Enterprise Risk Management
A state of the Art

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Christophe Calant, Refinitiv

Traditional Risk Management
Where do we come from…

Where do we com from…

Risks used to be managed by Business Unit (work in Silos)

- BU leaders accountable for managing risks related to their key areas of responsibility
- Internal lens to identify and mitigate Risks
- Separated Reportings to Executive Committee
- …

There's a consensus to recognize that this approach has many limitations, meaning that significant risks that would impact the organization will not be detected:

- Risks between siloes
- Risks across siloes
- Risks mitigation in silo A could impact performance in silo B
- Look at outside (Risk emerging from outside the company)
- No strong interlock between Risk Management and Strategic Planning

ERM Definitions

ERM Definitions…

‘Risk’ is used by different stakeholders to mean different things:

The objective of Enterprise Risk Management is to develop a holistic, portfolio view of the most significant risks to the achievement of the entity’s most important objectives.

Enterprise risk management (ERM) is a plan-based business strategy that aims to identify, assess and prepare for any dangers, hazards and other potentials for disaster – both physical and figurative – that may interfere with an organization's operations and objectives. The discipline not only calls for corporations to identify all the risks they face and to decide which risks to manage actively, it also involves making that plan of action available to all stakeholders, shareholders and potential investors, as part of their annual reports.

Enterprise risk management enriches management dialogue by adding perspective to the strengths and weaknesses of a strategy as conditions change, and to how well a strategy fits with the organization’s mission and vision. It allows management to feel more confident that they’ve examined alternative strategies and considered the input of those in their organization who will implement the strategy selected.

ERM does answer the question: What are the major Risks that could stop my company from achieving my mission?

ERM Definition (continued)

Enterprise risk management (ERM) in business includes the methods and processes used by organizations to manage risks and seize opportunities related to the achievement of their objectives…. ERM can also be described as a risk-based approach to managing an enterprise, integrating concepts of internal control, the Sarbanes–Oxley Act, data protection and strategic planning. ERM is evolving to address the needs of various stakeholders, who want to understand the broad spectrum of risks facing complex organizations to ensure they are appropriately managed...

Enterprise Risk Management by definition is the integration of an organisation's risks for the purpose of assisting it achieve its mission and vision. ERM is to assist navigating a complex world.

Enterprise risk management (ERM) is the process of planning, organizing, leading, and controlling the activities of an organization in order to minimize the effects of risk on an organization's capital and earnings. Enterprise risk management includes financial, strategic and operational risks, in addition to risks associated with accidental losses.

A process, effected by an entity's board of directors, management and other personnel, applied in strategy-setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives

What ERM is not…

- Enterprise Risk management was never about predicting the future (it's not weather forecast)
- Enterprise risk management is not about recording Risk, but managing Risk.
- Enterprise risk management is not a function or department.
- Enterprise risk management is not a checklist, kind of "tick-the-box" to comply with Regulations
- ….

ERM Context

ERM Context

'Risk' is often used to imply the many activities used to understand risk but which go beyond Risk Management – for example governance, policy development and monitoring, compliance, internal audit, etc.

These are activities that have grown significantly and haphazardly in response to high profile **events, globalisation and regulation** and have led to various models being developed to try to make sense of it all. **Three lines of defense** is one such model which, despite some limitations, is routinely referenced by our target clients. It categorises Risk activities into three groups (Lines of Defence) varying in their proximity to the business and level of independence.

