Strategic Risk Management: What is it and How do you manage it? (SRM 100)

John Bugalla – ermINSIGHTS
Kristina Narvaez – ERM Strategies
Linda Conrad - Zurich
Today’s Presentation

What is Strategic Risk Management (SRM)?

Why SRM?

How do you manage/implement it?

Skill sets?

Ground level applications
Strategic Risk Management

"Strategy without tactics is a slow path to uncertain success, tactics without strategy is the noise before defeat."
Sun Tsu
WHAT IS STRATEGIC RISK MANAGEMENT (SRM)?

Enterprise Risk Management (ERM) is a strategic business discipline that supports the achievement of an organization’s objectives by addressing the full spectrum of its risks and managing the combined impact of those risks as an interrelated risk portfolio. (RIMS)

Strategic Risk Management (SRM) is a business discipline that drives deliberation and action regarding uncertainties and untapped opportunities that affect an organization’s strategies and strategic execution. (RIMS)
WHY SRM?

**Strategy** – is the making of an integrated set of choices that will collectively position the organization in its industry so as to create a Sustainable advantage relative to competition and deliver superior financial returns

**Strategic Plan** – is an organization’s process of defining its strategy, or direction, and making decisions on allocating its resources to pursue its strategy

**Business Plan** – a tactical road map, including budgets, to achieve the organization's business goals
WHY SRM

Operating Environment

Less Favorable  More Favorable

2013  Operational Timeline  2018

Range of Outcomes

Planned Outcome

Less Favorable  More Favorable

2013  Operational Timeline  2018

Range of Outcomes

Planned Outcome
How do you manage/implement it?

- Collaboration
- Communication
- Business Case
- Tools and Techniques
STRATEGIC RISK MANAGEMENT SKILL SET

Kristina Narvaez
President & CEO
ERM Strategies, LLC
Becoming the Lamp Bearer

Dr. Anette Mikes from Harvard University identifies emerging role of Chief Risk Officer

• Compliance Champion
• Modeling Expert
• Strategic Controller
• Strategic Advisor

Source: Enterprise Risk Management Today’s Leading Research and Best Practices for Tomorrow’s Executives, John Fraser and Betty J. Simkins, 2010 Wiley and Sons Chapter 5 Becoming the Lamp Bearer: The Emerging Roles of Chief Risk Officer
Role of Strategic Advisor

- Brings judgment into high-level risk decisions
- Challenges the assumptions underlying business plans
- Helps decision makers understand emerging risks
- Creates processes that channel risk information to key decision makers
- Develops risk-based scenario planning

Source: *Enterprise Risk Management Today’s Leading Research and Best Practices for Tomorrow’s Executives*, John Fraser and Betty J. Simkins, 2010 Wiley and Sons Chapter 5 Becoming the Lamp Bearer: The Emerging Roles of Chief Risk Officer
Strategic Advisor’s Responsibilities

- Identifies key risk metrics and/or indicators to assist the responsible board committee and senior management in fulfilling their risk management responsibilities.

- Provides risk leadership support to executive management, business units, resources units and lines of business in their respective risk management efforts.

- Collaborates with legal, compliance, internal audit, corporate security, information security, controller, traditional risk management and other key risk stakeholders on risk identification, assessment and controls implementation.

- In cooperation with other risk management functional areas, makes risk an explicit factor in selecting controls to be tested.

- Reports to management and the board.

Source: *The Evolving Role of the Risk Practitioner* RIMS Executive Report  Carol Fox and George Lewis, 2012
Different Roles of SRM

<table>
<thead>
<tr>
<th>Functional Role</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership (Board, CEO)</td>
<td>Risk Oversight</td>
</tr>
<tr>
<td>Strategy Executive</td>
<td>Accountability</td>
</tr>
<tr>
<td>SRM Practitioner</td>
<td>Process Driven</td>
</tr>
<tr>
<td>Business Unit Leads</td>
<td>Risk Owners</td>
</tr>
<tr>
<td>Marketing Sales</td>
<td>Brand Reputation</td>
</tr>
<tr>
<td>Technology</td>
<td>Systems</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Monitoring</td>
</tr>
<tr>
<td>Internal Audit</td>
<td>Assurance</td>
</tr>
</tbody>
</table>

Source: *RIMS Strategic Risk Management Implementation Guide*, 2012. © Risk and Insurance Management Society, Inc. All rights reserved.
Strategic Risk Practitioner

