

Risk Intelligent Enterprise Risk Management (ERM)

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Today's Agenda

- **In the Spotlight**

- More Than 15 Minutes of Fame

- **Marketplace Perspective**

- Deloitte Global Risk Survey Recap

- **Risk Intelligent ERM**

- Vision, Road Map and Lessons Learned

- **Questions/Comments**

In The Spotlight

Mary Shapiro - SEC Chairman

“Boards of directors did not thoroughly question the decisions of senior management to take on risks. Of equal concern, boards often appeared to misunderstand the gravity of risks taken”

Mats Isakson - OECD

“When times were good, it seems that many took their eye off the ball and now we see the consequences. A firm’s rising share price is not necessarily a sign of good corporate governance”

Charles Schumer - (D-NY)

“Among the central causes of the financial and economic crises that the United States faces today has been a widespread failure of Corporate Governance”

Summary of market trends in risk management

1. Clear governance practices embedded into the organizational structure:

- ❖ Increase oversight, interaction and communication with board and senior management risk operating committees
- ❖ Communicate a statement of the risk philosophy and appetite of the firm that is actionable and can be assessed
- ❖ Document and clarify roles and responsibilities - both the implied and explicit authority and visibility of the Chief Risk Officer
- ❖ Actively participate in the business and strategy discussions

2. Alignment of front office and risk management priorities:

- ❖ Decision making is risk/return oriented and in partnership – risk is “right sized” to organization
- ❖ Compensation structure of the Front Office is aligned with risk and reward
- ❖ Risk management function has risk “veto” authority with clear escalation/ resolution processes
- ❖ Risk management, in partnership with the Front Office, should monitor, report, measure and manage exposure against risk appetite

3. Investment in infrastructure and risk capabilities:

- ❖ Enhance valuation and exposure measurement capabilities (i.e. ability to value and measure the risks associated with all transactions)
- ❖ Re-prioritize infrastructure investment areas, focus on risk exposure aggregation, netting and product coverage
- ❖ Develop informative, consistent and actionable information to senior management, board and business lines and regulators and rating agencies

4. Industry & regulatory guidance:

- ❖ March 2008, Senior Supervisors Group: Observations on Risk Management Practices During the Recent Market Turbulence
- ❖ April 2008, Financial Stability Forum: Enhancing Market and Institutional Resilience
- ❖ July 2008, Institute of International Finance: Report of the IIF Committee on Market Best Practices
- ❖ Summer 2008, Basel II: Sound Practices for Managing Liquidity Risks in Banking Organizations

Senior Supervisor Group Report (October 2009)

In the Spotlight-Lessons Learned

In addition to reviewing the funding and liquidity issues central to the banking turmoil of 2008, this report identified a number of deficiencies in governance and risk management that regulators believe will require additional effort and investment.

Board and Senior Management Oversight of Risk Appetite

- The failure of some boards of directors and senior managers to establish, measure and adhere to a level of risk acceptable to the firm

Compensation Programs

- Compensation programs that conflicted with the control objectives of the firm

Information Technology Infrastructure

- Inadequate and often fragmented technological infrastructures that hindered effective risk identification and measurement

Relative Positioning of Risk Takers vs. Risk Managers

- Institutional arrangements that conferred status and influence on risk takers at the expense of independent risk managers and control personnel

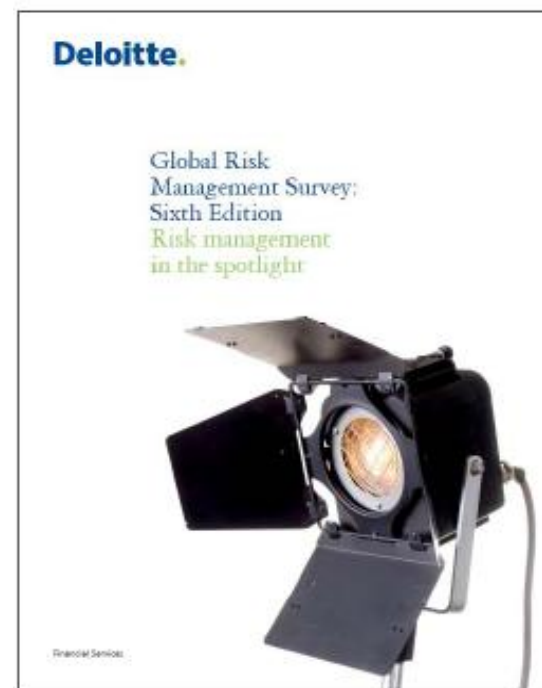
*Source: Senior Supervisor Group Report March 6, 2008

Marketplace Perspectives

Marketplace Perspective: Deloitte Global Risk Management Survey, 6th Edition

The sixth edition represents our most recent look at the state of risk management in the global financial services industry

- The survey was conducted online during the latter part of 2008
- We solicited responses from CRO's or their equivalent at financial services firms around the world
- Participating institutions totaled 111, with aggregate assets of over US\$19 trillion



Deloitte Global Risk Management Survey

Leading practices in risk governance

Role of the board of directors:

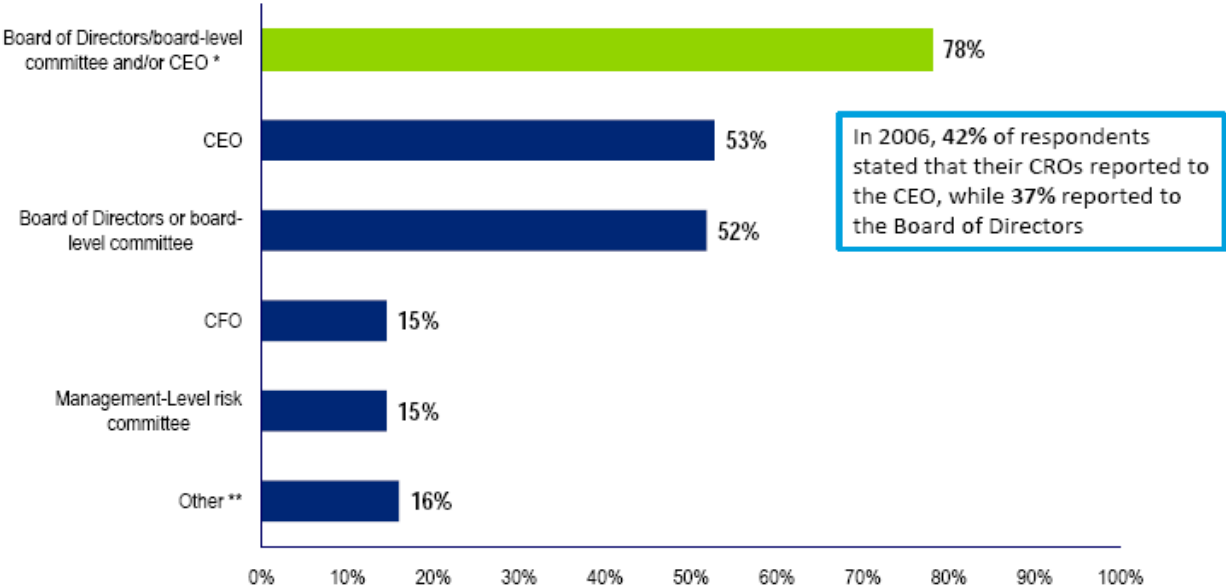
- Oversight of risk management should be an acknowledged responsibility of the board of directors
- A board risk committee can be an effective practice
- The board should consider and approve a clearly-stated risk framework and associated policies
- The board should consider approving a formal statement of risk appetite. This can provide strategic direction for business decision-making