Line & functions	*Recent evolution*
Line 1 **Local management** • Identify risks • Implement controls • Attest to policy compliance • Monitor Key Risk Indicators • Remediate issues	A recent, additional driver of client investment in risk solutions has been the shift in **accountability from Line 2 to Line 1** in ensuring risk identification and mitigation – a shift underpinned by Senior Manager Regime and other equivalent regulations and directives. Gone are the days of hiring experts in central corporate functions to deal with these issues in isolation. Management must be held accountable for managing risk and ensuring there is a cultural change with respect to day-to-day business. With the need to track and align different risk attributes and aggregate all information in a single location (a Line 2 need for the past 5 years) becoming even more critical.
Line 2 **Risk Management** • Risk identification and monitoring. • Capture losses / high impact events. • Remedial action monitoring. **Compliance** • Policy attestation. • Regulatory / Control reviews.	With Line 1 accountability now growing, the second line has evolved substantially, shifting in focus from directly managing risk to developing and monitoring risk **methodology** adoption and associated roles and responsibilities for local management. Consequently Line 2 has become more of an **oversight role**, comparing and contrasting the execution and outputs of their risk framework across the business. The Line 2 oversight role can often been seen as duplicative of Line 1 efforts but this added layer of assurance is critical to regulators and customers alike, who are becoming increasingly risk savvy. The ability the manage and aggregate a complex first and second line process has highlighted the need for advanced relational solutions.
Line 3 **Internal Audit** • Independent audits. • Review procedures. **External regulators / auditors** • Regulatory reviews. • External audit.	Line 3 has seen their role grow beyond traditional independent reviews of the first line but also to include detailed reviews of the second line and the interaction between Lines 1 and 2. This includes a need to understand the risk information these Lines generate and to plug gaps in the total assurance they provide to the board, non-executives and third parties. Technology has always played a role in the Audit function but must now support clearly defined and reportable 'total assurance' measures, not simply act as a document repository. Line 3 will commonly be an end-customer of the data and (technologies that manage this data). Hence it will be a stakeholder in any integrated platform but may be less influential than Lines 1+2.

Challenge <> Opportunity

Line 1-3 typically comprise several functions, potentially 30+. Naturally, this presents a number of challenges:

- Large volumes of data, varying quality and measures used.
- Gaps and overlaps in risk coverage.
- Business can become fatigued by multiple LoD activities.
- No singular view of risk.
- Any aspiration to consolidate / integrate hampered by reporting lines.

Clearly, technology can provide (part of) a response to these challenges.

ERM Context (continued)

The landscape for tools that support Three Lines of Defence functions has evolved significantly over the last ten years, in particular to meet a desire for more integrated ways of working.

Chronology	Line 1	Line 2	Line 3
What most started with and still maintain	*Rely on Line 2 to manage Risk*	**MS Office or Lotus Notes based solutions** • Excel spreadsheets serve as the most prominent tool given their ease of use and the users creative control. • Access or Lotus databases emerged to manage data relationships and data entry that Excel could not manage for larger firms **Document Management** • As more and more files are produced using these methods SharePoint and Network drives are relied on to manage versions and spreadmarts	
Initial isolated automated systems	**Point Solutions** • Focused primarily on process and control management • Interact with Line 2 solution but no tie in to business value	**Point Solutions** • SOX and Basel established a greater need for technical solutions that could centralize risk assessment, control identification and Issues Management workflows. • Reporting typically managed in MS Office	**Point Solutions** • Document management rich with process information to guide users through the creation and execution of an Audit programme • Integrated with MS Office
Required to meet current expectations	**Multi Function Solutions** • Line 1 + 2 risk management expectations and execution now require independent perspectives across a single process flow in an integrated platform. • While resources have been ramped up solidifying each line, the obligations continue to grow requiring automation of activities and process wherever possible. • Synergies between the risk functions are heavily desired to avoid and eliminate duplicate efforts and drive value out of non-revenue generating investments • *Looking ahead, additional automation bridging Risk solutions with underlying business systems and external content will produce a richer content set.*		**Point Solutions within Multi Function** • Third line solutions continue to require independence but a single platform model is still optimal for accessing Line 1+2 data. • Increased automation and data management can significantly improve reporting and issue tracking. • Syncing Lines 1-3 data can eliminate multiple versions of the truth.