RIMS Strategic Risk Management Implementation Guide

- Driver of Strategic Risk Management process providing the structured discipline for strategic risk identification
- Consideration of response options to address uncertainty
- Integrated member of the strategy team
- Facilitates proactive thinking about emerging future uncertainty
- Challenges assumptions
- Encourages provocative suggestions for future growth
- Conduit for Strategic Risk Management
- Acts as foundation for developing and testing methods
- Tools for addressing strategic risks and opportunities
- Supports gathering of risk intelligence sharing knowledge and lessons learned

Source: *RIMS Strategic Risk Management Implementation Guide*, 2012. © Risk and Insurance Management Society, Inc. All rights reserved.
How to Evaluate SRM Practitioner?

- Establish milestones against responsibilities
- Strategic communication skills
- Credibility in the organization
Bridging the Gap: Using ERM for Strategic Purposes

Linda Conrad
Director of Strategic Business Risk
Zurich Global Corporate
Bridging the Gap: Using ERM for Strategic Purposes

1. Enterprise resilience
2. ERM at Zurich
3. Risk culture
4. Using ERM for strategic purposes:
   • mergers and acquisitions
   • business resiliency
   • new project and product development
   • customers’ risks
   • decisions made in the marketplace
5. ERM monitoring and metrics
Zurich Insurance Group

• Insurance-based financial services provider
• Global network of subsidiaries and offices in North America and Europe as well as in Asia Pacific, Latin America and other markets.
• Approximately 60,000 employees
• Serving customers in more than 170 countries & territories
• 40 straight quarters of profitability
Enterprise Resilience Benefits

• Addresses the main risks that may hinder achieving strategic objectives

• Improves risk-based decision making, organizational resilience and capital efficiency

• Provides a wide-angle lens into maximizing enterprise opportunity

• Enhances internal communication to the Board and Senior Management
Challenges to Enterprise Resilience

• **Linkage from strategy to execution** in a complex environment
  – Unintended risks are on the increase
  – Disruptions are created by global supply chains, lean operations, complexity, outsourcing, the economy
  – Business preparedness continues to lag
• Need to understand the risk tolerance to determine which worst case scenarios to plan for
• Is our business adequately prepared?
Anatomy of Enterprise Risks

1st order risks
Physical damage, personal injuries/deaths

2nd order risks
Consequential losses (production, profits)

3rd order risks
Indirect economic losses
(market share, image, managing upset, personnel, lost investments...)

4th order risks
Reaction when risk is unacceptable to society

Hazard
Event
Cause

Insurable
Visible, can be evaluated

Poorly visible, difficult to evaluate
Not easily insurable
Enterprise Risk Wheel

**People Risks**
- Accident/ Health
- Labor/Key employees
- Recruiting and retention
- Corporate governance
- Knowledge management

**Market Risks**
- Geographical spread
- Patent infringement
- Competitors
- Trade barriers
- Market share

**Financial Risks**
- Stock Exchange
- Capital Markets
- Liquidity
- Fraud
- Debtors/Creditors
- Currency fluctuation

**Strategic Risks**
- Joint ventures and subsidiaries
- Product development
- Mergers and acquisitions
- Reputation
- Intellectual property
- Management skills
- Legal and compliance risks

**Operational Risks**
- Sabotage
- Transportation
- Product liability
- e-risk
- Earthquake
- Storm
- Flood

**Risk Monitoring and Reporting**

**Risk Treatment and Controlling**

**Risk Awareness and Culture**

**Risk and Opportunity Identification**

**Risk Assessment and Quantification**

Understanding risk across your business

**Keeping you in business**

Stay ahead of the curve

At RIMS '13 Annual Conference & Exhibition | Los Angeles | April 21-24
Bridging the Gap: Using ERM for Strategic Purposes

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The mission of risk management at Zurich is to promptly identify, measure, manage, report and monitor risks that affect the achievement of strategic, operational and financial objectives. This includes adjusting the risk profile in line with the Zurich Group’s stated risk tolerance to respond to new threats and opportunities in order to optimize returns.

