



Understanding Enterprise and Operational Risk Management

NOVEMBER 2023


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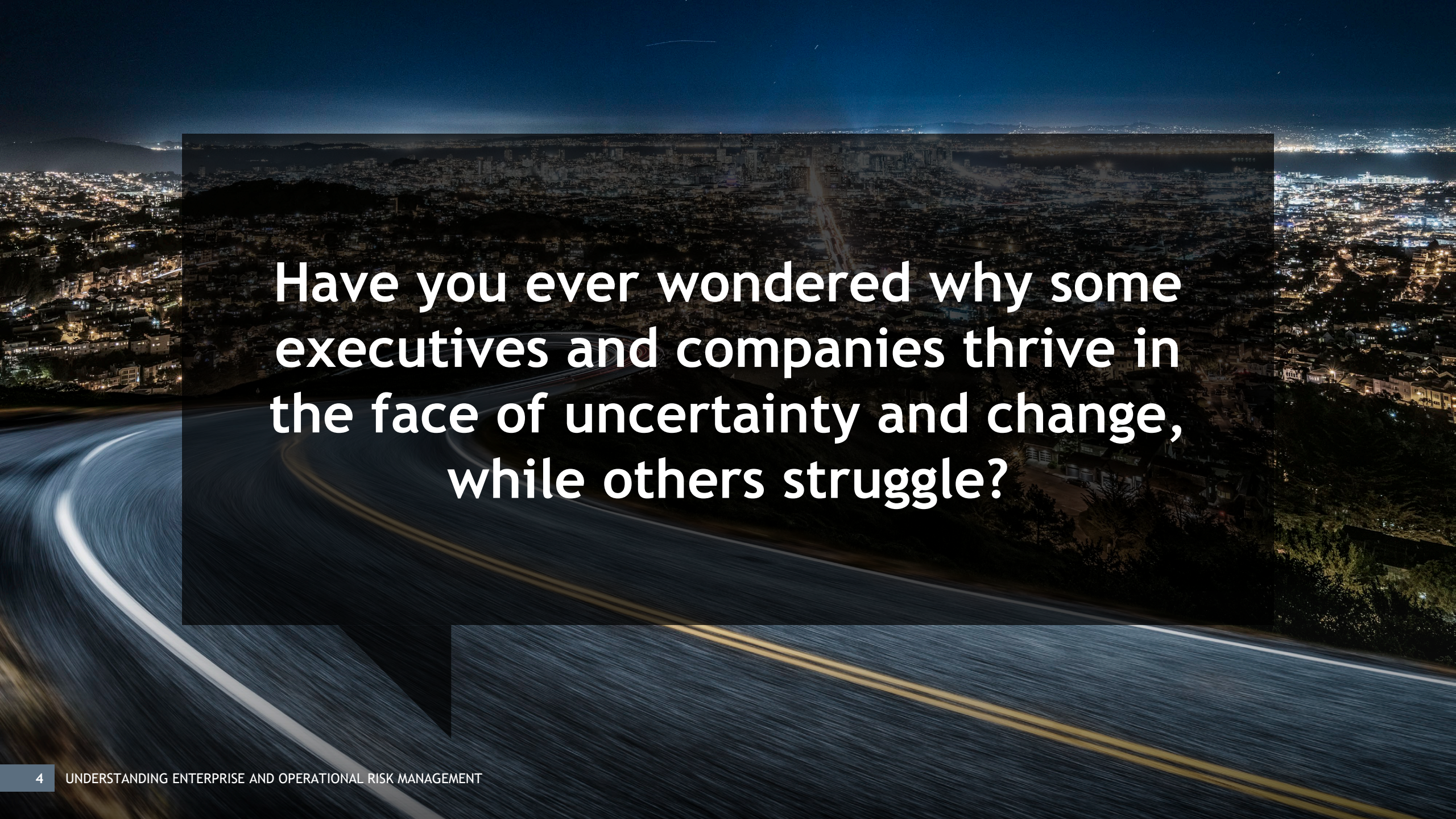
Learning Objectives

Upon completion of this session, participants will be able to:

- ▶ Discuss the importance of operational risk management and how to navigate risk and resilience within their organization.
- ▶ Review key strategies organizations can implement to mitigate risk and maintain operational continuity.
- ▶ Discuss the importance of building a resilience plan prior to adverse events.
- ▶ Identify a framework for risk culture change.

An aerial night view of a city, likely San Francisco, with a road in the foreground showing light trails from traffic. The city lights are visible in the background, and the sky is dark. The text is overlaid on a semi-transparent dark rectangle in the center of the image.

**Are you responsible for achieving
any targets as to growth, margin,
assets, or purpose?**

A night-time aerial view of a city, likely San Francisco, with a winding road in the foreground showing light trails from traffic. The city lights are visible in the background, and the sky is dark. The text is overlaid on a semi-transparent dark rectangle in the center of the image.

Have you ever wondered why some executives and companies thrive in the face of uncertainty and change, while others struggle?