Deloitte Global Risk Management Survey

Role of the CRO

The Survey demonstrates that the role of the CRO continues to gain importance and visibility:

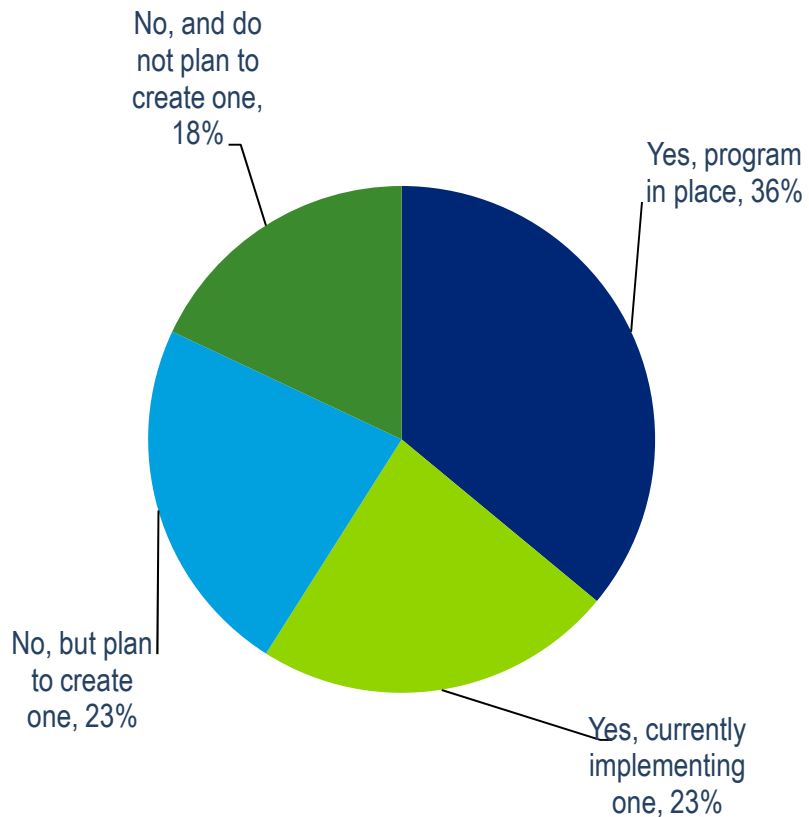
- The CRO reported to the Board of Directors and/or the CEO at over three quarters of surveyed institutions.
- The support of the CEO is important, and he or she should work closely with the CRO.
- The CRO is a valuable conduit of information on risk and potential impact on the business to the Board.



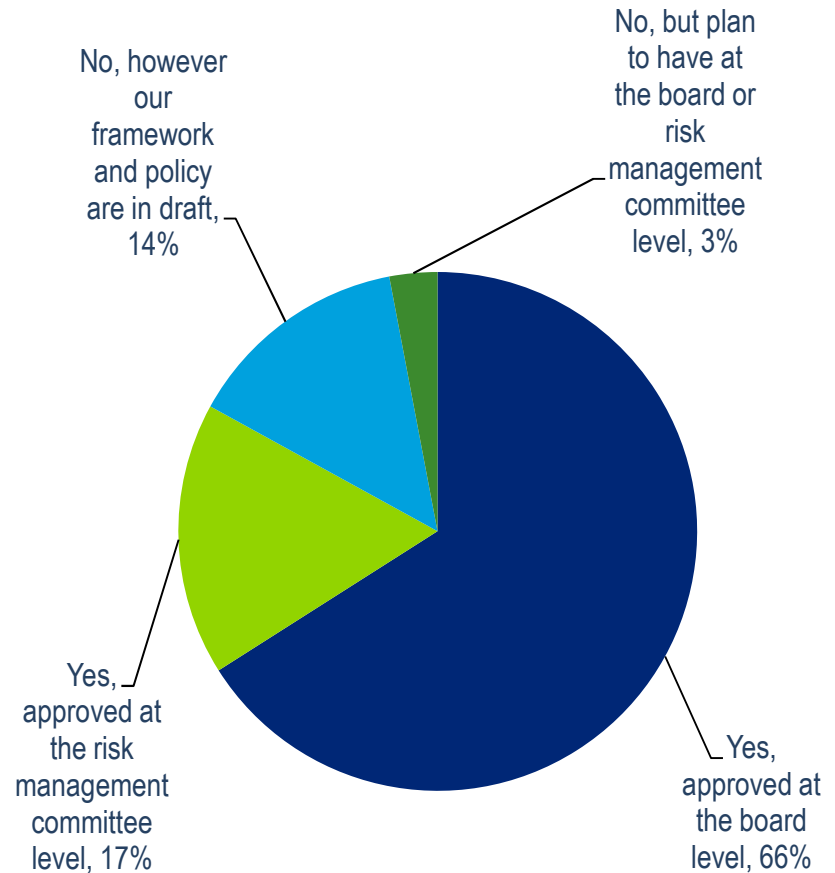
Deloitte Global Risk Management Survey

Survey results on ERM

Does your organization have an integrated ERM program or equivalent?



