization:**

- Empowered by an appropriate vision, culture and tone at the top
- Transparent views risk beyond organizational silos and across the organization (e.g. across business units, functions, and organizational structures)
- Views risk management as a core competency embedded within the culture, strategy and management of the overall business
- Views risk more as an opportunity and less as a hazard
- Monitors and Anticipates risk known, unknown and unknowable
- Creates organizational discipline around risk management
- Provides leadership with relevant, actionable information

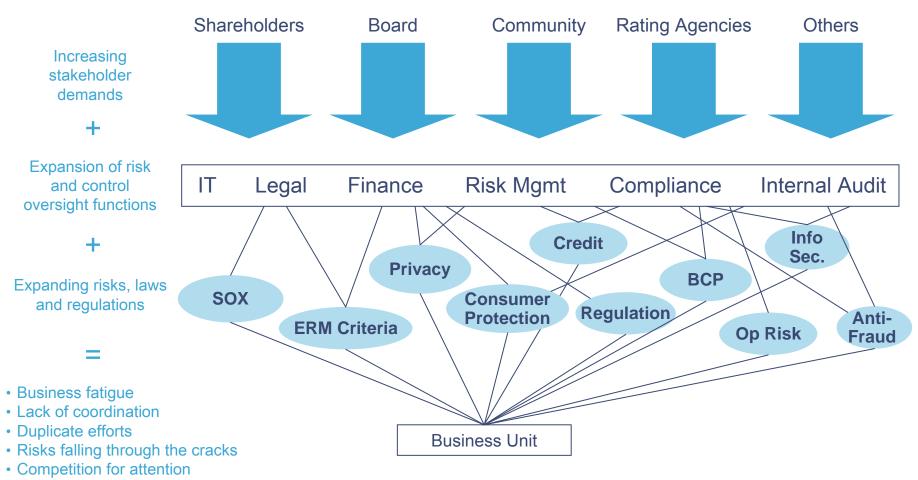
# The Future State: The Risk Resilient Organization

#### **Characteristics of a Risk Resilient Organization:**

- The risk, performance, and operational objectives are strategically aligned to the business strategy
- The organization can proactively manage risk to avoid hazard, manage uncertainty and capitalize on potential opportunities
- The culture is aligned with the risk appetite and tolerance to create a "risk culture" that enhances awareness and understanding of business risk throughout the enterprise resulting in fewer "risk surprises"
- The risk profile of the organization is continuously monitored and communicated to senior management to manage the top risks impacting the organization
- Senior management has allocated resources and techniques, both financial and human capital, to monitor and anticipate risks known, unknown and unknowable
- Risk is managed transparently across the enterprise to support more confident and informed business decision making capabilities
- Accountability and roles of risk management within the business are integrated and clearly defined
- Sustainable growth, value and competitive advantage is better achieved regardless of the uncertainties of the business climate

#### The "Risk Resilient" Organization

# For many organizations: the "current state"



Net Result: Costly, ineffective practices that overemphasize documentation and process, feel bureaucratic and disruptive . . and don't deliver on the objectives. .

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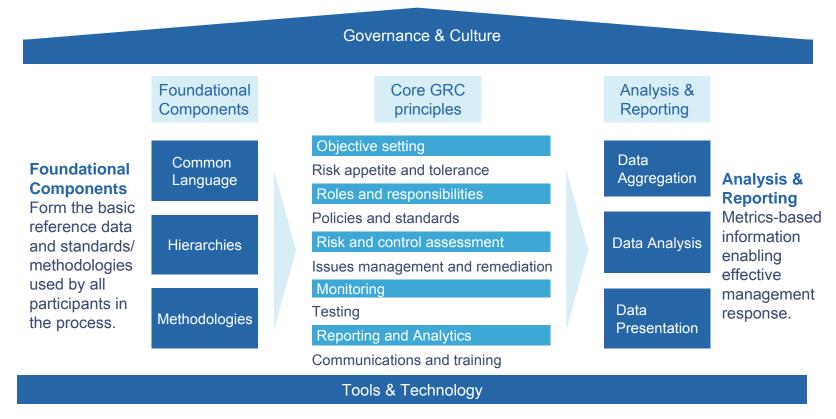
#### The "Risk Resilient" Organization

# Enabling the Risk Resilient Organization: A Sensible Framework

Culture – defines the values and norms that are shared by people in an organization and that control the way they interact with each other and with stakeholders outside the organization

Governance & Culture – Provides leadership, consistency and accountability over the entire process, including tone setting. Critical roles (e.g. risk management) are preserved as centers of excellence leveraging shared processes to drive the business strategy

Tools & Technology – Supports the entire organization, creating process efficiency and more effective data management and reporting.