ERM Objectives

- Protect the capital base by monitoring that risks are not taken beyond the Group’s risk tolerance
- Enhance value creation and contribute to an optimal risk-return profile by providing the basis for an efficient capital deployment
- Support the Group’s decision-making processes by providing consistent, reliable and timely risk information
- Protect Zurich’s reputation and brand by promoting a sound culture of risk awareness and disciplined and informed risk taking
Zurich’s Risk & Control Framework

Board of Directors level
- Risk Committee
- Audit Committee

GEC level
- CEO and Group Executive Committee
- Group Chief Risk Officer
- Group Balance Sheet Committee
- Group Finance & Risk Committee

Region, Segment, Business Unit level
- Business Management
- Audit, Risk and Control Committees
- Risk Management Network (including regional/segment/Chief Risk Officers & Local Risk Officers)

Risk Taking
Risk Control
Independent Assurance
Foster an Integrated View of Risk

**Risk Governance**
- Zurich Risk Policy (ZRP)
  - Risk ownership, roles and responsibilities
  - Limits by risk type
  - Mandatory
  - Regularly updated and communicated

**More quantitative**
- Risk Tolerance
  - Defines and informs risk limits
  - Takes a shareholder view
  - Capital-at-Risk, Earnings-at-Risk, financial flexibility and franchise value

**More qualitative**
- Total Risk Profiling (TRP)
  - Management view of risks
  - Proprietary tool for risk identification and assessment
  - 3-5 year time horizon

**Risk-Based Capital (RBC)**
- Sets target capitalization at AA level
- Takes a policyholder view (1/2000 years)

**Operational Risk & Control**
- Integrated Risk & Control framework and methodology (Top Down Scenarios, Operational Risk Assessments, Issue Register, Loss Events, etc.)
- Operational risk management
- Int. Control Framework (ICF)

**Risk reporting**
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Engage the Organization: C-Shift™
Achieve Risk Equilibrium™ with a Risk Culture Shift

- Why do your leadership team members view risk the way they do?
- How does your team align on risk issues?
- Begin the process of increasing accountability for risk
- Implement a risk dashboard to monitor and manage progress

Through C-Shift™ workshops, Zurich leads executive teams to understand their pre-disposition to risk and how this impacts results.

With clear top-down messaging of expectations, the entire company can learn to properly use risk within a defined tolerance level.
How We See the World

THINKER
Risk Analyzer

Risk Quantifier
Data Drivers
Builds Risk Models
Calculated Risk-taker

Risk Driver Analysis
Risk Adjusted Return
Practical Risk Auditing
Measures Risk With Actions

Logical
Deliberate
Prudent
Thoughtful

Possibilities
Exploring
Out of the Box
Connector

RISK STYLES

Results Oriented
Quick Decision Maker
Learn by Doing
Get things done

Harmony
Sensitivity to Others
Patience
Empathetic

INUITOR
Risk Innovator

Risk Strategizer
External Risk Drivers
Challenges Status Quo
Drives Growth through Innovation

Risk Equalizer
Human Risk Drivers
Builds Risk Culture
Cultivates Risk Openness & Collaboration

DOER
Risk Activator

Results Oriented
Quick Decision Maker
Learn by Doing
Get things done

Harmony
Sensitivity to Others
Patience
Empathetic

FEELER
Risk Integrator

Results Oriented
Quick Decision Maker
Learn by Doing
Get things done

Harmony
Sensitivity to Others
Patience
Empathetic

The Creating WE Institute & Standish Risk Management 2013
C Shift®
Cultural Shift Into Risk Accountability

Culture produces results; shift the culture.

Successful CEO’s create cultures that communicate about risk.

C Shift® Risk Intelligent Culture

Align Goals

Key Performance Indicators
Risk Culture Dashboard
Key Risk Indicators

Total Risk Profiling™

Leadership, Ownership & Dialog

Trust & Teams with “Conversational Intelligence®”
Creating WE Institute®

Individual Business Risk Styles

Increase Risk Accountability

Risk

Profit

Zurich Insurance Company™
2012 survey by FERMA found firms demonstrating a more mature approach to Risk Management have better financial results. Study found a correlation between risk management maturity level and both short-term financial performance and long-term growth.

- EBITDA growth of over 10% was generated by 28% of companies with “advanced” risk management practices, compared with just 16% of firms with “emerging” practices.

- Revenue growth of 10% was shown by 29% of companies with “advanced” practices, compared with 18% of companies with “emerging” practices.

Creating an active risk culture is correlated with higher growth, as the organization becomes more aware and accountable for risk.