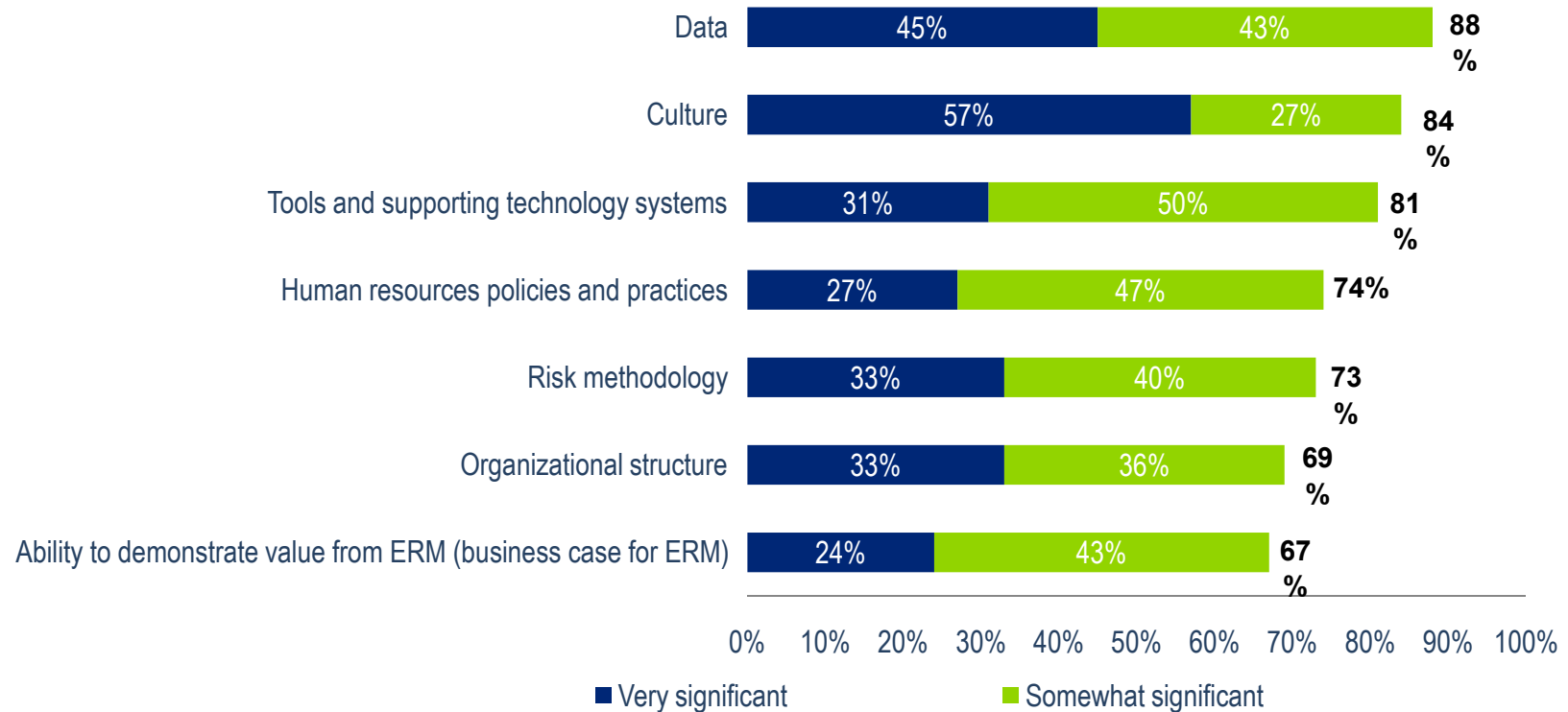
Does your organization have an approved ERM framework and/or an ERM policy?



Deloitte Global Risk Management Survey

Key Challenges

How significant are the following challenges to your organization in implementing its ERM program or equivalent?



Deloitte Global Risk Management Survey

Leading practices in ERM

Measuring value of ERM:

- Seek to apply both quantifiable measures and non-quantifiable assessments
- Consider measuring and assessing potential benefits in terms of:
 - Possible reduction in losses due to risk events
 - Improved perception by rating agencies
 - Improved understanding of risks and controls
 - Increased ability to escalate issues
 - Enhanced reputation and transparency

Deloitte Global Risk Management Survey

Leading practices in ERM

Consider a broader scope for ERM:

- Most common in ERM programs today are credit, market, and operational risks
- Give consideration to additional risk types not included in Basel II capital calculations:

✓ **Liquidity**

✓ **Reputation**

✓ **Business continuity**

✓ **IT security**

✓ **Regulatory compliance**

✓ **Strategic**

✓ **Litigation**

✓ **Vendor**

✓ **Privacy**

✓ **Budgeting/financial**

✓ **Geopolitical**

Risk Intelligent ERM

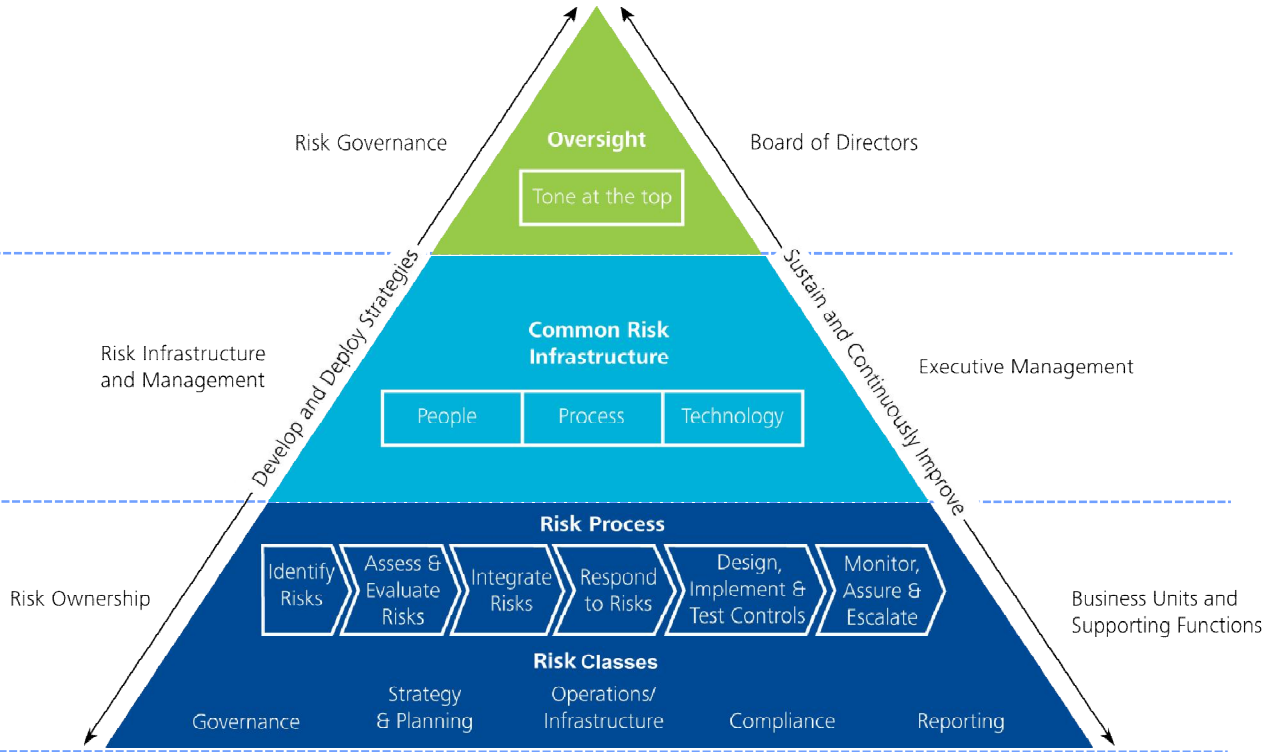
Building a Risk Intelligent Enterprise

A holistic approach for transforming an organization’s risk management capabilities, providing a vision and roadmap for becoming a Risk Intelligent Enterprise.