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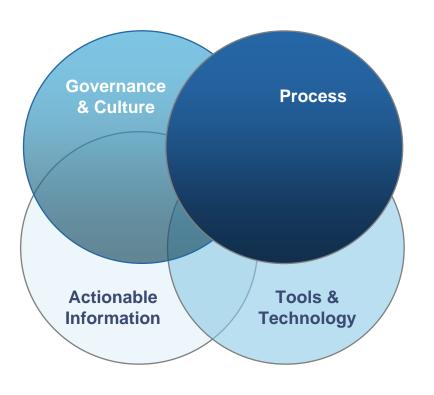
#### The "Risk Resilient" Organization

# Pursuit of the Future State: Next Steps

- Ineffective business processes for customer operations, financial reporting, or procure-topay are no longer tolerable. Why should risk and compliance be any different?
  - Practices were designed, implemented and sustained in an environment in which compliance risk was the primary focus
  - They rely heavily on process and people and lack effective integration of technology
  - They rarely produce actionable information: risk practices that do not prompt action cannot capture value

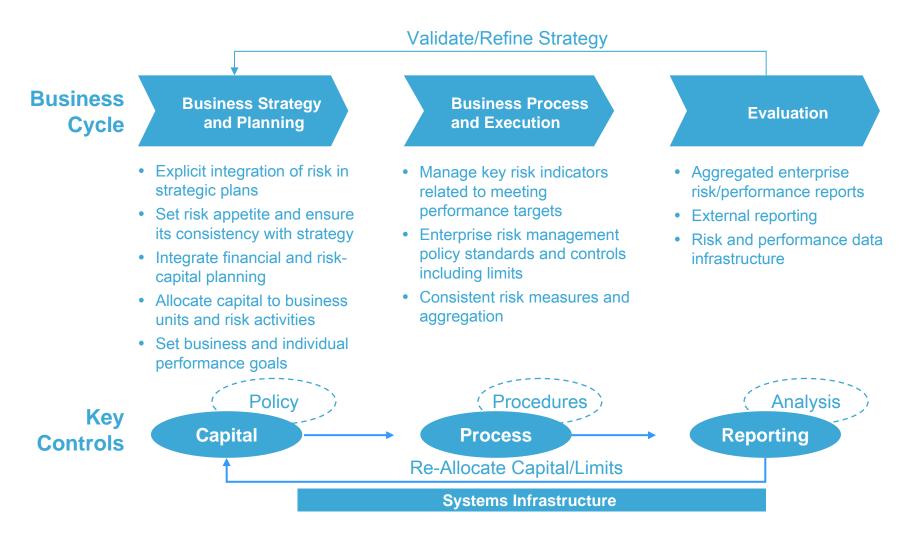
Incremental change or marginal improvements are not likely to provide substantial cost reductions or unlock significant value.

# Pursuit of the Future State: Enabling the Core Elements



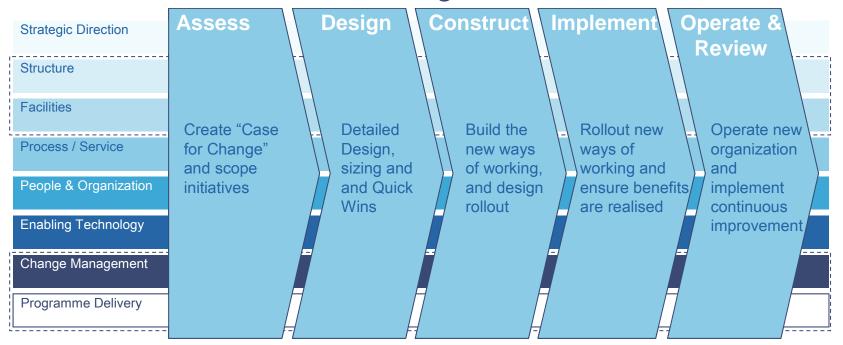
Core Element	Focus Areas
Governance & Culture	Governance framework Organizational structure Roles and responsibilities Communications Performance metrics Risk culture
Process	Strategy setting Gather, aggregate and analyze risk information Develop appropriate responses Monitor effectiveness and efficiency of risk responses Take corrective action and update risk profile
Actionable Information	Reference Data Risk Profile Reporting framework Third party and internal data
Tools & Technology	Standards and Methodologies Gathering and aggregation templates Analytical tools and techniques Integrated risk management / compliance technology platforms