Source: 2012 study by Federation of European Risk Management Associations
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Using ERM for Strategic Purposes

Mergers and acquisitions:

- Zurich uses both its Zurich Risk Room (ZRR) and the Total Risk Profiling (TRP) as opportunity analysis tools to supplement traditional due diligence.

- Tools served to help identify and understand the risks associated with the strategy, so they could be managed accordingly.

- Zurich Risk Room tool is used to evaluate risks at country and continent level

- Supports better understanding of risks our operating environment, to help increase the likelihood of profitability on opportunities.
The Zurich Risk Room (ZRR) is a global risk assessment tool designed to illustrate the impact of multivariate risks on individual countries. It analyzes the complex interconnectivity between many different types of risks, containing 68 individual risks across 6 categories (economic, business, political, social, environmental, and technical), covering 158 countries. This tool helps companies answer tough strategic questions such as: “Where should we invest next?” or “How to identify the best approach to managing existing risks?”

Visit [www.zurich.com/riskroom](http://www.zurich.com/riskroom) for more info and free tablet app, or search for the Zurich Risk Room in the iTunes App store for a free iPad app.
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Helping Business Be More Resilient

Profitable Growth

Business Resilience

Business Interruption Modelling
Supply Chain Assessment
Business Continuity Management
Business Impact Analysis

Total Risk Profiling™

Enterprise Risk Management
Using ERM for Strategic Purposes

Business resiliency:
• addresses potential disruption and recovery to business operations
• combination of BCM gap analysis, modeling software, supply chain risk assessment, and stress testing to evaluate disaster plans
• supply chain risk officer reports to the Group CRO, tasked with finding the appropriate balance between cost and reliability.
• a robust network champions within the business, trained to return the business to operation quickly and efficiently after a disruption.
• While anything can happen, the Business Continuity Team regularly exercises a variety of plans to ensure Zurich is ready for anything.
Using ERM for strategic purposes

Key Performance Indicators help an organization understand how well it is performing in relation to its strategic goals and objectives. Key Risk Indicators are leading indicators of risk to business performance, giving an organization an early warning to identify a potential risk event that may harm business continuity. A Key Risk Indicator for many retail businesses is the price of gas. When gas prices rise, the number of potential customers might drop. Business owners can provide discount coupons to offset the gas price increases and get customers visiting their place of business again.

Some examples of Zurich using KRIs to monitor risks are in the areas of natural catastrophe risks (percentage of group shareholder equity), asset-liability matching (duration mismatch), strategic asset allocation (%'s allowed in various investment categories) and credit risk (weighted average credit rating). Both KPIs and KRIs are used in many organizations to measure risky behavior in relationship to the organization's strategic goals.
Zurich’s Family of Risk Tools

**Risk Room**
Provides macro country insights, e.g. political stability, economic status, labour situation

**Total Risk Profiling**
Structured approach to defining risk appetite and prioritisation for dealing with risks in the supply chain

**Risk understanding**

**Natural Catastrophe - Location risk**
Provides exposure information for supplier locations in respect of e.g. floods, earthquakes, windstorm, related transport infrastructure

**Profit risk exposure**
Enables a company to understand its total supply chain profit exposure in terms of a particular location, country or region

**Business interruption analysis**
Helps a company model its relevant BI exposures

**Disruption understanding**
Helps in the understanding of the level and nature of disruptions in the particular industry or a particular location from a unique database

**Formalised assessment of relevant areas which are part of the due diligence process within the sourcing activity**

**Structured approach to defining risk appetite and prioritisation for dealing with risks in the supply chain**

**Provides exposure information for supplier locations in respect of e.g. floods, earthquakes, windstorm, related transport infrastructure**
Define & Evaluate Risk Scenarios, Develop List of Possible Credible Risks

<table>
<thead>
<tr>
<th>Risk No.</th>
<th>Vulnerability</th>
<th>Trigger</th>
<th>Consequence</th>
<th>Likelihood (probability)</th>
<th>Impact (Severity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Transportation delay</td>
<td>Rail interruption (Nat Cat, rail line blockage)</td>
<td>Short term (weeks) interruption for alt. transportation</td>
<td>B- Moderate</td>
<td>3-Low</td>
</tr>
<tr>
<td>2</td>
<td>Production delay</td>
<td>Mechanical failure (PSM), minor accident or union strike (if union)</td>
<td>Short-Medium term (several weeks) interruption</td>
<td>B- Moderate</td>
<td>2- Moderate</td>
</tr>
<tr>
<td>3</td>
<td>Utility or Supplier (T2-3) failure</td>
<td>Nat Cat, financial, other</td>
<td>Short-Medium term (several weeks) interruption</td>
<td>B- Moderate</td>
<td>2- Moderate</td>
</tr>
<tr>
<td>4</td>
<td>Significant PD (partial or total loss)</td>
<td>Nat Cat, man-made disaster</td>
<td>Long term (several months to complete) significant interruption</td>
<td>C – Low</td>
<td>1-High</td>
</tr>
</tbody>
</table>