Nine fundamental principles for building a Risk Intelligent Enterprise

- Governing Bodies Responsibility
- Roles & Responsibilities
- Common Definition of Risk
- Common Risk Framework
- Common Risk Infrastructure
- Executive Management Responsibility
- Objective Assurance and Monitoring
- Business Unit Responsibility
- Support of Pervasive Functions

The Risk Intelligent Enterprise



Assess maturity: The Risk Intelligence Diagnostic and Maturity Model



Typical Symptoms				
Unaware	Fragmented	Top Down	Systematic	Risk Intelligent

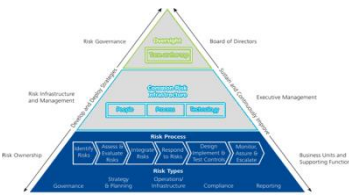
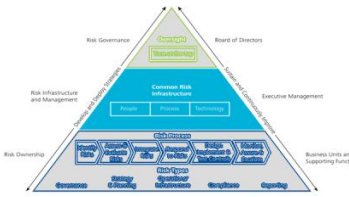
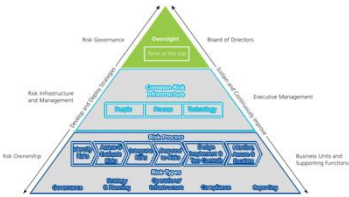
- | | | | | |
|--|---|---|--|---|
| <ul style="list-style-type: none"> • Ad hoc/chaotic • Depends primarily on individual heroics, capabilities, and verbal wisdom | <ul style="list-style-type: none"> • Independent risk management activities • Limited focus on the linkage between risks • Limited alignment of risk to strategies • Disparate monitoring & reporting functions | <ul style="list-style-type: none"> • Common framework, program statement, policy • Routine risk assessments • Communication of top strategic risks to the Board • Executive/Steering Committee • Knowledge sharing across risk functions • Awareness activities • Formal risk consulting • Dedicated team | <ul style="list-style-type: none"> • Coordinated risk management activities across silos • Risk appetite is fully defined • Enterprise-wide risk monitoring, measuring, and reporting • Technology implementation • Contingency plans and escalation procedures • Risk management training | <ul style="list-style-type: none"> • Risk discussion is embedded in strategic planning, capital allocation, product development, etc. • Early warning risk indicators used • Linkage to performance measures and incentives • Risk modeling/scenarios • Industry benchmarking used regularly |
|--|---|---|--|---|

Risk Intelligence: Program Methodology Summary

Phases Nine Principles		Assess	Develop	Implement	Monitor
		Assess Current State and Identify Opportunities for Enhancing the Risk Management Program	Develop Components of a Desired State for the Risk Management Program	Implement Risk Management Program Enhancements	Monitor and Sustain Risk Management Program
Risk Governance	Governing Bodies Responsibility	1.1 Business and Risk Management Strategy	2.1 Board and Executive Management Risk Committees and Charters	3.1 Integrated Approach to Strategy and Risk Management	4.1 Board and Executive Management Performance and Risk Management Oversight
	Roles & Responsibilities	1.2 Board and Executive Management Risk Oversight and Governance	2.2 Governance Structure		
	Common Definition of Risk	1.3 Risk Culture and Definition of Risk	2.3 Risk Culture, Taxonomy, Framework(s) and Metrics		
		1.4 Risk Treatment, Appetite and Limits			
Common Risk Framework	1.5 Risk, Compliance and Regulatory Framework(s)	2.4 Enhanced Risk Management Methodology, Policies, Processes and Controls	3.2 Enhanced Risk Management Infrastructure to Support Business Operations	4.2 Business Strategy and Risk Management Execution	
Executive Management Responsibility	1.6 Risk Management Methodology, Policies, Processes and Controls				
	Common Risk Infrastructure	1.7 Risk Management Technologies			2.5 Technology Infrastructure to Manage Enterprise Performance and Risk
		1.8 Data Governance			
Objective Assurance and Monitoring	1.9 Resources, Skills and Training Activities	2.6 Resources, Skills and Training Program	3.3 Assurance Framework, Programs and Activities	4.3 Objective Assurance over the Risk Management Program	
		2.7 Change Management and Communications Program			
	1.10 Risk, Compliance and Regulatory Oversight Functions and Activities	2.8 Assurance Framework for Risk Oversight and Independent Assurance			
Risk Ownership	Business Unit Responsibility & Support of Pervasive Functions	1.11 Internal Audit Function and Activities	2.9 Risk Mitigation and Response Plans	3.4 Integrated Risk Management within Key Business Functions/Activities	4.4 Risk Processes and Controls/Escalation and Response
		1.12 Enterprise and Business Unit Risks to Value Creation/Preservation			
		1.13 Risk Scenarios, Measurement, Vulnerability and Priority	2.10 Business Process and Control Enhancements		
		1.14 Existing Risk Mitigation Activities/Business Processes and Controls	2.11 Key Risk/Performance Indicators		

Enterprise View of Risk: Top Down and Bottom Up

ILLUSTRATIVE



**Board of Directors
Senior Management
Risk Committees**

Aggregation and Integration
 • Risk metrics & limit data
 • Business unit risk assessment reporting

The Top Down View
 • Risk appetite, risk policies, guidelines, and framework

**Chief Risk Officer (“CRO”) &
Enterprise Risk Management (“ERM”)**

Data Collection
 • Risk metric inputs

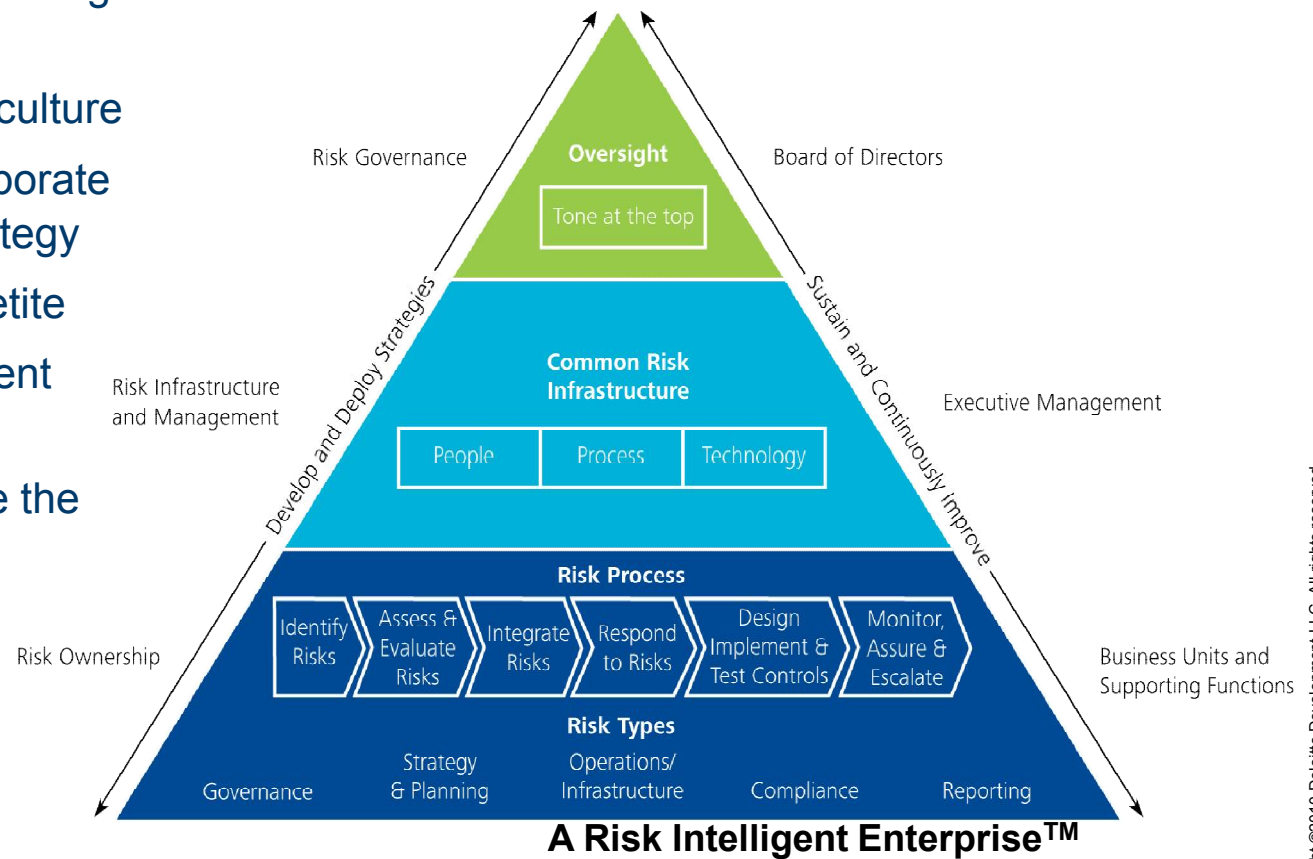
Operationalized View
 • Practices & procedures
 • Guidance on risk mitigation and limit information