One Key Differentiator is Proactive Risk Management and Preparation

RISK MANAGEMENT

- ▶ Identify and assess risks to growth, margin, assets, and purpose
- ▶ Get ahead of issues
- ▶ Validate risks are not over or under controlled
- ▶ Streamline processes



INSIGHTS and ANALYTICS

- ▶ Focus efforts on specific risk areas
- ▶ Leverage data and analytics to monitor risks and inform decisions
- ▶ Reduce risk management cost
- ▶ Optimize insurance spend and coverage



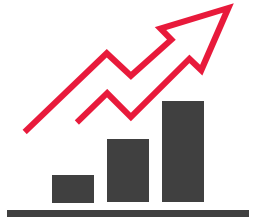
CRISIS MANAGEMENT

- ▶ Meet customer expectations even when disaster strikes
- ▶ Reduce losses by faster recovery
- ▶ Improve regulatory reporting compliance for cyber issues
- ▶ Enhance long-term post impact business performance



Simply Avoiding or Trying to Eliminate Risk is not a Sustainable Strategy

Modern Businesses are...



moving fast and growing quickly

Strong risk management and resilience programs enable effective navigation of challenges and uncertainties.



operating in more complex and regulated environments

Operational risk management and resilience are crucial for mitigating potential risks.



taking more risks to remain competitive

Risk and resilience balances risk-taking and mitigation, enhancing competitive edge.



Executives who best manage risks they take will be most successful

It's a key differentiator between successful and struggling organizations.

How Do Business Leaders and BDO Deliver Value to Executives through Risk and Resilience Solutions?



Focus on business value



Build risk and resilience capabilities prior to adverse events



Deliver risk management via innovative and engaging approaches



Leverage learning and experience from an array of companies



Deploy teams with the right experience



Focus on Business Value

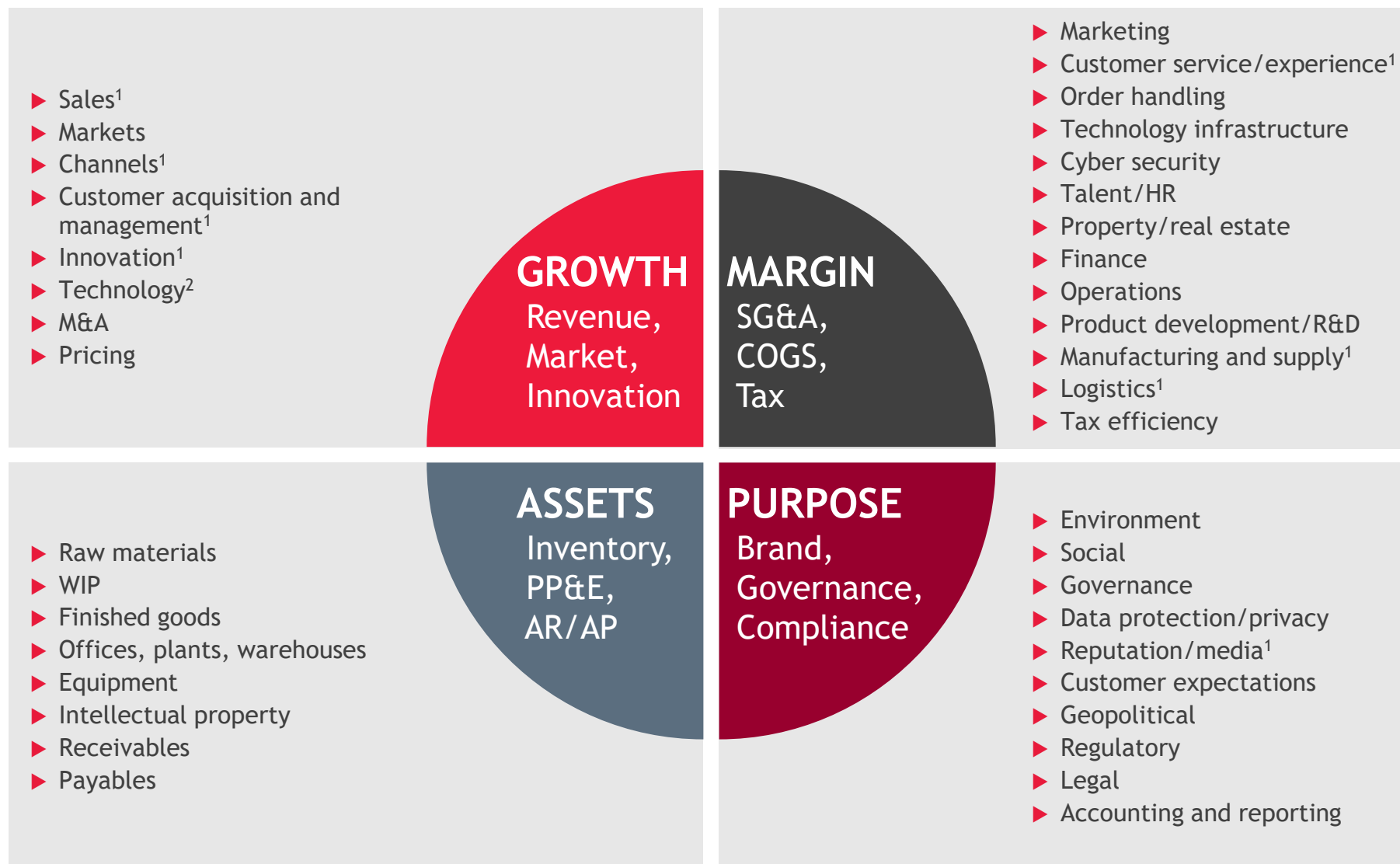


What Highly Successful Risk and Resilience Teams Do

Help company executives manage risks to growth, margin, assets, and purpose



Drill Down to Business Drivers Behind Those Expectations



¹Requires consideration of third parties, joint ventures, suppliers, and other business partners