Visit [www.SupplyChainRiskInsights.com](http://www.SupplyChainRiskInsights.com) for more supply chain risk information
Business Interruption Modeling

Helps model relevant BI exposures.
Enterprise Resilience Challenges

“Well, thank God we all made it out in time. ... 
'Course, now we're equally screwed.”
ERM and Scenario Planning

Scenario exercises take place in parallel to ensure the network is prepared to shift workload, deploy contingencies, and remain operational

- December 2009 Eurostar trains caught in tunnel.
- India: internal tensions between military and government. Bomb explodes in hotel where we have employees. Impacts India where company has operations in Pune, Bangalore and Chennai.
- Fire in HO location injuring employees, impacting critical processes and possibly preventing occupancy in location for up to 3-4 months.
- Los Angeles earthquake
- Kansas tornado
- Political demonstration in New York City
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5. ERM monitoring and metrics
Using ERM for Strategic Purposes

New project or product development

• use Total Risk Profiling (TRP) to evaluate vulnerabilities, risk triggers, and consequences that may prevent the successful outcomes

• Actions assigned to ‘risk owners’ can be mitigation steps (risk avoidance or reduction) or steps to capitalize on growth opportunities

• TRP also helps quantify potential exposure and risk tolerance level. For example, the tolerance on an IT project might be the project budget.

• TRP was used before considering outsourcing IT services, to help vet exposures and ensure risks were appropriate to the Group’s Strategy.

• TRP is updated regularly as risks changed and new ones surfaced, so it helps us make informed risk-based decisions to achieve our objectives.
Proactive in Business Life Cycle


You know when you’re really getting good at risk management, when the company does its risk assessment at the project kickoff rather than at the end.

– Angela Herrin, Harvard Business Review Analytics Services
Total Risk Profiling (TRP)

How can you deal with risks that you don’t even know are there?

Develop risk scenarios
- Quantify financial severity and assess probability

Define the risk appetite
- Prioritize risk scenarios and develop improvement plan

1. VULNERABILITY
- what?
- where
- controls?

2. TRIGGER
- how?
- why?
- when?

3. CONSEQUENCES
- how big?
- how bad?
- how much?

TIMELINE!!
A Comprehensive TRP Process

1. Identify potential risk issues
   - Open brainstorming
   - Review of generic scenarios

2. Develop risk scenarios
   - Vulnerability
   - Trigger
   - Consequence

3. Assess and quantify current rating
   - Severity / Probability

4. Define risk priority boundary and prioritize risk scenarios

5. Develop improvement actions for prioritized scenarios
   - Assess target rating
   - Name a responsible person
   - Set a due date

6. Follow-up on improvement actions quarterly

… at all levels of the company

Input for thought starters

Group Key Focal Point

Group TRP

Global Life and General Insurance TRPs

Business Divisions TRPs

Regions and Business Units TRPs

1. TRP process ...

2. … at all levels of the company
We Practice What We Preach…

The Group Executive Committee TRP process at Zurich

2011 GEC TRP signed-off
16 risk scenarios prioritized

Starting point
22 thought starters

1. Thought starter
2. Thought starter
3. Thought starter
4. Thought starter
5. Thought starter
6. Thought starter
7. Thought starter
8. Thought starter
9. Thought starter

2012 GEC TRP signed-off
9 risk scenarios prioritized

1. Thought starter
2. Thought starter
3. Thought starter
5. Thought starter
7. Thought starter
8. Thought starter
9. Thought starter

Prior Year TRP signed-off
1Q Thought starters Sources: internal interviews + industry review
2Q GEC brainstorming session + review of thought starters
3Q TRP scenario development and internal syndication with risk owners
3Q GFRC review
4Q GEC review and sign-off
4Q Presentation to Risk Committee of the Board
1Q Next Year Presentation to Board of Directors

* GFRC = Group Finance and Risk Committee

ILLUSTRATIVE EXAMPLE
Bridging the Gap: Using ERM for Strategic Purposes

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Using ERM for Strategic Purposes

Customer risks

• Zurich does credit checks to monitor collateral and monitor financial viability of their customers and their suppliers.