Business Units and Corporate Functions

Risk Intelligent Governance

Risk Intelligent Enterprises adopt a perspective of risk governance that balances risk and reward and includes the following:

1. Define the board’s risk oversight role
2. Foster a Risk Intelligent culture
3. Help management incorporate Risk Intelligence into strategy
4. Help define the risk appetite
5. Execute the Risk Intelligent governance process
6. Benchmark and evaluate the governance process



1. Define Oversight Roles

Effective risk oversight begins with a solid mutual understanding of the extent and nature of the board's responsibilities as compared to those of management and other stakeholders.

Actions Board's should consider in defining the Board's oversight role:

- **Defining the board's risk governance roles and responsibilities:** Depending on the organization's needs and the board's structure and composition, it may make sense to allocate specific aspects of risk oversight responsibility to specific board committees (e.g. Board Risk Committee)
- **Consider board composition:** A board should possess enough collective knowledge and experience to promote a broad perspective, open dialogue, and useful insights regarding risk, Having the right mix of board members at the table will allow for discussions that are founded on Risk Intelligent knowledge and perspective
- **Establish an enterprise-wide risk management "ERM" framework:** Like any organizational process, risk management requires a framework that defines its goals, roles, activities, and desired results.

Steps to improve risk governance:

- Revised committee charters to include risk-related concerns
- Created committees dedicated to risk management oversight
- Benchmarked their practices against peer companies
- Obtained guidance from associations of directors and similar sources
- Focused more attention on risk management and its value and shortcomings
- Reviewed ethical guidelines and codes of conduct

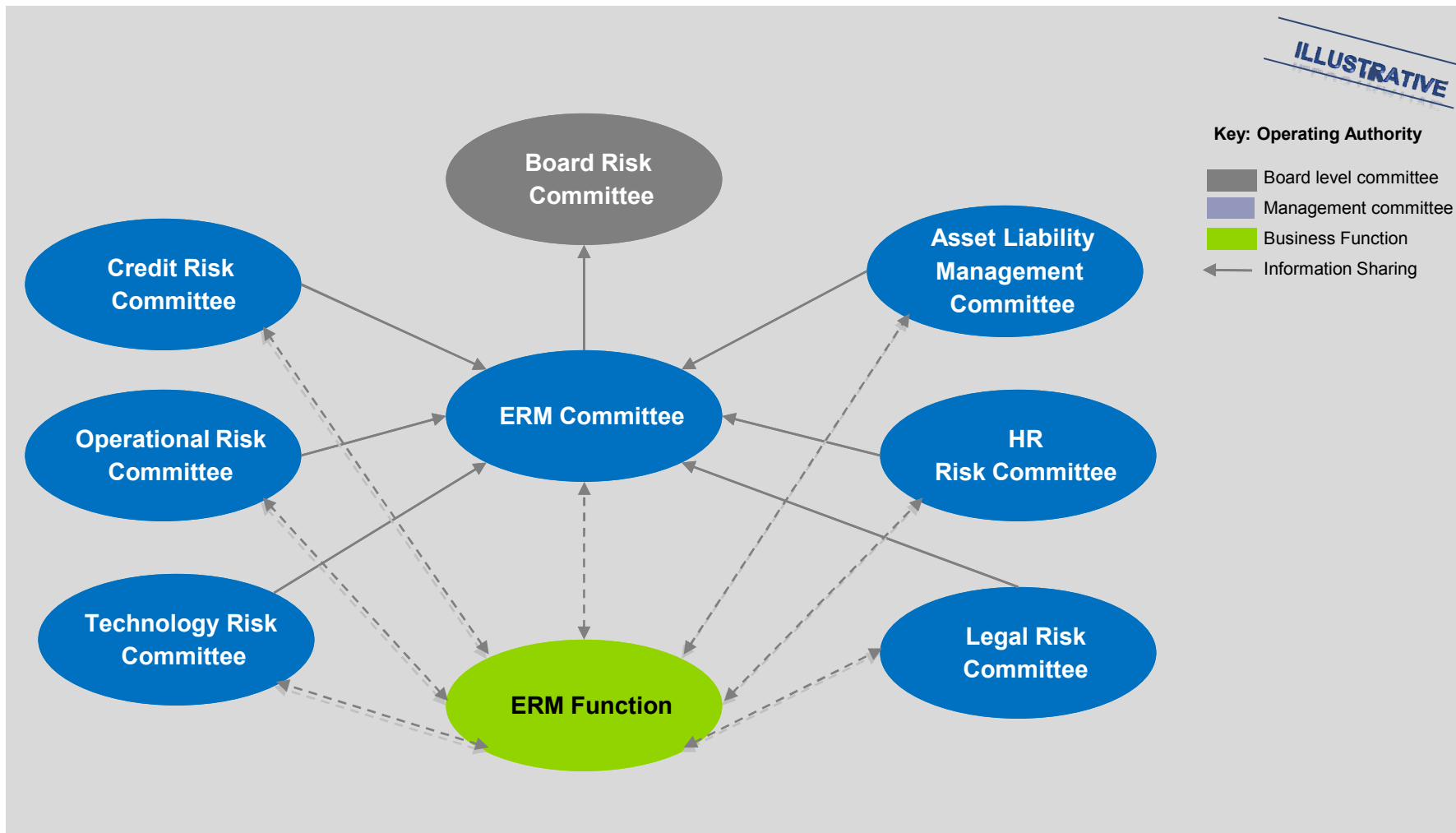
Risk governance and management roles and responsibilities should drive accountability and be complementary.