²Technology that is part of the product or service as opposed to technology infrastructure used to operate the business

Risk Universe (based on stakeholder expectations of executives/companies)

Align a Risk Universe to Each Business Driver

Such alignment makes risk management more relevant, valuable, quantifiable, and easier to understand

GROWTH

- Innovation**
 - Company culture and attitudes
 - Performance measures and consequences
 - Skills, willingness, thinking
- Sales**
 - Selling more to existing customers
 - Selling to new customers
 - Competition and disruptors
 - Product/service differentiation
- Substitute goods and services**
 - Identifying customer needs and changes
 - How to incorporate into services
 - Skills
 - Product availability
- Targets**
 - Setting, valuing, and pricing targets
 - Acquisition, due diligence, and other pre-deal activities
 - Integrating acquisitions and other post-deal activities
 - Trading success
 - Investment availability
- Pricing**
 - Power/weakness
 - Achieving and maintaining margins
 - Risk adjustment
 - Incentives and other discounts

MARGIN

- Marketing**
 - Market segmentation and rationalization
 - Understanding of and focus on customer perspective and needs
 - Profitability and marketing analytics
- Customer service/experience**
 - Ordering - process, ease, communication, accuracy
 - Order delivery and packaging experience
 - Product/service quality
 - Addressing issues, returns, refunds, credits
- Order handling**
 - Customer onboarding and data maintenance
 - Order entry (company-side)
 - Order processing
 - Returns
 - Credits and refunds
- Technology infrastructure**
 - Strategy and management
 - Alignment to business needs
 - Availability and continuity
 - Infrastructure and architecture
 - Investment, upgrades, maintenance
- Cyber security**
 - Cyber defensive risk/threat planning
 - Cyber offensive testing, intelligence, mapping
 - Security, access, patching/updates
 - End user and insider threat security, awareness, education
 - Cloud security
 - Application security
 - Cyber event crisis planning, impact mitigation, insurance
- Talent**
 - Loss of key personnel and succession planning
 - Attracting and retaining talent
 - Performance management
 - Compensation and incentives
 - Training, education, development

MARGIN

- Property/real estate**
 - Infrastructure aging and maintenance
 - Footprint optimization
 - Lease agreements and optimization
 - Financing and efficiency
 - Insurance and claims
- Finance**
 - Financial planning and analysis
 - Budgeting and forecasting
 - Treasury operations, cash management
 - FX exposure, hedging
 - Working capital, debt management, interest rates
 - Investor relations
 - Depreciation and amortization
- Operations**
 - Aligning organization and functions to strategy
 - Organizational efficiency and effectiveness
 - Measuring and reporting progress and opportunities
 - Outsourcing, third-party and vendor strategy
 - Staffing and resource planning
- Product development / R&D**
 - Anticipating market needs
 - Understanding competition
 - Continuous product/service improvement
 - Managing R&D pipeline
- Manufacturing and supply**
 - Concept development and scaling
 - Manufacturing/production setup
 - Production scheduling
 - Managing raw material supply
 - Managing components, sub-assemblies, modules
 - Production, assembly, packaging
- Logistics**
 - Warehousing, storage, material handling
 - Packaging unitization
 - Inventory control
 - Transportation
 - Distributors and distribution
 - Data, analytics, information and control
- Tax efficiency**
 - Tax strategy and planning
 - Tax optimization
 - Property tax
 - Sales and use tax
 - Tax compliance, SALT

ASSETS

- Raw materials**
 - Optimizing raw material inventory
 - Protecting supply, risk transfer
- WIP**
 - Managing demand, optimizing WIP
 - Managing maximum tolerable period of disruption (MTPD)
 - Protecting WIP, risk transfer
- Finished goods**
 - Inventory turnover
 - Backorders, lost sales
 - Forecast demand accuracy
 - Inventory shrinkage - damage, theft, loss
- Offices, plants, warehouses**
 - Purchase/sale of property
 - Depreciation
 - Contingency planning - crisis, disaster
 - Insurance and claims
- Equipment**
 - Purchase/sale of equipment
 - Depreciation
 - Contingency planning - breakdown, crisis
 - Insurance and claims
- Intellectual property**
 - Identifying IP and getting protection
 - Protecting IP - theft, challenges
 - Valuing IP
 - Maximizing IP value - sales, licensing
 - Managing in/out-bound royalties
- Receivables**
 - Receivables strategy and policy
 - Managing receivables, collection/DSO, bad debt/write-off
 - Analyzing credit and credit risk
- Payables**
 - Defining and managing payment terms
 - Managing timely payments
 - Leveraging credit and managing interest
 - Streamlining accounts payable