# Industry leaders will integrate Enterprise Risk Management principles into key management activities.



## The "Risk Resilient" Organization

# Pursuit of the Future State: Long Term Transformation



Defining the Highlevel "Blueprint" for the new organization and the "Case for Change", and the portfolio of initiatives that will transform the organization, while achieving shortand medium-term fiscal and business goals

Creating the detailed "Target processes and Operating Model" and plan locations, org for the organisation (e.g. new org structures, processes, locations, skills, IT etc), whilst also implementing "quick win" initiatives

Build new supporting IT, structures, skills etc., to support new ways of working. Understand in detail the requirements to implement these across the organization **Implementing** the portfolio of group-wide and organisationwide initiatives, pro-actively ensuring benefits are tracked and realised. addressing any shortfalls (i.e. portfolio "leakage")

Operate the transformed organisation, deliver the benefits, and instigate a culture of continuous improvement



# Embedding Risk Management into the day-to-day management of the business should allow companies to answer some key questions

#### Enterprise Risk Management – End State

- Strategic planning integrates risk management to ensure proper compensation of the risks being assumed and adequate optimization of capital usage
- Risks are systematically identified and managed on a consistent basis and with clear decision rights
- Risks is explicitly considered when evaluating new projects/investments both on a standalone and portfolio basis
- Key risk indicators impacting business performance targets are properly controlled
- Business unit performance is measured on a risk-adjusted basis in order to obtain a clear understanding of where and how much value is created/destroyed across the enterprise
- Ensure risk management infrastructure is aligned to business strategy and risk appetite
- The board and senior managers confidently make informed decisions regarding risk/reward tradeoffs related to existing portfolio of business and new opportunities

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# Transition to Risk Management implementation is based on five key building blocks.

## Stages of Implementation of Enterprise Risk Management\*



<sup>\*</sup>Source: PwC ERM Framework and Methodology. See Appendix -1 for PwC ERM Implementation Approach.

An initial requirement for Risk Management effectiveness is an appropriate organizational and governance structure.

# Risk Management Organization

- Risk organization should be built under enterprise standards set by a centralized unit
- The unit should be supported by business unit risk managers that report to business CEOs with dotted lines to risk management
- A risk committee structure should be built by risk type and aggregated at an enterprise Board Risk Committee
- Clear mandates, roles and responsibilities need to be defined for both units and committees involved
- An integrated approach to governance, risk and compliance should be evaluated to leverage synergies
- Performance metrics should be identified to promote proper accountabilities

