Enterprise-Wide Risk Management

Embedding ERM Principles into Accounting and Finance

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Learning Objectives

- Recall enterprise-wide risk management best practices for identifying, evaluating, and determining how to respond to relevant risks
- Recall how to embed risk management into day-to-day accounting and finance activities

ERM Program Goals

- Formalize how risks and identified, assessed, managed, monitoring, and reporting on in light of strategic priorities
- Helps management and those charged with governance make informed judgments in the face of uncertainty

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Varying Levels of Adoption

1. Some informal practices exist with issues dealt with reactively
2. Systems and processes are in place and partially aligned with business operations
3. Formal systems embedded and operating to meet expectations
4. Integrated systems permit collaborative strategic and efficient responses to current and emerging risks
5. Systems, processes and culture are directly linked to strategic priorities to optimize governance

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Key Elements for Success

1. Alignment with corporate strategy
2. Risk strategy and governance
3. Common risk language with a clear value proposition
4. Enterprise risk assessment
5. Risk response plans
6. Ongoing monitoring

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Example Emerging Risks

- Macroeconomic and geopolitical uncertainties
- Digital transformation
- Cybersecurity
- Climate change
- Health and safety
- Increasing regulatory requirements
- New technology development
- Growing investor and public interest

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Communicating With Governance

- Identify the key risks for each of an organization's strategic priorities or challenges
- Create a direct "line of sight" between performance targets and risks that must be managed to achieve them
- List risks beside the relevant strategic objective to make relevance clear

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Example Risks:
Goal to Reduce Costs by 15%

1. Can't attract skilled resources
2. Loss of information in a cyber intrusion
3. Negative change in compliance requirements
4. Loss of resources to competitors
5. Major contractor cost increase
6. Environmental incident

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Critical Elements of an ERM Plan

1. ERM Program Objectives
2. Metrics for tracking ERM program success
3. Risk governance and reporting structure, including board oversight and allocation
4. Clearly defined risk management roles, responsibilities, and authorities from top down
5. An operating model that includes the resources and processes that will support objectives

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Accountant's Role in ERM

- Promote and facilitate effective risk and opportunity management in support of value creation and preservation over time
- Expectation that accountants develop skills beyond managing financial reporting and compliance risk
- Focus on the benefits of intelligent risk-taking in addition to the need to mitigate and control risk

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CFO and Finance Role

- Many are not driving cross-functional risk management
- Well-positioned to provide deep insights based on knowledge of data and activities
  - Financial stewardship
  - Managing compliance with laws, regulations, contracts and agreements
  - Communication with those charged with governance
  - Providing integrity and objectivity in key decisions

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How Accountants Support Risk Management Approaches

- Financial and non-financial implications of project and investment proposals and alternative courses of action
- Forecasts that integrate key drivers of value and cost, including testing assumptions and sensitivity analysis of key variables and developing alternative scenarios
- Reviewing potential positive and negative impacts from external factors
- Risk weighting, adjusting performance measures sensitivity analysis, and scenario modeling

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Treasury

- Manages financial risks with foreign exchange, commodity price, interest rate, and liquidity risk
- Ensures treasury activity properly supports organizational goals

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Internal Audit

- Provides objective assurance to those charged with governance
- Provides assurance on material business risks
  - Managed appropriately
  - Internal control is well-designed and operating effectively

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Those Charged With Governance

- Chair and participate on audit committees
- Focus on financial reporting risk
- Oversee enterprise risk management
- Review and approve company strategies, objectives, and related risk profile
- Determine whether management is taking the appropriate risk management actions
- Review and approve an entity's overall risk appetite and risk policies

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Why couldn't the shoes go out to play?

- They were all tied up…

Traditional View of Risk

- Risk management can sometime be seen as a process designed to prevent rather than facilitate an event or activity
  - Such as reacting to crisis
- May be inappropriately viewed as increasing costs with potentially little benefit
- Goal should be more proactive practices
  - Help align mission, vision and values with strategy, risk appetite, and performance

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Organization-Wide Emphasis

- ERM is not a “department” or distinct “function”
- Different parts of organization and multiple processes merge to expose an organization to uncertainty
- There may be a dedicated risk functions
  - Helps create awareness and culture across the organization

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Key Tasks of CFO and Finance

