Creating an Information Risk Intelligent Enterprise

Ramy Houssaini

Governance Risk and Compliance – G32
Organizations continue to struggle with limited operational risk transparency, particularly with regards to Information Risks. As a result, these type of risks generate their fair share of surprises for enterprise risk managers, management teams and boards of directors. This session will describe the competitive benefits of improved information Risk Intelligence and show how the deployment of robust data collection and analysis processes can optimize the management of operational risks in Enterprises. It will also highlight the key governance structure implications and the required supporting processes.
Where Are Most Companies Today?

Current State

- Fragmented silos
- Mostly reactionary
- Individual projects
- Handled separately from mainstream processes and decision making
- People used as middleware
- Spreadsheets, spreadsheets, spreadsheets
- Limited and fragmented use of technology

Source: Open Compliance & Ethics Group
What is the Impact?

**Lack of Insight**
- Explosion of data — no information
- Activities are reactive and defensive
- Reporting of problems vs. alerting capabilities to prevent issues

**Limited Transparency**
- Fragmentation — silos of information
- Lack of visibility into business process performance
- Minimal context of risks across processes

**Inefficiencies and Costs**
- Lack of automation for business process management
- Manual compliance, risk, and reporting methodologies
- Lack of alignment to strategy and performance initiatives

**Complex Environments**
- Expanding global business environment
- Increase in global regulatory requirements
- Lack of standardization in risk and control processes
The Path to Risk Intelligence

Enterprise Risk Intelligence

Evolution

8 step process to best practice ERI

1. Notify of events
2. Investigate events
3. Corrective actions to prevent further events from occurring
4. Compliance process to audit/test control frameworks/corrective actions
5. Introduction of risk - risks identified from investigations & auditing of control framework
6. Top Risks - manage significant risks, IACM = ISO 31000
7. Integration of all risk categories - permeation of the compliance process across all obligations (internal/external)
8. ERI - full collaboration & analysis of event, risk & compliance management processes
What characterizes an Information Risk Intelligent Enterprise?

Characteristics of a Risk Intelligent Enterprise include the following:

1. Risk management practices that encompass the entire business
2. Risk management strategies that address the full spectrum of risks
3. Risk assessment processes augment the conventional emphasis on probability by including the vulnerability dimension
4. Risk management approaches take into account risk scenarios and the interaction of multiple risks
5. Risk management practices that are infused into the corporate culture
6. Risk management philosophy that focuses not solely on risk avoidance, but also on risk-taking as a means to value creation

The competitive benefits of improved Risk Intelligence include:

1. Improved ability to prevent, quickly detect, correct, escalate and respond to critical risk issues
2. Reduced burden on business operations by standardizing risk management principles, language and decision-making
3. A means to improve strategic flexibility for both upside and downside scenarios
4. The ability to provide a “comfort level” to the board and other stakeholders that the full range of risks is understood and managed
5. The ability to manage expected risk exposure within acceptable risk appetite
6. Preparedness for rating agency’s increased focus on risk management capability

Source: Deloitte
How do we get there? Risk Intelligence Data Sources

- Control Tests
- Compliance Issues & Remediation
- Regulatory Compliance
- Regulatory Exam Findings
- Regulatory Filings
- Enterprise Risk Assessments
- Top-Down Risk Perspectives
- Risk Findings & Remediation

- Corporate Compliance
- Enterprise Risk
- Operational Risk
- Finance
- Internal Audits
- HR
- Legal

- Marketing Compliance
- Marketing Activities
- Operating Risks
- Restricted Materials
- Permits
- Permit Filing Calendar
- Non-Compliance Issues
- Marketing & Sales
- R&D
- Manufacturing
- Supply Chain
- Quality

- Non-Conformances
- Complaints
- Part Inspections
- Quality Audits
- CAPAs
- Contracts & SLAs
- Regulatory Compliance
- Threats & Vulnerabilities
- Security Incidents
- Configurations
- Roles & Access Rights
- Physical & Virtual Assets

- General Ledger
- Losses
- Tax Filings
- Financial Transactions
- Rebel Risk Perspective
- Control Tests
- Audit Findings & Remediation

- HR Policies
- HR Compliance
- Reputation
- Social & Web monitoring
- Ethics & Fraud Policies
- Legal Matter
- e-Discovery

- Supply Chain Risks
- Supplier Scorecards
- Supplier Metrics
- Supply Chain Issues
- Supply Chain Incidents
Reporting and Analytics for Risk Intelligence

**Advanced Visualizations**
- Data Relationship Browsers, Calendars, Gantt Charts, Radar Charts, Maps, etc.

**Simulation and Analytics**
- Statistical Analysis, Simulation Models, Predictive Analytics, etc.

**Interactive Dashboards**
- Powerful & Visually Appealing Interactive Dashboards

**Production Reports**
- WYSIWYG Report Designer
- Pixel-Perfect Production Reports (PDF, WORD, etc.)

**Big Data**
- Hadoop for Email, Social Media, Voice

**Structured Data**
- RDBMS for Application, Security Data

**Documents and Files**
- File Systems for Documents and Content
Protect Existing Value
- Streamline cross-enterprise risk identification, analysis, and mitigation
- Prevent incidents and losses through automatic risk monitoring

Create New Value
- Increase the success of strategies and initiatives
- Improve performance through risk-adjusted forecasts and plans