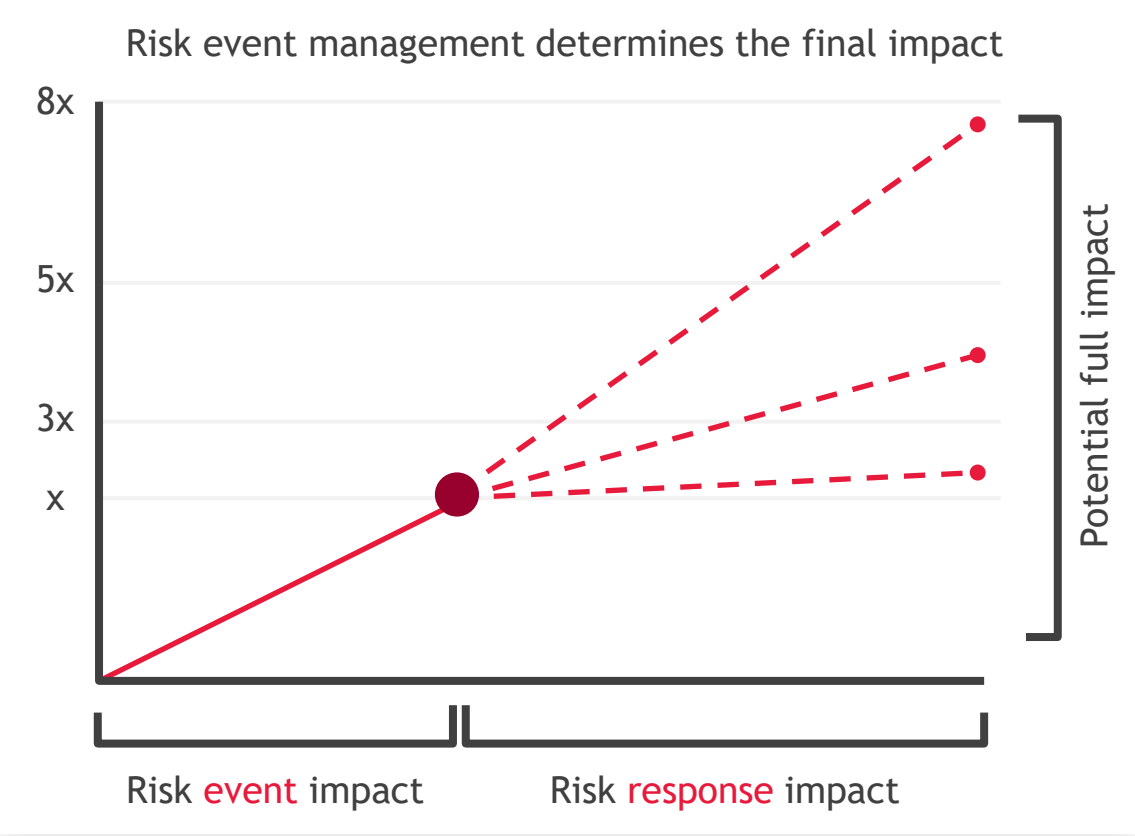
PURPOSE

- Environment**
 - Setting goals aligned with internal and external stakeholders
 - Achieving and measuring results and actual impact
 - Managing and complying with stakeholder expectations
 - Anticipating regulatory and public sentiment change
- Social**
 - Setting goals aligned with internal and external stakeholders
 - Managing wage equality, safety, human rights, diversity, inclusion
 - Managing and complying with stakeholder expectations
- Governance**
 - Living organizational purpose
 - Maintaining culture and ethics
 - Setting tone at the top
 - Delegation of authority
 - Achieving transparency
 - Setting executive compensation
- Data protection/privacy**
 - Privacy compliance
 - Data protection legal compliance
 - Ethical data gathering and use
- Reputation/media**
 - Assessing reputational risks from business, customers, markets, etc.
 - Media coverage and relations
 - Social media, viral events/video
- Customer expectations**
 - Meeting quality and service levels (SLAs)
 - Managing pricing, performance, and risk
 - Privacy, confidentiality, cyber and data protection
 - Ethics, labor practices, AML, bribery, overall compliance
- Geopolitical**
 - Monitoring shifts in political sentiment
 - Responding to changes - policy, war, economic, sanctions
- Regulatory**
 - Monitoring and influencing changes
 - Understanding impacts, scenario planning
 - Planning changes - strategic, operational, compliance
- Legal**
 - Contracting and ease of doing business
 - Interpreting and applying laws and regulations
 - Developing solutions while maintaining compliance
 - Litigation, arbitration
 - Managing costs
- Accounting and reporting**
 - Regulatory reporting
 - Accounting and analysis
 - Internal controls over reporting
 - Financial systems