Business Units	CRO & ERM Function	Risk Committees	Executive Committee	Board	Internal Audit
Take and Manage Risks	Monitor & Aggregate	Oversee	Approve	Ratify	Validate
<ul style="list-style-type: none"> Ownership of business unit activities which give rise to risk and responsibility for risk management and mitigation Risk identification and self-assessments <ul style="list-style-type: none"> Develop strategy & take actions to manage and mitigate risks within policy and risk appetite Provide assertions on risk exposure and controls for their business area / function <ul style="list-style-type: none"> Business Unit Risk Managers coordinate the Business Unit risk assessment, monitoring, and mitigation activities 	<ul style="list-style-type: none"> Establishment of consistent risk policies, governance framework, standards, and information reporting mechanisms to facilitate effective risk management Monitoring and participation in specific risk committees for the purpose of providing the enterprise view Provide summary information and analysis to the Executive Committee to assess, evaluate, and act on risk 	<ul style="list-style-type: none"> Oversight over risks within scope of authority Oversight and approval of measurement and management methodologies for risks within scope Oversight of changes in risk profile Oversight of Business Unit management of designated risk categories 	<ul style="list-style-type: none"> Approval of key documents, such as: <ul style="list-style-type: none"> ERM Policy Risk Appetite Risk Governance Model Authorities Committee Charters Monitor risk exposure status Approve Board reporting package Monitor Business Unit mitigation plans and their status for top risks Approve limit exceptions 	<ul style="list-style-type: none"> Ratification of key documents, such as: <ul style="list-style-type: none"> ERM Policy Risk Appetite Risk Governance Model Authorities Committee Charters 	<ul style="list-style-type: none"> Independent Verification and Testing of: <ul style="list-style-type: none"> Internal Controls Quality of the Enterprise Risk Management Program Quality and integrity of risk models

ILLUSTRATIVE

Risk Committee Blueprint

Your committee blueprint should align with the key risks in the organization. The role of the ERM Committee is to aggregate risk information and to provide enterprise wide analysis.



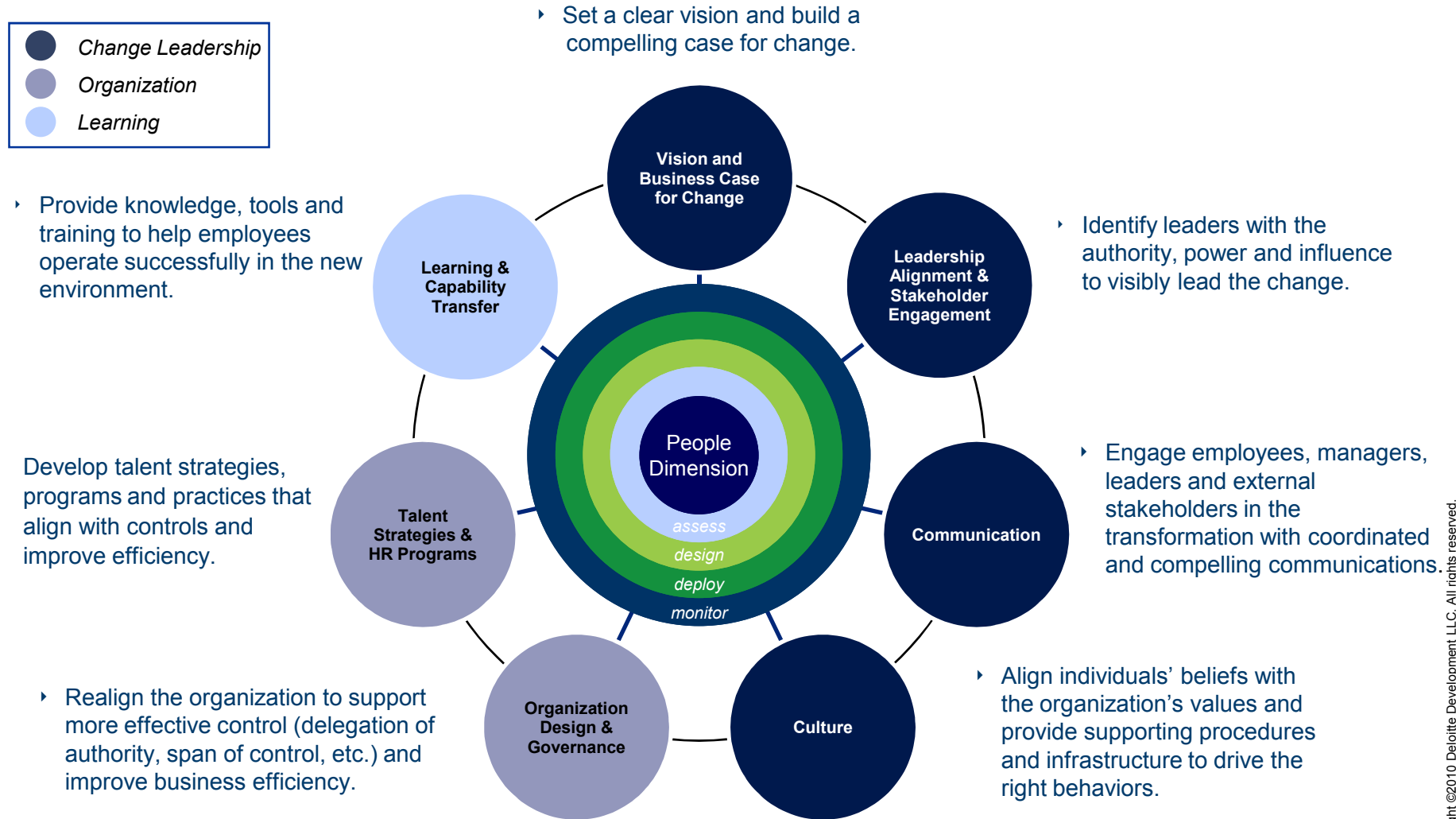
2. Foster A Risk Intelligent Culture

In a Risk Intelligent culture, people at every level manage risk as part of their jobs.

Actions to consider in fostering a Risk Intelligent Culture:

- **Lead by Example in Communicating About Risk:** Set expectations with senior executives and business unit leaders what information the board expects and how it will be conveyed. Set the tone for an open and candid dialogue.
- **Build Cohesive Teams with Management:** Create opportunities to engage with management and to learn more about their risk management practices. These interactions can form the basis of a continual, iterative process of alignment that both allows you to refine your views and priorities, and enables management to adjust its practices to reflect your guidance.
- **Reward Risk Intelligent behavior:** Consider incorporating risk-related objectives into company's executive compensation structures. Urge management to weave risk management practices into job descriptions, training, work processes, supervisory procedures, and performance appraisals.
- **Consider a third-party assessment:** In addition to self-assessment, commissioning an independent external review of your risk governance policies, procedures, and performance can yield useful benchmarking information and shed light on leading risk governance practices.

Cultural Transformation starts with a vision



3. Incorporate Risk Intelligence into Strategy

Actions to consider in incorporating Risk Intelligence into Strategy

- **Design Processes for Integrating Risk Management Into Strategic Planning:** Consider augmenting the strategic planning process by considering risks across the organization, prioritizing the risks, and appropriately allocating risk management resources. Consider the scenario-planning process and whether it incorporates both upside and downside risks, as well as a view into the overall risk exposures and opportunities
- **Monitor strategic alignment:** Monitoring strategic alignment involves analyzing the risk-return tradeoff in setting the company's financial goals the proposed means of reaching those goals, and likely constraints.
- **Establish accountability:** As the company's overall governing body, the board should establish and reinforce executive accountability for risk management.