# Clear definition of roles & responsibilities is required between organization units in the business cycle.

Business

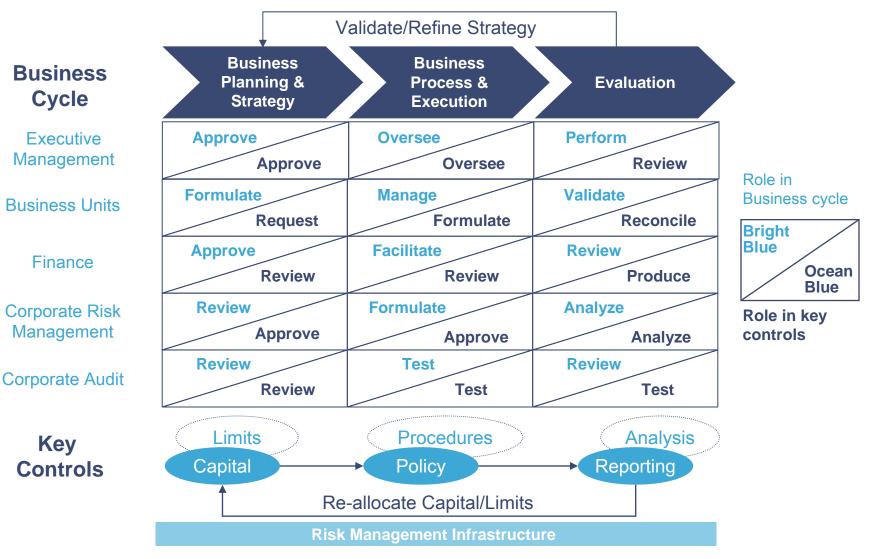
Cycle

**Executive** 

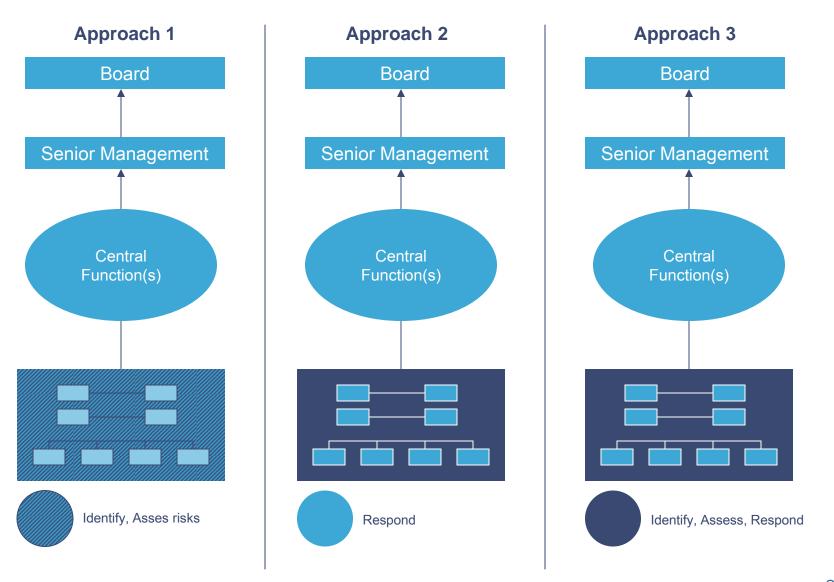
**Finance** 

Key

**Controls** 



# Risk organizational models can be centralized vs. decentralized.



# Risk identification and assessment is a critical first step.

			Risk Categorization	
COSO ERM Principles	8	Business/ Strategic Risk	Sales Effectiveness     Customer	
Internal Environment	_	J	<ul><li>Competition</li><li>Technology</li></ul>	
<b>Objective Setting</b>			External Factors     Process Efficiency	
Risk Assessment		Reputational Risk Regulatory Risk		
Risk Response	-	Operational Risk	Systems Availability     Project Management	
Control Activity	-		<ul><li>Operations</li><li>Network Planning</li><li>Service Assurance</li><li>Provisioning</li></ul>	
Communication	• Environmental		Environmental	
Monitoring	-		<ul><li>Legal</li><li>Fraud and Security</li><li>Procurement</li></ul>	
Applies to all layers of the organization		Financial Risk (credit and market)	<ul> <li>Accounts Receivables</li> <li>Derivatives/Insurance Exposures</li> <li>Interest Rate Risk</li> <li>F/X Risk</li> <li>Equity Risk (stock option employee plan)</li> <li>Employee Benefit Plan Risk</li> </ul>	

# In a self-assessment performed on risk culture key strengths and potential issues can be explored.

Category	Key Attribute	Comp	BU1
	Personal Ethical Practices		
Leadership &	Tone at the Top		
Strategy	Top-down Alignment of Strategy		
	Policies & Procedures		
	Assignment of Ownership		
Accountability &	Demonstrated Accountability		
Reinforcement	Incentives & Discipline		
	Performance Indicators		
	Employee Competence		
	Training		
People & Communication	Information Quality		
	Top-Down Communication		
	Communication Across Processes		
	Risk Assessment Practices		
	Risk Tools & Processes		
Risk Management &	Control Effectiveness & Efficiency		
Infrastructure	System Access & Security		
	Process Reliability & Efficiency		

	# Respo	onses	# Parti	cipants	R	esponse Rate
BU 1	50		100		50%	
Comp	300	50		00	60%	
		Compa		BU	1	PwC Average
Mean so	core		0.92	1.1	6	0.40 to 0.80

#### **Concerns from respondents:**

"If risks were being managed properly... we wouldn't have so many products that miss market needs."