• Emerging Risk Group is a cross-divisional group with global reps scanning the horizon for new exposures that impact customers.

• Zurich reviews customers’ loss control techniques and provides best practice guidance via nearly global 1,000 Risk Engineers, supporting customers’ needs and protecting Zurich’s own portfolio.

• Accumulations within Zurich’s risk portfolio are monitored via a database to identify areas of disproportionate exposure to a single company, industry, supplier, or geographic location.
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Decisions made in the marketplace

• Business Segment CEO’s communicate to their staff about the importance of following a simple identify-assess-mitigate approach to address potential Corporate Responsibility issues.

• Annual training, while fulfilling a compliance need, is treated as an opportunity to ensure employees understand the risks within their roles and act in accordance with the company’s risk tolerance.

• Zurich Risk Policy is available to all employees via the corporate intranet; select portions are highlighted by management as needed.

• Overall, Zurich’s ability to take on customers’ risks is fully based on each employee’s understanding of the effect these risks have on the business, so it is treated seriously and messaged clearly.
STS Sales Overview

Metric
- Net Sales
- Gross Sales
- Profit

Chart Type
- Line
- Column
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Aligning Key Performance and Key Risk Indicators

- Key Performance Indicators (KPIs) help a firm see how it is performing in relation to its strategic goals and objectives.

- Key Risk Indicators (KRIs) are leading indicators of risk to business performance, giving an early warning to identify a potential risk event.

- Zurich uses KRIs to monitor risks are in the areas such as:
  - natural catastrophe risks (percentage of group shareholder equity)
  - asset-liability matching (duration mismatch)
  - strategic asset allocation (percent allowed in investment categories)
  - credit risk (weighted average credit rating)
  - other risks specific to business or functional areas
# Sample Monthly Report

## Risk Heat Map

**Sample: Tech Industry**

<table>
<thead>
<tr>
<th>Summary Items Only (y/n)?</th>
<th>Yes</th>
</tr>
</thead>
</table>

### Risk Rating / Forecast

<table>
<thead>
<tr>
<th>Risk Category / Business Area</th>
<th>Risk Title and Description</th>
<th>Action Rating</th>
<th>Action Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ERM Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH UP</td>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compliance - Difficulty in complying with foreign regulations. Risk Owner: Bob Jones</td>
<td>Overdue / Ineffective</td>
<td>Establish compliance guidelines for EU - distribute to BU's.</td>
<td></td>
</tr>
<tr>
<td>MEDIUM UP</td>
<td>Emerging Markets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mergers &amp; Acquisitions - Insufficient research performed on targets Risk Owner: Mary Smith</td>
<td>Delayed / Needs Improvement</td>
<td>Hire 3rd party to perform due diligence</td>
<td></td>
</tr>
<tr>
<td><strong>IP Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW STABLE</td>
<td>US &amp; Can</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copyright - Management of competitor's use of copyrights Risk Owner: Chief Counsel</td>
<td>Delayed / Needs Improvement</td>
<td>Install software to track competitor's new products and potential copyright infringements</td>
<td></td>
</tr>
<tr>
<td>HIGH DOWN</td>
<td>Emerging Markets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trademark - Competitor's use of trademarks Risk Owner: Tanya Swift</td>
<td>Overdue / Ineffective</td>
<td>Contract a consultant to monitor competitor's product releases</td>
<td></td>
</tr>
</tbody>
</table>
# ERM Diagnostic Assessment