Steps to encourage a Risk Intelligent approach to strategic planning:

- Increased the frequency of discussions of risk with management
- Engaged in defining high-level risk indicators with management
- Evaluated risk appetite and tolerances with management
- Identified activities, decisions, and transactions (typically by size) to be brought to the board's attention
- Obtained information on risk-related leading practices for their industry

4. Help to Define Risk Appetite (Continued)

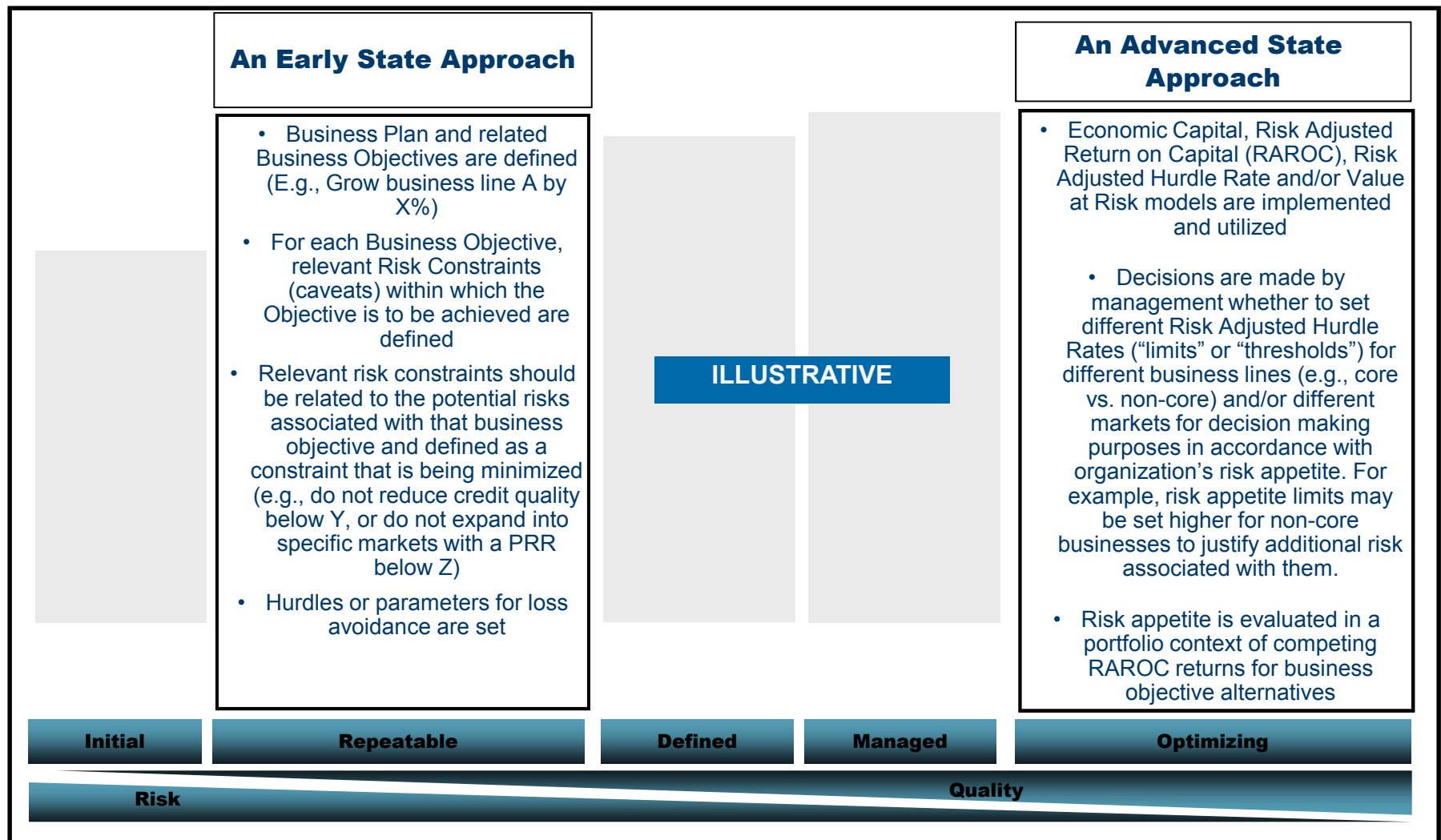
Risk appetite defines the level of enterprise-wide risk that leaders are willing to take (or not take) with respect to specific actions, such as acquisitions, new product development, or market expansion.

Key Considerations for Defining Risk Appetite

- Risk Appetite should be established for the organization’s key activities and risk types.
- Risk Appetite can initially be articulated using a combination of qualitative statements (e.g., acceptable business activities) and quantitative measures of acceptable levels of risk and thresholds by risk categories (e.g., maximum industry or counterparty concentration, target credit agency rating, etc.).
- An organization should determine baseline risk appetite to assess the current state and to determine level of effort to achieve the next milestone towards the desired state.
- Perspective on risk appetite evolves along a maturity continuum and may include additional quantitative approaches (e.g., Economic Capital, Risk Adjusted Return on Capital (RAROC), Risk Adjusted Hurdle Rate, Value at Risk and/or potential impact on shareholder value).

4. Help to Define Risk Appetite (Continued)

Below is an illustrative Risk Appetite approaches viewed through a Maturity Model



5. Execute the Risk Governance Process

Risk Intelligent governance process should be strategic in design, promote awareness of the relationship between value and risk, and efficiently and effectively allocate the company's risk management resources. Effective execution of the process depends on maintaining a disciplined, collaborative approach focused on process design, process monitoring, and accountability.

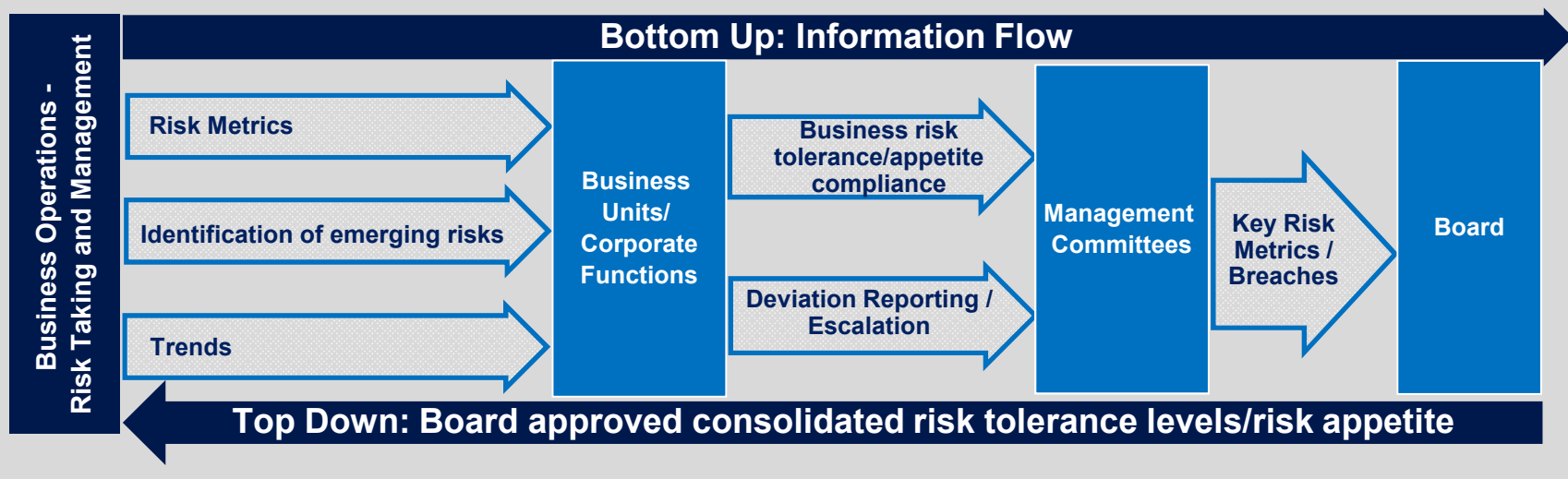
Actions to consider in helping to execute the Risk Governance Process:

- **Work with management on process design:** The Board should collaborate with executives to develop value creation and risk management objectives, board responsibilities, and mechanisms for elevating key risk issues.
- **Monitor the overall risk management process:** Set up procedures for evaluating and overseeing the processes by which risks are systematically identified, reported, and managed. To execute effective monitoring, it's important for board members to keep abreast of the company's vulnerabilities, risk appetite, and risk tolerances.
- **Conduct formal risk management program assessments:** A risk management program assessment can include questions about risk governance, risk infrastructure and management, and risk ownership. This provides a comprehensive view of the process and enables all stakeholders to see how they fit into both the basic process and any improvement efforts.
- **Clarify accountability at the board and management levels:** Complete, ongoing disclosure of major risk exposures by the CEO to the board is fundamental to a Risk Intelligent governance process. The Board should work with the CEO to verify that responsibility for specific risks and related activities has been assigned to specific members of the management team.

Effective Execution Focuses on Both Top-Down and Bottom-Up

The Risk Management Function is responsible for establishing standards, coordinating with the Business Units, monitoring, aggregating and reporting consolidated risk information:

- Enterprise wide risk reporting should provide information about key risks on an enterprise-wide, integrated and consistent basis vs. separate reports prepared for specific risk committees (e.g., ALCO or Credit).
- Enterprise Risk Management reports should strive to be exception-based and be focused on KRIs and thresholds for each major risk category.
- Risk reporting should be tied to defined Risk Appetite, and clear protocols should exist for escalation of breaches.



6. Benchmark and Evaluate the Governance Process

Risk governance is a continual process, and systematic mechanisms for evaluating and improving risk governance proficiency .Actions to consider in helping to benchmark and evaluate the Governance Process execute the Risk Governance Process:

- **Work with management on process design:** The Board should collaborate with executives to develop value creation and risk management objectives, board responsibilities, and mechanisms for elevating key risk issues.
- **Use internal monitoring and feedback:** The Board should periodically ask for feedback from senior executives on how well the Board has played its risk oversight role. As part of this effort, the Board may wish to request relevant reports from internal audit and/or the risk management team.
- **Participate in continuing education and updates:** To keep the Board knowledge up to date, it's helpful for the Board receive ongoing updates on approaches to risk management and on risks developing in the internal and external environment.
- **Solicit independent viewpoints:** An independent review of the Board's risk governance program can help you identify what is working, locate any gaps, and prioritize areas for improvement. Consider having management present the summary results along with a plan for any corrective actions.
- **Include risk as a topic in the annual board self-assessment:** The board's annual self- assessment process provides a broad view into how the full board feels that it is performing in its overall governing body role.

http://www.corpgov.deloitte.com/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/USEng/Documents/Audit%20Committee/Risk%20Oversight/Risk%20Intelligent%20governance_Deloitte_082609.PDF

Closing Thoughts: Risk Intelligence Difference

Although progress has been made in developing ERM programs, the lessons of the current crisis and the increased regulatory and shareholder scrutiny demand a new level of risk intelligence.

- **Critical Success Factors of an effective ERM Programs are:**

- Board and executive management oversight and support
- Independence and authority of the CRO in the organization
- Focus on the key risks to the organization (iceberg vs. ice cubes)
- Linkage to risk appetite to determine response (opportunities to leverage vs. threats to mitigate)
- Aggregation and integration of risk information across risk categories, regions/countries and divisions/business units
- Forward looking view and incorporation of new and emerging risks

Questions/Comments/Feedback

Deloitte.

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Presenter Biography



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Experience: Over 25 years experience assisting clients in building, enhancing and integrating their governance and risk management practices.

Dolores Atallo-Hazelgreen is a Firm Director and a tenured leader in the Risk Strategy & Regulatory financial services practice focusing on Enterprise Risk Management (ERM), Corporate Governance, Enterprise, Credit and Operational Risk. She is the National Relationship Leader for the Federal Home Loan Bank System and the National Leader for the Regulatory & Capital Consulting Markets Practice for the Deloitte Inclusion Initiative.

Dolores has extensive experience assisting clients in building, enhancing and integrating their risk management practices from the Board of Directors to the business process level. She advises the firm's financial services clients on full life cycle risk management projects, by designing and enhancing ERM programs that assess risk as business impact and analyze opportunities to efficiently leverage risk, control and compliance initiatives. In this role, she advises board members and senior management in matters of governance practices, committee charters and structures, articulation of risk appetite, thresholds, metrics and risk program branding, linkage to strategy, cultural integration and program implementation, including training and facilitation.

Prior to joining Deloitte & Touche in 1996, Dolores was a charter member of Coopers & Lybrand's In-Control Services Practice, an early adopter among the Big Four to focus on the linkage between governance, risk management, internal controls and regulatory compliance. She specialized in risk management and regulatory services for the financial services industry and also served as the global leader for COSO training.

Dolores speaks and publishes extensively on topics related to enterprise risk management most recently for the Federal Financial Institutions Examination Council (FFIEC), Fiduciary Investment Risk Management Association (FIRMA), the Professional Risk Managers International Association (PRMIA) and International Financial Services Association (IFSA).

Additional Resources

Deloitte's Center for Corporate Governance encourages dialogue and knowledge-sharing, and provides thought leadership on governance issues. Additional Center activities include:

- Audit Committee Brief and Corporate Governance Monthly Newsletter
- U.S. Center Web site www.corpgov.deloitte.com – Audit committee Section
- Global Center for Corporate Governance

Selected references for today's presentation include:

- Shareholders Bill of Rights
(http://schumer.senate.gov/new_website/record.cfm?id=313468)
- Restoring American Financial Stability Reform Act
(http://banking.senate.gov/public_files/FinancialReformDiscussionDraft111009.pdf)
- Organization for Economic Co-Operation and Development
(<http://www.oecd.org/dataoecd/32/18/31557724.pdf>)
- SEC Proxy Access Reform
(<http://www.sec.gov/rules/proposed/2009/33-9086.pdf>)
- Treasury Guidance on Corporate Governance
(<http://www.treas.gov/press/releases/tg165.html>)
- SEC Corporate Governance Disclosures
(<http://www.sec.gov/news/press/2009/2009-268.htm>)

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