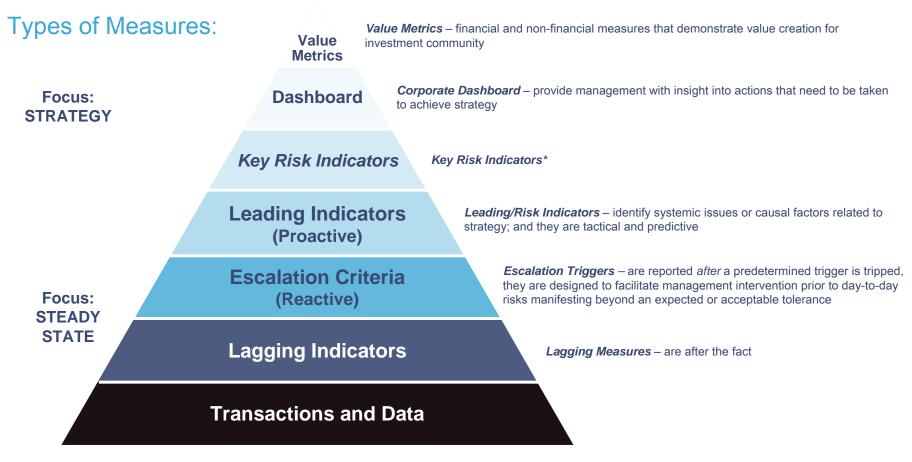
"Responsibility for many business processes is ambiguous. There are overlapping functions and lack of ownership"

"There is too much internal competition, wasted energy that should be directed toward being more competitive."

"The rate of external change dramatically effects our ability to execute our strategy."

Strong	Greater than 1.66	Caution	(0.33) to 0.66
Good	0.67 to 1.66	Review suggested	Less than (0.33)

# Risk metrics should be linked to value drivers, managed based on tolerances and/or targets...



<sup>\*</sup> PwC defines key risk indicators as measures that can be collected at ANY time during the period as required by management

## ... and defined at enterprise and operating levels.

- Based on Kaplan & Norton's Balanced Scorecard approach
- Incorporates both financial and non-financial measures and looks at 4 perspectives of key performance indicators.
- Ensures that desired behaviors are driven through the right combination of metrics
- Ensures alignment of compliance actions with organization's strategy and objectives
- Promotes compliance accountability & responsibility at different levels of the organization

# Organization, People & Culture "Is the organization ready?"

Measures the level of organizational awareness and readiness

#### Sample KPIs:

- Employee training rate
- · Pulse survey trend
- Ethics violation
- Self-assessment activities/programs
- Policies developed/updated

#### **Internal Processes**

"Are we doing the right things and are we doing things right?"

Measures the effectiveness of internal GRC processes

#### Sample KPIs:

- Number of incidents/events
- Hotline call trends
- Suitability rejects
- Replacements
- · Number of significant risks managed

#### **Stakeholders**

"Are we meeting stakeholders' expectations?"

Measures how stakeholders view the organization's GRC efforts

#### Sample KPIs:

- Governance ratings
- Customer satisfaction
- Market share

#### **Financial**

"How are we delivering value to the organization?"

Measures the efficiency and business value of the GRC programs.

#### Sample KPIs:

- Reduction in Cost of Non-Compliance
- Cost of capital
- Credit Rating
- Share price

# The next step consists of measuring key risk factors that impact value volatility.

Risk Types Illustrative Key Risk Indicators Dynamic Model **Business**  Volatility of win/loss ratio Overall and Business Unit Volatility of customer churn distribution curves will be dynamic, changing over time to reflect **Operational**  Frequency and severity of fraud losses changes in the underlying Key Risk Frequency and severity of systems Indicators. breakdowns **Market**  Value-at-Risk for interest rate and FX exposures Employee Benefits Plan Credit Receivables default and DSO Year 2 Counterparty default exposure Regulatory Frequency and severity of compliance Year 1 penalties

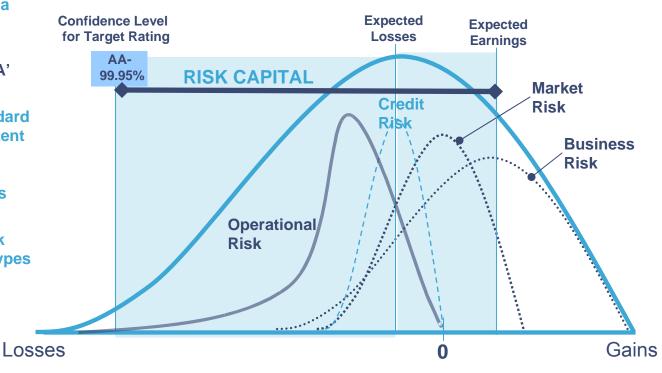
## Risk capital provides a common language to quantify risks.

#### **Modelling Assumptions**

- 1. Risk Capital is the required amount of capital to protect against unexpected earnings deviations over a time horizon given the company's risk distribution and a target rating.
- 2. 99.9% confidence level which corresponds to a target 'Single A' Rating
- 3. 1 year horizon, an industry standard protection level which is consistent with the Company's strategic planning cycle and provides a reasonable time period to access capital markets if required.
- 4. Use observed correlation for risk capital aggregation within risk types when available.