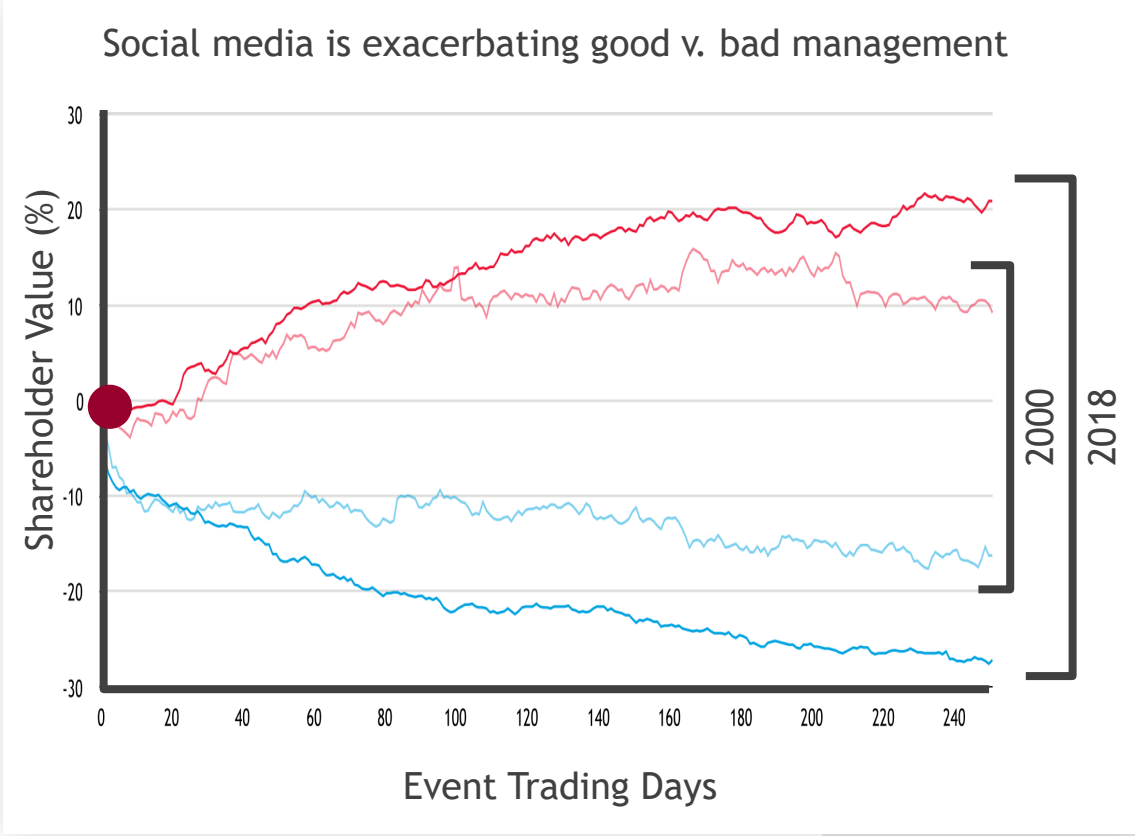
Source: BDO USA, P.C., www.bdo.com

Prepare for Circumstances when Risks Materialize

Despite risk prevention efforts, risks do materialize; the total impact depends on preparation



Source: BDO experience with risk and crisis management.



Source: Reputation Risk in the Cyber Age THE IMPACT ON SHAREHOLDER VALUE. Pentland Analytics