1. Identify uncertainties relating to objectives and the business model
   - Ensure right decisions are made at the right time
2. Identify value of intangible assets, such as intellectual capital, data, brand, etc.
3. Capture broad aspects of value creation to provide data and insights on all critical aspects of a business
   - High-quality information is crucial to sound decision-making

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Key Tasks of CFO and Finance

4. Apply risk modeling and analytic techniques
5. Identify interconnections and interdependencies between different trends
6. Ensuring functioning within risk appetite and related tolerances

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Overall Key Point

- Focus on the risks that matter most
- Criteria should consider a combination of factors
- Continuously update assessments over time
- Ensure governance is actively involved in managing the top 10-15 risks
- Build risk management accountability

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Overview of COSO Internal Control Integrated Framework (2013)

5 Internal Control Components

Source: Based on the 2013 COSO *Integrated Framework*

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Five Components – 17 Principles

1. Control Environment	1. Demonstrate commitment to integrity and ethical values. 2. Exercise oversight responsibility. 3. Establish structure, authority and responsibility. 4. Demonstrate commitment to competence. 5. Enforce accountability.
2. Risk Assessment	6. Specify suitable objectives. 7. Identify and analyze risk. 8. Assess fraud risk. 9. Identify and analyze significant changes.
3. Control Activities	10. Select and develop control activities. 11. Select and develop general controls over technology. 12. Deploys through policies and procedures.
4. Information and Communication	13. Use relevant information. 14. Communicate internally. 15. Communicate externally.
5. Monitoring	16. Conduct ongoing and/or separate evaluations. 17. Evaluate and communicate deficiencies.

Operations Objectives

- Achieving entity's mission and vision:
  - Resources may be misdirected
- Based on management's choices:
  - Profitability, return on assets, liquidity
  - Productivity and quality
  - Customer and employee satisfaction
  - Increasing donor satisfaction
  - Satisfying governmental program objectives

Compliance Objectives

- Laws and regulations
- Contracts, grants and agreements

Reporting Objectives

- Financial:
  - **Internal:** Customer Profitability Analysis, Bank Covenants, Divisional F/S
  - **External:** Annual F/S, Interim F/S
- Nonfinancial:
  - **Internal:** Asset Utilization, Customer Satisfaction, Health and Safety Measures
  - **External:** Internal Control Reports, Sustainability, Supply Chain

Overlapping Internal Control Objectives

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Did you hear about the man who got his finger stuck in the computer?

- He was trying to install his thumb drive….

Enterprise Risk Management – Integrated Framework

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COSO's ERM Frameworks

- *Enterprise Risk Management – Integrated Framework (2004)*:
  - Provided a more robust focus on a broader subject
- *Enterprise Risk Management – Integrating with Strategy and Performance (2017)*:
  - Overlaps with *COSOs Internal Control – Integrated Framework (2013)*
  - Recognizes increased globalization and complexity
  - Accommodates evolving technology and data analytics
  - Divided into 5 components and 20 underlying principles

ERM Defined Within Framework

- Process
- Affected by an entity's management, those charged with governance, and other personnel
- Applied in strategy setting and across the entity
- Designed to identify potential events that may affect the entity's ability to achieve objectives
- Manages risk within risk appetite

Key Elements of ERM

1. Aligns risk appetite and strategy
2. Enhances risk response decisions
3. Reduces operational surprises and losses
4. Identifies and manages multiple and cross-enterprise risks
5. Seizes opportunities
6. Improves deployment of capital

Underlying Premise of ERM

- Every entity exists to provide value to stakeholders:
  - Challenge is how much uncertainty to accept
- Value is maximized when optimal balance between growth/return and related risks:
  - Along with effective and efficient deployment of resources in pursuit of objectives
- Helps an entity get to where it wants to go, and avoids pitfalls and surprises along the way

Benefits of ERM

- Achieves performance and profitability targets
- Prevents loss of resources
- Ensures effective reporting and compliance with laws and regulations
- Avoids damage to the entity's reputation and associated consequences
- Forces integrated risk consideration, beyond single projects and departments
- Helps understand implications of chosen strategy

Components of Original ERM (2004)

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Components of New ERM (2017)

1. **Governance and culture** – Sets tone for ethical values, desired behaviors (including oversight), and risk understanding
2. **Strategy and objective-setting** – Establishing risk appetite as a basis for identifying, assessing, and responding to risk
3. **Performance** – Prioritization of risks in context of risk appetite and selection of response
4. **Review and revision** – Function over time, considering substantial changes and necessary revisions
5. **Information, communication, and reporting** – Continuous process of obtaining and sharing internal and external information