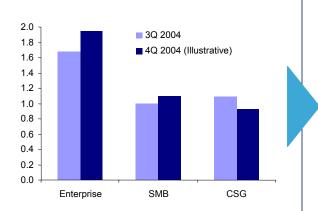
#### Risk Capital Concept

Risk Capital is the required amount of capital to protect against unexpected deviations from expected/budgeted earnings. The Risk Capital approach contains four modules that estimate capital levels for business, operational, market and credit risks.



Risk analysis can be integrated into existing business planning processes, adding more objective risk measures to strategic decision-making.

Risk Capital Analysis



- Internal Risk Capital model
- Quarterly refreshes
- Continual improvement

Risk Capital Reporting

#### **Risk View**

#### **Capital View**

- Bell capital and solvency
- BU/Sub risk and return, capital and solvency
- Recommendations for Finance decisions
- Senior management report
- Results from quarterly Risk Capital analysis form key input

**Capital Mgmt Process** 

#### Pre-strategic dialogue



Strategic dialogue



Planning dialogue

- Impact of corporate strategy on capital availability
- Define risk appetite in line with acceptable EPS range
- Capital allocation of risk appetite to businesses
- Risk quantification and SVA projections

# Risk Management linkage to strategic planning provides clear definition of risk appetite and promotes accountability.

# Six Key Elements of the Planning Process

- 1. Define risk appetite of the enterprise
- 2. Organizational alignment that supports enterprise goal
- 3. Confidence in, and transparency of, forecast by BU/total company
  - a. recurring & non-recurring
  - b. sensitivity
- 4. Using a risk adjusted basis to create plans to manage the key uncertainty drivers
- 5. Develop key action steps and performance tracking
- 6. Cultural alignment including incentives and control issues

# Finally, internal risk reporting should link risk and return data at strategic and tactical levels.

#### Strategic level

#### **DASHBOARD**

#### **Strategic Measures**

- SVA Analysis
- Competitive Position
- Capital Adequacy

**Market View** 

#### **SVA DRIVERS**

#### **Profitability**

- Earnings Quality
- Budget Analysis
- Cost Efficiency
- Growth

#### Risk

- Credit Risk
- Market Risk
- Liquidity Risk
- Operational Risk

#### Tactical level

#### **BUSINESS UNITS**

- Global Commercial
  - US Commercial
  - Europe
  - Other International
- US Federal Government
  - Department of Defense
  - Civil Agencies
  - Other
- Corporate

**TOTAL** 

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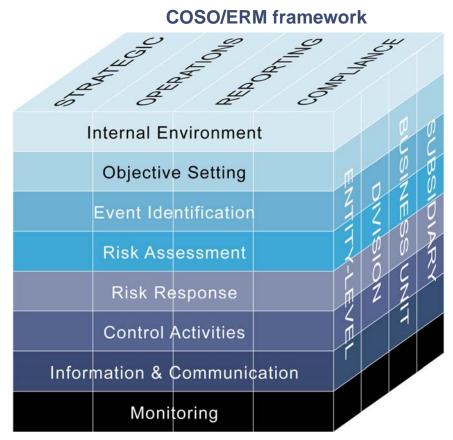
## S&P's approach to ERM by industry



Source: PwC Analysis

## Other frameworks can build upon S&P's evaluation criteria

- Implementing the S&P framework is one step in the "ERM Journey"
- An ERM framework should provide a comprehensive, systematic approach for helping companies manage uncertainty by identifying events, and measuring, prioritizing and responding to a company's internal and external risks
- COSO/ERM is widely accepted as the definitive ERM framework and enhances S&P's requirements to ensure best in class ERM



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#### The S&P ERM timeline



- Incorporating ERM into credit ratings will give S&P a good indication of forward looking company stability and an insight into how management thinks strategically
- S&P began its preliminary analysis in the 3<sup>rd</sup> Qtr of this year (2008).
- 2008 was originally described as a learning exercise, so corporations should begin to prepare now for the 2009 cycle.