Coordinate to Enable Preparation, Efficiency, and Reduced Frustration

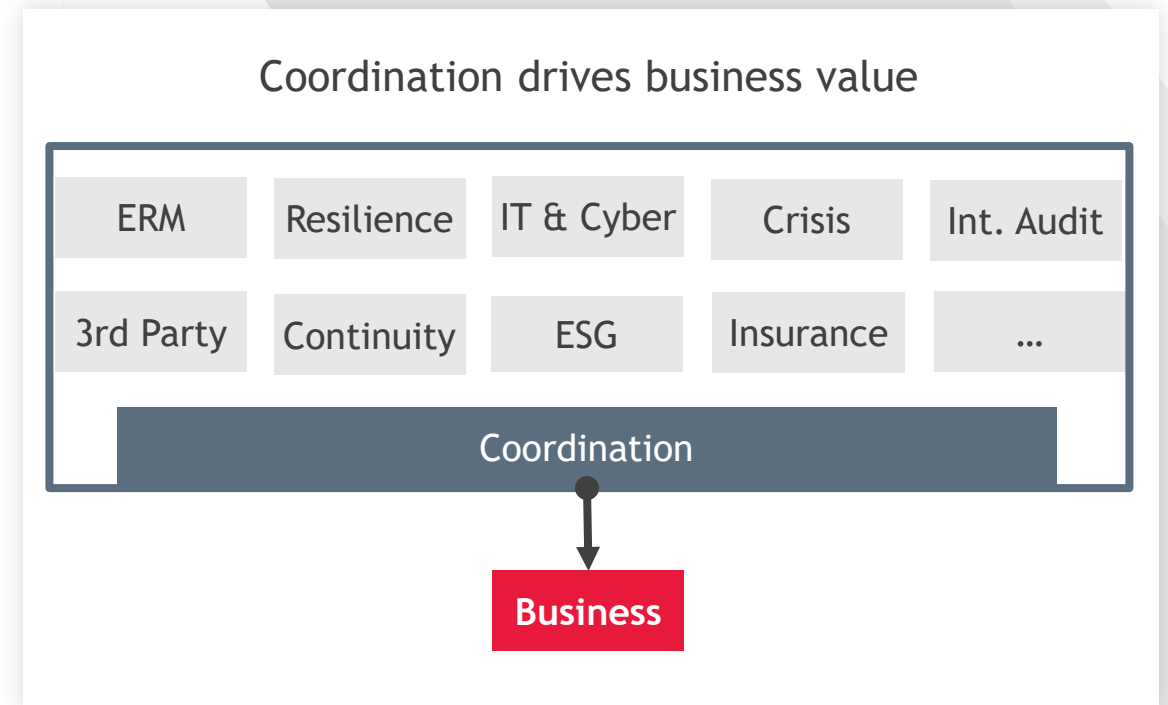
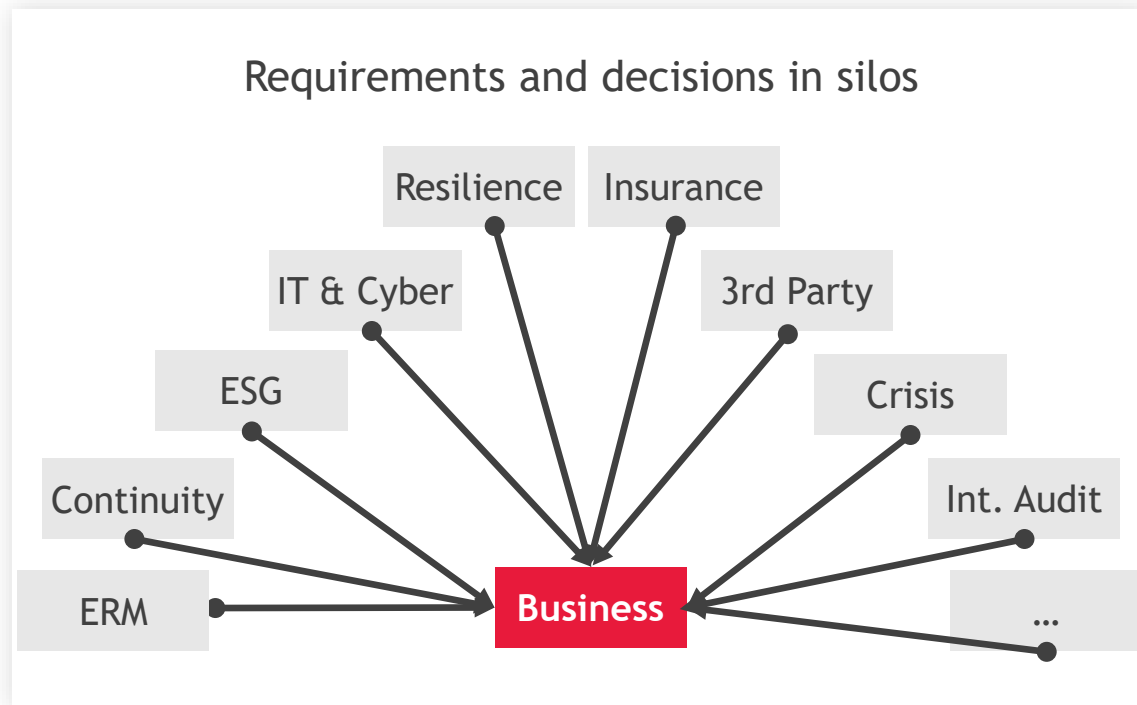
Multiple operational risk domains often conduct similar or overlapping activities. A lack of alignment and integration results in redundancy, gaps, and extra costs, which erode growth and margins and cause confusion or frustration among business stakeholders.

An integrated approach enables business performance while reducing risk exposure, operating costs, and frustration.

	ERM	Crisis Management	Business Continuity	Cyber Response / Disaster Recovery	Third Party Risk Management	Emergency Management (HSE)	Internal Audit	...
Risk Assessment	•	•	•	•	•	•	•	•
Policy	•	•	•	•	•	•	•	•
Training	•	•	•	•	•	•	•	•
Exercise	•	•	•	•	•	•	•	•
Response Plan or Team		•	•	•	•	•	•	•
Post Incident Reporting		•	•	•	•	•	•	•
Threat Monitoring	•	•		•	•	•	•	•
Incident Escalation		•	•	•	•	•	•	•
Operational Improvement	•	•	•		•		•	•

Coordination Increases Risk Management Speed and Effectiveness while Reducing Operating Cost

Stakeholders expect executives to improve business value and ROI of risk management investments



Other efforts like employee training, risk technology, and process improvement can also contribute to effectiveness and cost reduction

Improve - Risk Management Impacts Business Speed and Competitiveness

Like Formula 1 racers who rely on their teammates in the pit crew, front line business professionals rely on functions like risk management. So, risk management needs to continually improve to stay competitive.

What can risk and resilience functions learn from Formula 1 racing?

These are average historical Formula1 Pitstop times	
Era	Average time (seconds)
1950s	67
Mid 60s	45
Early 70s	27
Early 80s	20

How fast is a Formula 1 pitstop today, with 4 tires changed?		
Year	F1 Team	Time (seconds)
2015	Ferrari	2.22
2018	Ferrari	1.97
2021	Red Bull	1.88
2023	McLaren	1.80

Are your risk management functions improving and moving at the speed needed by the business?



Build Risk and Resilience Capabilities Prior to Adverse Events



Build Capabilities that Help Executives Deliver Business Value



Enterprise Risk Management (ERM)

Help leaders, functions, and entire organizations increase the likelihood of achieving stakeholder expectations and value as to Growth, Margin, Assets, and Purpose that they are responsible for delivering, like sales, EPS, innovation, compliance, or reporting.