Governance and Culture – Principles (2017 ERM)

1. Exercises board (governance) risk oversight
2. Establishes operating structures (e.g., how organized to carry out day-to-day activities)
3. Defines desired culture (that characterize core values and risk attitudes)
4. Demonstrates commitment to core values (integrity and ethics)
5. Attracts, develops, and retains capable individuals

Characteristics of a Risk-Aware Culture

- Stresses importance of managing risk
- Encouraged transparent and timely sharing of risk-related information
- Supports achievement of entity's strategy and business objectives
- Emphasizes values and desired behaviors

Example Survey Questions Related to Culture

1. The leaders of my unit set a positive example for ethical conduct.
2. I understand the entity's overall mission and strategy.
3. Disciplinary action is taken against those who engage in professional misconduct.
4. Turnover of personnel has not significantly affected our ability to achieve objectives.
5. The leaders of my business unit are receptive to all communications about risk, including bad news.

Strategy and Objective-Setting – Principles (2017 ERM)

6. Analyzes business context (e.g., trends, relationships, and other factors)
7. Defines risk appetite (in context of creating, preserving, and realizing value)
8. Evaluates alternative strategies (and impact on risk profile)
9. Formulates business objectives (to align and support strategy)

Factors That Impact Business Context

- Anything that influences and entity's current and future strategy and business objectives
  - External environment – e.g., political, economic, societal, legal, technological, etc.
  - Internal environment – e.g., capital, people, process, technology, etc.

Link Business Objectives to Strategy

- Financial performance – e.g., profitability
- Customer focus – e.g., increasing customer support
- Operations – e.g., expanding benefits to attract and retain employees
- Compliance – e.g., health and safety
- Efficiency – e.g., reducing carbon footprint
- Innovation – e.g., launching new product

How can you tell a train has been through town?

- You can see its tracks…

Performance – Principles (2017 ERM)

10. Identifies risk (to allow timely response)
11. Assesses severity of risk (focusing on those that are most disruptive to achieving strategy and business objectives)
12. Prioritizes risks (as basis for selecting response that optimizes resource allocation)
13. Identifies (and selects) risk responses
14. Develops portfolio view (of risk)

Sample “Bad” Risks

- Supply chain disruption
- Customer preference shift
- Raw material prices rise >10%
- Economic downturn
- Local competitors enter
- Cost of capital rises >5%
- Exchange rate fluctuations
- Cybersecurity threats

ASC 275, Risks and Uncertainties

- Disclose risks and uncertainties that could significantly affect the reported amounts
  - In the near term or the near-term functioning of the reporting entity
  - E.g., cybersecurity threats, natural disasters, pandemics, etc.

Nature of Operations

- Legal form and structure
- Major products or services, and relative importance of each
  - May be conveyed in qualitative terms
- Location of principal markets (e.g., regional or international markets)

Concentrations of Risk

- Disclose a current vulnerability due to certain concentrations if:
  - The concentration exists at the date of the financial statements
  - The concentration is known to management at the time the financial statements are issued or available to be issued, rather than simply a wide range of possible concentrations based on general knowledge
  - The concentration makes the entity vulnerable to severe near-term impact
  - It is at least reasonably possible that the events that could cause the severe impact will occur in the near term

Examples of Risk Concentrations

- Volume of business transacted with a particular customer, supplier, lender, grantor, or contributor that could be lost in the near term
- Revenue from specific products, services, or events that can be impacted by changes in volume, price, or other factors in the near term
- Availability of sources of materials, labor, services, licensing rights, or similar in the near term (for example, labor subject to collective bargaining agreements)
- Operations in certain markets or geographic areas that could be negatively impacted by economic or political forces in the near term (for example, operations outside of the entity's home country)

Common Flaws with Risk Identification

- Standard ERM processes are reasonably effective at identifying and prioritizing bad risk:
  - Most less effective at managing good risks
- Many companies cannot define, much less quantify, their risk appetite:
  - E.g., mortgage lenders and insurance companies did not understand the quality of assets and liabilities during the recent economic crisis
- Human beings are not always good at visualizing a world they have not seen