# S&P will focus initially on two areas of ERM: risk management culture and strategic risk management

#### Risk management culture discussion topics

- Risk management frameworks or structures currently in use
- The roles of staff responsible for risk management and reporting lines
- Internal and external risk management communications
- Broad risk management policies and metrics for successful risk management
- The influence of risk management on budgeting and management compensation

#### **Strategic risk management components**

- Management's view of the most consequential risks the firm faces, their likelihood and potential effect on credit
- The frequency and nature of updating the identification of these top risks
- The influence of risk sensitivity on liability management and financing decisions
- The role of risk management in strategic decision making

# Initially, S&P will conduct its evaluations by focusing on a series of key questions for management

- What are your top risks?
- How are you managing these?
- What is your risk tolerance for each (and in aggregate)?
- What is your risk governance structure and organization?
- How do you evaluate the success of risk management programs?
- How are risk events incorporated into incentive plans and evaluation of business unit performance?
- How is risk information included as part of key Board or management conversations/discussions?
- How has a recent industry "surprise" impacted you relative to your competitors?

Source: Standard & Poor's

## Summary of S&P's proposed ERM ratings for non-financials

Excellent	<ul> <li>Achieves risk/reward optimization</li> <li>Has very well-developed capabilities to consistently identify, measure and manage exposures to risk and losses within predetermined tolerance objectives</li> <li>Unanticipated losses are highly unlikely to occur</li> <li>Risk management is always considered important in corporate decision making</li> </ul>
Strong	<ul> <li>Demonstrates enterprisewide risk view, but is still less control focused</li> <li>Has capabilities to consistently identify, measure and manage exposures to risk and losses within predetermined tolerance objectives</li> <li>Unanticipated losses are unlikely to occur</li> <li>Risk management is usually considered important in corporate decision making</li> </ul>
Adequate	<ul> <li>Manages risk in separate silos.</li> <li>Has moderate capabilities to identify, measure and manage most major exposures to risk and losses</li> <li>Unanticipated losses are somewhat likely to occur</li> <li>Risk management is often considered important in corporate decision making</li> </ul>
Weak	<ul> <li>Lacks complete controls for one or more major risk(s)</li> <li>Has limited capabilities to systematically identify, measure and manage exposures to risk and losses</li> <li>Risk management may sometimes be considered in corporate decision making</li> </ul>

# Value proposition: better ERM assessments $\rightarrow$ better credit ratings $\rightarrow$ lower cost of capital $\rightarrow$ enhanced reputation

Higher credit ratings lead to a more favorable cost of capital



This applies to all sectors:

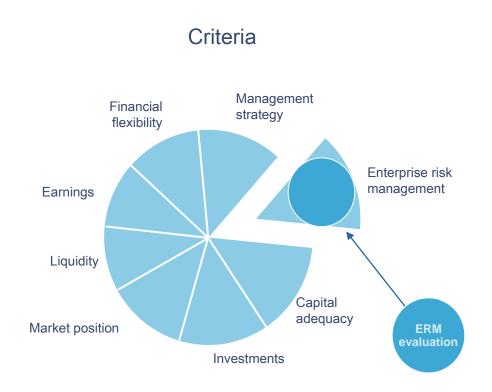
- Industrial Products
- Retail & Consumer
- Technology
- Automotive
- Entertainment and Media
- Financial Services
- Others

One year credit spread for industrial products companies

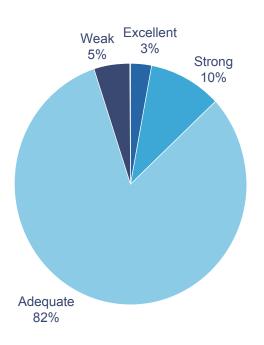
Source: Bloomberg and PwC analysis

A company's cost of capital is driven by its credit rating and cost of debt capital – a higher credit rating enables a company to maintain lower borrowing costs

# Summary of S&P's proposed risk management rating scale for the insurance industry



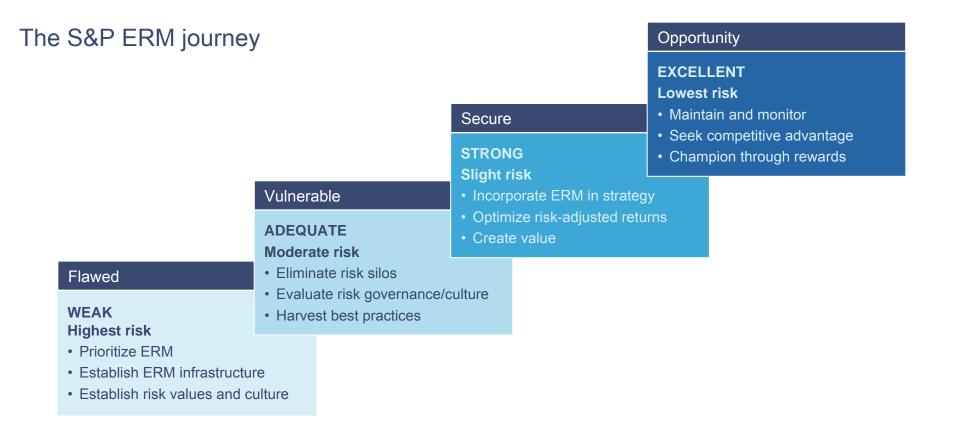
# 2006 all ERM scores global 241 insurers