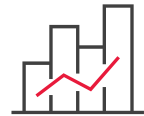
Identify top risks to growth, margin, assets, and purpose



Operate as a service to business, segment, geography, and functional leaders



Provide risk insights and quantifiable impacts to objectives



Enable analytics and data visualization that delivers decision-making information



Step back from detailed risk and control frameworks to address broader risks and responses



Facilitate identification and monitoring of emerging risks



Drive risk management efficiency and effectiveness



Align and optimize risk responses to meet business needs



Coordinate risk training that engages participants and reduces risk profiles

Business Continuity (BC)

Design and implement a world class business continuity program, including training, engagement, and choosing best-fit technologies, to enable the business to continue meeting customer needs within an acceptable time frame and capacity during a disruption.



Crisis Management (CM)

Advise and support executives in difficult times of change, challenge, and disruption by planning responses and communications to manage crises and mitigate further exposure



Labor
Dispute



Workplace
Accident



Pandemic



Cyber
Attack



Geopolitical
Unrest



Natural
Disaster

Crisis Management (CM)

BEFORE

- ▶ Maturity assessment
- ▶ Risk assessment
- ▶ Governance and strategy
- ▶ Training and exercises
- ▶ Technology implementation
- ▶ Staff augmentation / training
- ▶ Crisis planning

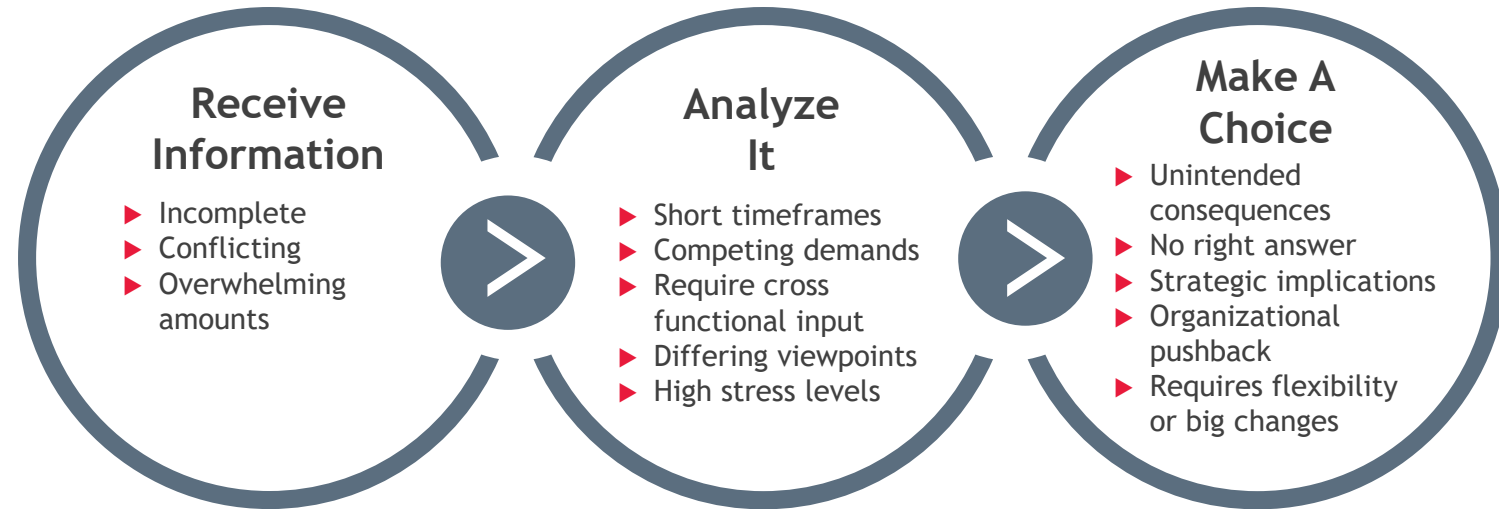
DURING

- ▶ Crisis response support
- ▶ Communications support
- ▶ Situational awareness / monitoring
- ▶ Supply chain analysis
- ▶ Threat specific advice

AFTER

- ▶ Post incident assessment
- ▶ Improvement planning

Why is Decision-making in an Incident Difficult?



Emergency Response

Protect employees and assets and organization's reputation

Organization & Assignment of Responsibilities	Triggers & Escalation	Response Procedures	Communications & Coordination
<ul style="list-style-type: none"> ▶ Who is in charge (lead)? ▶ Who is involved (support)? ▶ What are the responsibilities for each role? 	<ul style="list-style-type: none"> ▶ What are the triggers for mobilizing response teams? ▶ What are the thresholds for escalating the response? 	<ul style="list-style-type: none"> ▶ Preparation: What actions are you taking before the incident? ▶ Response: What actions are you taking during the incident? ▶ Recovery: What post-incident actions are you taking? 	<ul style="list-style-type: none"> ▶ What internal teams are you coordinating with? ▶ What external entities are you communicating with? ▶ How are internal notifications handled? When are these communications made?