Increase Enterprise Transparency
- Ensure business units operate within appropriate risk appetite
- Improve governance by aligning business processes, risks, and controls
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Risk Intelligence & Risk Lifecycle

Risk-adjusted management of enterprise performance

- Establish risk appetite and thresholds
- Automatically identify risks
- Collaborate and aggregate across the enterprise
- Balance cost of risk avoidance and opportunity
- Actionable, role-based dashboards and alerts
Risk Intelligence & Risk Lifecycle: Risk Planning

1. Model and Align Risks to Organization Structure
   - Data models aligning organizational units, process activities, risk categories and indicators
   - Consolidated view of risk information supporting information needs

2. Create Risk and Activity Catalogs
   - What types of risks do we want to track?
   - Align risks to corporate goals
   - Customizable, pre-delivered content

3. Document Risk Appetite
   - Proposed risks based on business process
   - Define appropriate risk categories and thresholds
Prioritization Using Risk Heat Map

- Prioritize by impact to determine response and mitigation investment
- Identifying shifts in risk profile and overall risk exposure

Identify and Manage Risk Status in Your Business Context

- Automated risk assessment and surveys
- Build, complete and consolidate risk assessment results

Risk Intelligence & Risk Lifecycle: Risk Identification

- Identify key risks and risk indicators by overall category or industry
- Identify risk exposure through management of key risk indicators
### Quantitative and Qualitative Risk Analysis Options

- Point and scenario analyses
- Survey functionality and guided activities
- Workflow reminders for updates

### What-If Scenario Analysis

- Create a business scenario and link primary risks to the scenario
- View results with and without scenario
- Adjust assumptions, add responses, and re-run scenario as appropriate

### Monte Carlo Simulation

- Define the frequency distribution for the risks
- Define severity distributions for the risk impacts
- Simulate the scenario for multiple number of runs and view results
Risk Intelligence & Risk Lifecycle: Risk Response

1. View Aggregate Risks by Process and Category

2. Mitigate Risks Across Multiple Processes and Risk Categories
   - Top Operational Risks
     - Operational Degradation
     - Brand Impact
     - Loss of Data
     - Compliance Failure
     - Supplier/Third Party disruptions

3. Track Mitigation Response Status
   - Response status monitoring
   - Response cost tracking
   - Analysis done before and after responses
Risk Response Overview

The purpose of risk response is to make decisions based on the risk analysis about which risks need to be addressed, and to set the associated priorities.
Risk Intelligence & Risk Lifecycle: Risk Monitoring

1. **Align Risks with Strategy**
   - Ensure risk management methodology is aligned with organizational goals
   - Execute strategy with increased visibility and understanding of risk
   - Increase effectiveness of strategies and initiatives by clearly understanding the risk exposure

2. **Automatically Monitor Risks**
   - Embedded into key business processes
   - Controls monitoring based upon the level or risk associated with each business process
   - Workflow delivers assessments to experts

3. **Capture Incidents and Losses**
   - Create risk knowledgebase to learn from previous experiences
   - Incorporate and document workflow capabilities into response playbook
• The Governance model should focus on setting the right tone from the top
• Risk Communication vehicles are important forums for risk optimization
• Engagement from Key areas of the Business is key to success
• Regular review of the KRI Dashboard will ensure adequate monitoring of key risks is institutionalized
• Risk decisioning should be an integral part of the governance process
• Policies and Standards are important governance instruments and should be frequently reviewed and improved
Governance for the Information Risk Intelligent Enterprise

KRI Development Methodology

Key Drivers
- Efficiency
- Effectiveness
- Compliance
- Confidentiality
- Integrity
- Availability

Define

Information Business Value Proposition

Information Risk Management Business Objectives

Identify

• Brand Protection
• Service Delivery
• Compliance
• Strategic Insights
• Optimal Governance

Operational Failure

Data Stewardship Failure

Compliance Failure

Monitor

Technology Risk Dashboard & KRI Report

Information Risk Dashboard

Governance for the Information Risk Intelligent Enterprise
Governance for the Information Risk Intelligent Enterprise

- **Inherent Risk**: The risk if no controls are in place.
- **Current Risk**: With current or underway implementations of controls in place.
- **Residual Risk**: After all target appetite investments.
- **Target Appetite**: The level of risk that the organization is prepared to accept.
- **Policy Appetite**: The risk achieved by compliance with the policy and procedural guidelines.
- **Target Appetite Investments**: Time and money required to reduce the risk to the acceptable level.

- **Asset**
  - **1**
  - **2**
  - **3**
  - **4**

- **Risk Levels**:
  - **Major Risk**
  - **Significant Risk**
  - **Important Risk**
  - **Minor Risk**
Practical Next Steps

Step 1: Perform an inventory of all Information Risk functions in the organization
Step 2: Identify opportunities for improved collaboration and knowledge sharing
Step 3: Leverage a common Risk Information Master System of Record
Step 4: Develop the right governance vehicles
Step 5: Reexamine your Risk Policies and Standards
Step 6: Create regular risk reporting (KRI dashboard)
Step 7: Continuously monitor and improve risk response
References

1) Open Compliance and Ethics Group
2) Deloitte & Touche Risk Intelligence Whitepaper
3) SAP GRC Whitepaper
4) RMSS
5) RIMS
Ramy Houssaini
http://www.linkedin.com/in/strategicleadership