Over the past two years,10% of financial corporations analyzed had their rating either downgraded or upgraded due to their ERM score

Source: Standard & Poor's

## Taking stock — evaluating the current state of ERM



How ERM adds value to your organization

# Implementing a comprehensive ERM program can add additional value to the organization beyond an improved S&P credit rating

#### The potential exists for:

- Fewer operational and financial surprises
- Reduced likelihood of compliance failure
- Reduction in the overall cost of managing risk
- Lower variability in financial performance
- Reduced cost of capital
- Improved capital allocation across business units
- The ability to take more risk and capitalize on business opportunities
- Ability to allow management to focus on opportunities to drive value creation rather than responding to crises or other unplanned events

A practical approach to preparing for S&P's review

## Preparing to discuss ERM with Standard and Poor's

- Consider how to leverage the work already done on ERM (SOX, etc.)
- Have a clear understanding of the current risk profile
- Evaluate the inherent strengths and weaknesses of current ERM process
- Evaluate the current state of risk management culture
- Be able to demonstrate that ERM influences strategic planning
- Prepare an action plan to improve ERM rating and secure an upgrade or defend against a downgrade
- Have clear view where the organization stands vis a vis S&P's criteria
- Plan to show progress in ERM in the best possible light to the rating agency

# Culture is driven by several organizational elements that need to be addressed

#### Leadership and strategy

- Integrity and ethical values
- Communicate mission and objectives

# Leadership Risk Risk culture Communication

#### Risk management and infrastructure

- · Identify and assess risk
- Establish processes and controls

#### Accountability and reinforcement

- Assignment of authority and responsibility
- Human Resource polices and practices and performance measurement

#### People and communication

- · Commitment to competence
- Information and communication

Culture is a common thread in most risk standards and frameworks, including Basel II, COSO, PCAOB etc. Results of a risk culture survey are an important indicator of the efficiency of an entity's current ERM environment

## How to prepare for the S&P ERM meeting

## Developing the S&P ERM roadmap

Assess	Design	Construct	Implement
Review current state ERM framework	Define S&P ERM preparedness target state	Preparation for S&P ERM meeting	Implementation of S&P ERM action plan
Prepare a risk assessment	Develop S&P ERM action plan	<ul> <li>Overview of enterprise risks</li> </ul>	Migration to target state S&F ERM
Prepare S&P criteria gap report  Risk management culture  Strategic risk management	Develop implementation strategies/priorities Instill project management discipline	<ul> <li>Description of current ERM environment</li> <li>Recognized areas for improvement</li> <li>Improvement efforts (S&amp;P ERM action plan)</li> </ul>	Develop S&P ERM continuous improvement mechanisms
Conduct a risk culture survey			Integrate into larger ERM implementation objectives
Determine advance S&P rating  • Weak  • Adequate  • Strong  • Excellent		<ul> <li>Develop presentation</li> <li>Rehearsals and role playing</li> </ul>	
Agree on ERM improvement opportunities			

A practical approach to preparing for S&P's review

## Common ERM implementation pitfalls

- Lack of clear board and executive level ownership and sponsorship of risk management
- Lack of clear definition of ERM scope, and roles and responsibilities
- Lack of ERM integration with internal strategic and operational planning

- Conflicting priorities (failure to give ERM the attention and/or resources it needs)
- Poor communication with key stakeholders
- Not leveraging and integrating existing ERM practices already in place
- Lack of appreciation that ERM implementations can be long term projects

#### Conclusions

- The rate of change will continue to accelerate and unmanaged risks will become more transparent to stakeholders
- Effective risk management enables management to anticipate and manage those events that will affect the company
- Effective risk management facilitates earnings volatility management, capital adequacy and capital optimization towards value creation
- Risk capital approaches help to balance various interests and views around the performance and risk profile of the company

# The Risk Resilient Organization

## Transforming risk to opportunity\*

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