Specific Tips for Risk Event Identification

- Use strategic management approaches to manage both "good" and "bad" risks:
  - E.g., SWOT analysis and scenario planning
- Encourage brainstorming and creative thinking about what will happen in the future
- Train management for expanding thinking
- Build a risk-management process around objective risk indicators of early warnings of emerging risks (e.g., customer retention)

Techniques for Event Identification

- Risk inventory: Detailed listing of potential events common to a particular industry
- Inventory analysis: Use of information from customers, suppliers, and business units as part of routine business planning cycle
- Escalation and threshold triggers: Comparisons made to predefined criteria, triggering alert for concerns
- Process analysis
- Facilitated workshops and interviews

Relevant Assessment Factors

- Likelihood – e.g., remote, possible, probable
- Impact – e.g., financial, reputational, regulatory, health, safety, security, environmental, employee
- Velocity – speed of onset
- Persistence – duration of impact

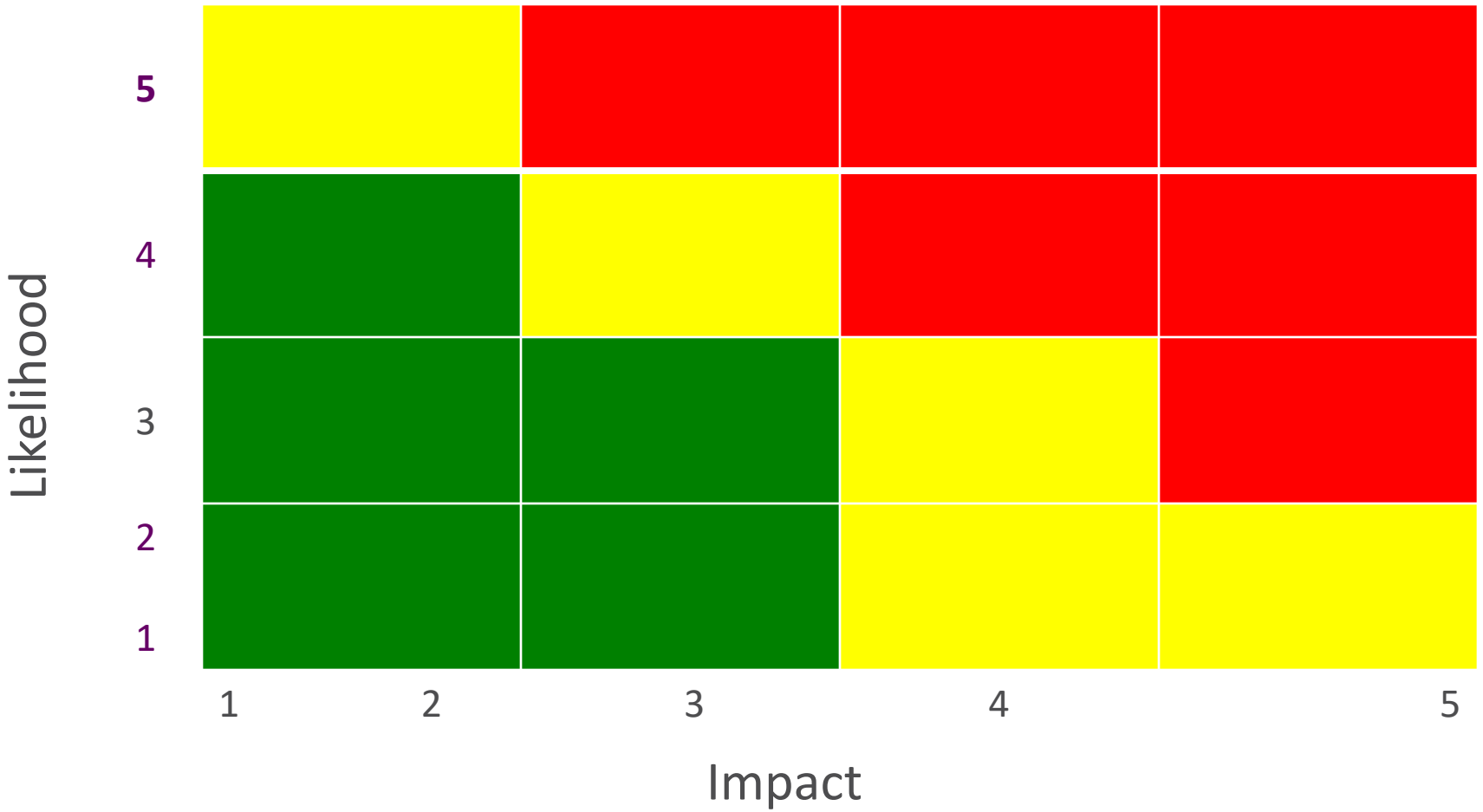
Sample Likelihood Scale

1. Rare – <10% chance over life of asset or project
2. Unlikely – 10-35% chance of occurrence
3. Possible – 35-65% chance of occurrence
4. Likely – 65-90% chance of occurrence
5. Almost Certain – 90-100% chance of occurrence

Sample Impact Scale

1. Incidental – e.g., not reportable to regulator, isolated employee dissatisfaction
2. Minor – e.g., local reputational damage, reportable incident to regulators w/ no likely follow-up
3. Moderate – e.g., report of breach to regulator w/ immediate correction, widespread high turnover,
4. Major – Report to regulator requiring major project for correction, high turnover of experienced staff
5. Extreme – Significant fines and litigation, multiple senior leaders leave

Illustrative Bad Risk "Heat Map"



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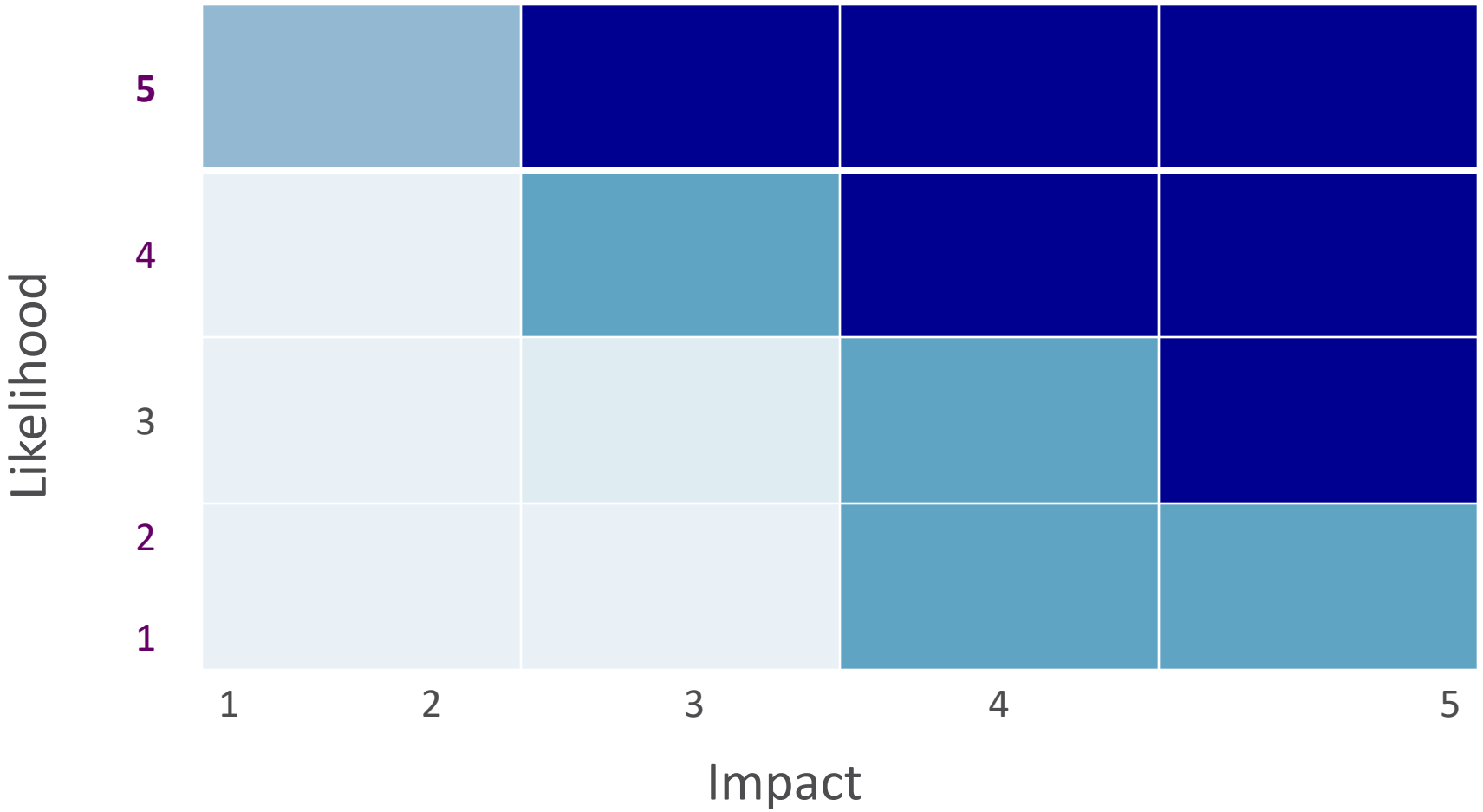
How do you tickle a rich girl?