Optimize Insurance Cost and Coverage

Help executives maximize value

1. **Insurance Policy Review:** Align insurance with risk profile and objectives
2. **Insurance and Claim Alignment:** Identify insurable risks and optimize insurance coverage
3. **Insurable Exposures:** Identify and assess insurable exposures across operations
4. **Comparison to Market Standards:** Benchmark insurance coverage to obtain competitive and comprehensive coverage
5. **Coverage Recommendations:** Guide coverage limit, deductible, and terms for optimal cost and protection
6. **Optimize Reserves:** Validate claim reserves to forecast risk and project accurate loss payments

Internal Audit (IA)

Provide independent and objective assurance on an organization's risk management, control, and governance

BUSINESS RISK ASSESSMENT METHODOLOGY

A. PROJECT INITIATION

- ▶ Review objectives
- ▶ Identify core processes
- ▶ Establish measurement criteria and data gathering techniques
- ▶ Educate participants

B. RISK IDENTIFICATION

- ▶ Identify risks
- ▶ Determine causes of events
- ▶ Determine likelihood of occurrence, and consequences

C. RISK RATING

- ▶ Rate inherent risks
- ▶ Identify risk mitigation methods
- ▶ Evaluate mitigation effectiveness
- ▶ Rate residual risks

D. RISK VALIDATION

- ▶ Prioritize significant risks to form an overall risk profile
- ▶ Validate risk profile
- ▶ Report risk assessment results to management
- ▶ Finalize risk coverage map



DELIVERABLE: STRATEGIC INTERNAL AUDIT PLAN

Based upon the risk assessment, a strategic internal audit plan is developed that focuses on the high priority risks and ensures proper risk coverage. The audit plan includes the performance of monitoring activities to ensure processes are operating as designed, controls are effective, and risks are managed. The underlying activities include:

- ▶ Analyzing risk coverage and profile by process and auditable unit
- ▶ Efficiently allocating available internal audit resources to those processes and auditable units
- ▶ Validating the strategic internal audit plan with management



Deliver Risk Management via Innovative and Engaging Approaches



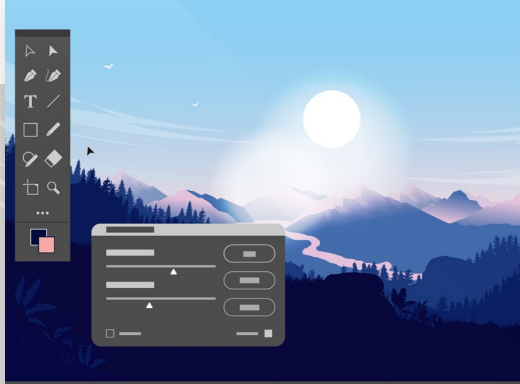
Make Risk and Resilience an On-going Process

INTEGRATE RISK MANAGEMENT INTO KEY BUSINESS CYCLES

- ▶ Strategic planning
- ▶ Budgeting
- ▶ Forecasting
- ▶ Operational improvement
- ▶ Policy development
- ▶ Financial reporting



Leverage Innovative and Creative Approaches that Drive Change



Use and incorporate creative and design services



Embrace an entrepreneurial approach



Leverage cognitive, behavioral and military sciences



Consider technology partnerships and solutions

What Questions Should You Be Asking?



Do We Have the Right Mix of Experience, Skills, and Perspectives?



SUBJECT MATTER

- ▶ Branding
- ▶ Business continuity
- ▶ Crisis management
- ▶ Disaster recovery
- ▶ Emergency response
- ▶ Enterprise risk
- ▶ Internal audit
- ▶ Insurance
- ▶ Risk management
- ▶ Technology resilience



COMPETENCIES

- ▶ Analytics dashboarding
- ▶ Facilitation
- ▶ Learning
- ▶ Metrics / measures
- ▶ Organization design
- ▶ Process improvement
- ▶ Quantification
- ▶ Scenario analysis
- ▶ Strategy
- ▶ Technology integration



CERTIFICATIONS/STANDARDS

- ▶ CBCP
- ▶ CISA
- ▶ CISM
- ▶ COSO
- ▶ CPA
- ▶ ISO
- ▶ ITIL
- ▶ NIST
- ▶ ARM



PERSPECTIVE

- ▶ Business enablement
- ▶ Business value
- ▶ Compliance
- ▶ Control
- ▶ Innovation
- ▶ Strategic
- ▶ Sales
- ▶ Trusted advisor

Is Risk and Resilience Delivering Value?

What ROI is realized from your risk and resilience investments?



How well are executives prepared to respond to a crisis incident?



Are your risk and resilience costs optimized? Do you know your spend?



How does risk management help your executives with risks to growth, margin, assets, and purpose?

GROWTH

- ▶ Is risk management viewed as a contributor to the achievement of objectives?
- ▶ How much value creation is credited to risk and resiliency management?
- ▶ When was your last simulated risk or incident response and readiness assessment?

MARGIN

- ▶ Do leaders have access to risk data and analytics? Do they link to objectives?
- ▶ How does risk management provide insights on risks managed by third-parties?
- ▶ Can risk and resiliency management be optimized to operate at the speed of business and lower cost? Is risk management spend more than 4% of revenue?

ASSETS

- ▶ Are risk responses like insurance, transfer, or avoidance/acceptance addressed?
- ▶ How prepared is the organization for crisis, disaster, continuity of operations?

PURPOSE

- ▶ Do Board, C-suite, and other leaders actively engage risk management?
- ▶ How differentiated is ERM from risk and control matrices and assessments?

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