**ERM Key Elements**

<table>
<thead>
<tr>
<th>ERM Key Elements</th>
<th>Points Available</th>
<th>Points Earned</th>
<th>Percent</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Internal Environment</td>
<td>24</td>
<td>19</td>
<td>79%</td>
<td>C</td>
</tr>
<tr>
<td>B. Objective Setting</td>
<td>8</td>
<td>6</td>
<td>75%</td>
<td>C</td>
</tr>
<tr>
<td>C. Event Identification</td>
<td>32</td>
<td>23</td>
<td>72%</td>
<td>C</td>
</tr>
<tr>
<td>D. Risk Assessment</td>
<td>36</td>
<td>31</td>
<td>86%</td>
<td>B</td>
</tr>
<tr>
<td>E. Risk Response</td>
<td>28</td>
<td>26</td>
<td>93%</td>
<td>A</td>
</tr>
<tr>
<td>F. Information &amp; Communication</td>
<td>60</td>
<td>46</td>
<td>77%</td>
<td>C</td>
</tr>
<tr>
<td>G. Monitoring and Control Activities</td>
<td>44</td>
<td>33</td>
<td>75%</td>
<td>C</td>
</tr>
<tr>
<td><strong>Overall Total</strong></td>
<td><strong>232</strong></td>
<td><strong>184</strong></td>
<td><strong>79%</strong></td>
<td><strong>C</strong></td>
</tr>
</tbody>
</table>

**Performance Rating Metrics**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%-100%</td>
<td>A - World Class- ERM Framework excellence with continuous improvement</td>
</tr>
<tr>
<td>80%-89%</td>
<td>B - Intermediate- Solid ERM Foundation with some areas for improvement</td>
</tr>
<tr>
<td>70%-79%</td>
<td>C - Basic- ERM Framework with several gaps and need for improvement</td>
</tr>
<tr>
<td>60%-69%</td>
<td>D - Threshold- Significant Gaps in ERM Framework and processes</td>
</tr>
<tr>
<td>&gt;59%</td>
<td>Below - Below Minimum Threshold for ERM maturity</td>
</tr>
</tbody>
</table>
ERM Risk Healthcheck

• How familiar are you with the corporate risk management policies?

• Do you agree that a strong risk management culture exists throughout the organization?

• Do you agree that Enterprise Risk Management roles are clearly defined throughout the organization?

• Do you feel you have the authority and support to execute your risk management responsibilities?

• Do you feel that the corporate risk management policies are taken into consideration in the decision making process for your business unit?
Are you familiar with the corporate code of conduct?

Do you agree your training regarding the corporate risk management policies is adequate?

Do you agree that management does an adequate job in communicating risk management solutions?

As it pertains to your business unit, do you agree that there is adequate funding for risk management activities?

Do you agree that your business unit's business objectives are in line with the corporate risk management objectives?

www.ZurichERM.com
Bridging the Gap: Using ERM for Strategic Purposes

1. Enterprise resilience
2. ERM at Zurich
3. Risk culture
4. Using ERM for strategic purposes:
   • mergers and acquisitions
   • business resiliency
   • new project and product development
   • customers’ risks
   • decisions made in the marketplace
5. ERM monitoring and metrics leads to success!
### Enterprise Resilience Spells Success

1. **Risk assessment and risk aggregation are indispensable**
   - Understanding individual risks is not enough; we must also account for inter-linkages and remote possibilities.

2. **Extremes must be factored in**
   - The world does not follow a normal distribution and “Black Swans” can appear at any time.

3. **Quantitative tools are important, but informed qualitative judgments are indispensable**
   - The arsenal of quantitative risk assessment tools is impressive, but models have their limits.

4. **We must ascertain our risk appetite**
   - Enterprise risk management has a strategic function, to determine the organization’s choice of the trade-offs between risk and reward.

5. **The risk culture must be entrenched in the organization**
   - There must be a strong, top-down risk assessment, and risk management capability must be applied across the organization.

Source: *Dealing with the Unexpected*; A Zurich Report in Applied Risk Management, Zurich
Using ERM for Strategic Purposes

• The program is constantly scrutinized in search of better ways to identify, assess, manage and monitor Zurich’s key risks.

• management continuously looks for opportunities to create a closer partnership between ERM and the core businesses

• helps Zurich better adapt to changing conditions, anticipate surprises, recover from disruption, and leverage emerging opportunities
Operational Risk Success Story

• Zurich introduced an enhanced operational risk management framework

• One business unit reduced operational risk-based capital (RBC) consumption by 21.7 percent when Zurich moved from an asset-based to a risk-based approach for operational risk quantification

• The business unit then identified high risk exposures, performed a deeper assessment and developed mitigation measures.

• The unit experienced an additional reduction of 28.9 percent in operational risk capital consumption the following year.

• Operational risk capital not consumed was then available to fund profitable growth for Zurich.
Thank you!

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For more information visit:
www.ZurichERM.com
www.SupplyChainRiskInsights.com
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