- Say Gucci Gucci Gucci…

Top Global Risks for 2017 – In Ranked Order per Protiviti Survey

1. Economic conditions
2. Regulatory changes and scrutiny
3. Cyber-threats
4. Speed of disruptive innovation
5. Privacy or identity management and security
6. Succession challenges – attracting and retaining talent
7. Global market and currency stability
8. Organization culture hindering escalation of risk issues
9. Resistance to change operations
10. Sustaining customer loyalty and retention

Illustrative Good Risk "Heat Map"



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Possible Risk Responses

1. Accept – Within risk appetite
2. Avoid – e.g., selling a division
3. Pursue – e.g., expanding operations
4. Reduce – e.g., lowering customer credit limits
5. Share – e.g., outsourcing, insurance

Ways to View Portfolio of Risk

1. Risk category – e.g., financial, operational, compliance, customer
2. Discrete risk – e.g., technology disruption, product obsolescence, product recall, noncompliance
3. Business objective – e.g., maintaining customer satisfaction, minimizing losses, optimizing working capital
4. Entity objective – e.g., strengthening balance sheet, enhancing operational excellence, growing market share

Review and Revision – Principles (2017 ERM)

15. Assesses substantial change (both internal and external, that may impact strategy and business objectives)
16. Reviews risk and performance
17. Pursues improvement in enterprise risk management

Important Questions for Review and Revision

1. Has the entity performed as expected and achieved its targets?
2. Has the entity been taking enough risk to achieve its targets?
3. Was the estimate of the amount of risk accurate?

Why Review and Revision Is Critical

- Entity objectives may change
- Risks responses may become irrelevant
- Control activities may become less effective or no longer performed
  - E.g., change in personnel, new entity structure or direction, introduction of new processes, etc.

Information, Communication, and Reporting – Principles (2017 ERM)

18. Leverages information systems (to support ERM)
19. Communicates risk information (to support ERM)
20. Reports on risk, culture, and performance (at multiple levels of and across the entity)

Techniques for Risk Assessment

- Benchmarking – Compares measures and results using common metrics
- Probabilistic Model – Associates a range of events and the resulting impact with the likelihood of those events based on certain assumptions:
  - E.g., value at risk, cash flow at risk, earnings at risk
- Non-Probabilistic Model – Uses subjective assumptions in estimating the impact of events:
  - E.g., sensitivity measures, stress tests, scenario analyses

Why Monitoring Is Critical

- Entity objectives may change
- Risks responses may become irrelevant
- Control activities may become less effective or no longer performed
- E.g., change in personnel, new entity structure or direction, introduction of new processes, etc.

Limitations of Risk Management

- Human judgment in decisions can be faulty
- Human error, such as simple mistakes
- Relative cost and benefit considerations
- Management override

Roles and Responsibilities

- Everyone in entity has some responsibility
- Chief Executive Officer ultimately responsible:
  - Ensures presence of positive internal environment
  - Shapes values, principles, and major policies
- Financial executives develop budgets, and track and analyze performance:
  - From an operations, compliance, and reporting perspective

Three Lines of Defense Model

1. Front-line operating management:
   - Own and manage risk and control
2. Risk, control, and compliance functions put in place by management:
   - Monitor risk and control in support of management
3. Internal audit:
   - Provide independent assurance to governance and senior management concerning the effectiveness of risk management and control

Role of Governance

- Oversees integrity and ethical values
- Reserves authority to make key decisions
- Sets strategy
- Formulates high-level objectives
- Concurs with risk appetite
- Allocates broad-based resources

Why did the pilot go out on sick leave?

- He had the flew…

Thank you!

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