Thomson Reuters Proposition: Connected Risk

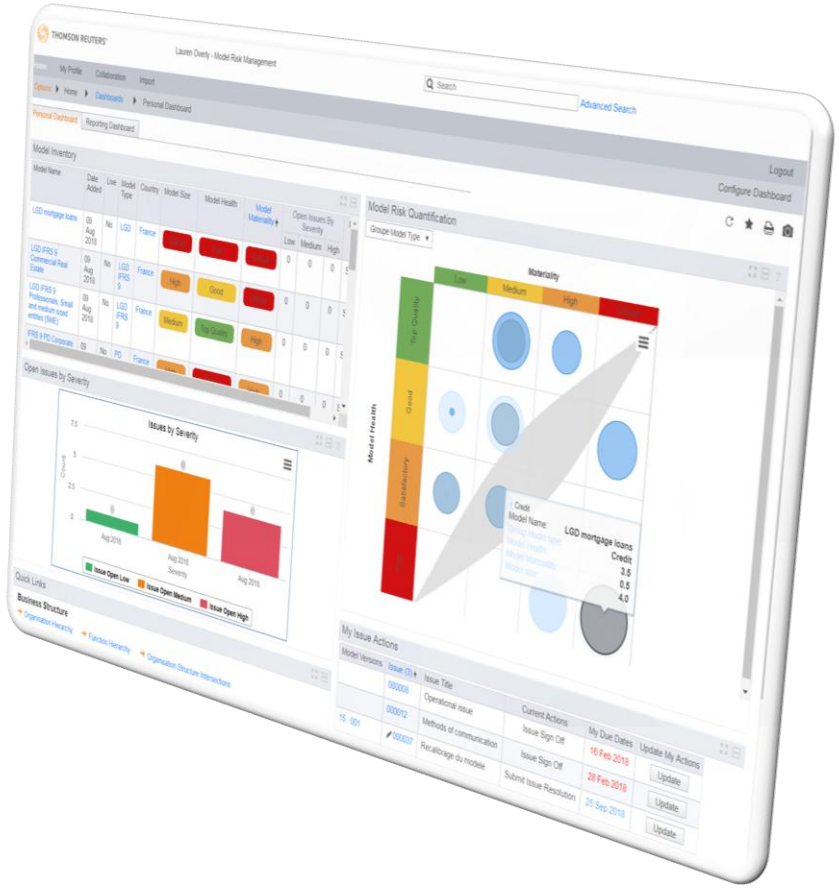
A truly integrated platform – Connected Risk helps you mitigate and manage the risks that matter and supports several solutions that can be **linked together** on the platform:

- Risk Management
- Compliance Management
- Audit Management
- Regulatory Change Management
- Model Risk Management
- Policy Management
- Any Customized workflow (KYC, GDPR, Project Management, etc.)

Thomson Reuters Proposition: Connected Risk

SOLUTIONS

FOUNDATIONAL			SPECIALIST			
Risk Management (FR and NFR)	Compliance Management	Internal Audit Management	Regulatory Change Management	Model Risk Management	Policy Management	Customized Module (KYC, 3rd Party, etc.)



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Industry Perspective

ERM Challenges

Increasing volatility, complexity and ambiguity of the world.

The World Economy Forum's 2018 Global Risks Report succinctly observed:

"Humanity has become remarkably adept at understanding how to mitigate conventional risks that can be relatively easily isolated and managed with standard risk-management approaches. But we are much less competent when it comes to dealing with complex risks in the interconnected systems that underpin our world, such as organizations, economies, societies and the environment. There are signs of strain in many of these systems: our accelerating pace of change is testing the absorptive capacities of institutions, communities and individuals.

ERM Challenges (continued)

Risk are more and more complex !

- We leave in a complex world we don’t control (Social medias fake news impact)
- Our environment is evolving quickly (speed of change linked to new technologies)
- Strong emergence of new dangerous Risks
  - Cybersecurity
  - Supply Chain
  - Environmental Risk
  - Geopolitical Risk
  - Reputational & Image Risk (CEO Perspectives)
  - Talent Risk
  - Employee behaviours

ERM Challenges (continued)

Risk are more and more complex !

- New disruptive technologies, no clear idea about their real impact, a tiny change could trigger big tsunami.
  - BlockChain and CryptoCurrency Model
  - Artificial Intelligence, Machine Learning, NLPs and Neural Networks
  - Robot Advisors, predictive Analytics.

- Ever-shifting regulatory requirements
  - Complex regulations
  - Regulatory enforcement
- Big Data crunching (it’s a matter of structured & unstructured data)

ERM Challenges (continued)

From	To
• Static	• Dynamic
• Simple	• Complex
• Compliance	• Collaboration
• Pro-active	• Re-active → Pro-active
• Constraint	• Business Opportunity
• Risk Averse	• Seek Opportunities

What should we focus on

- Need full support from the top management.
  - They are responsible for understanding, managing, and monitoring the most significant risks affecting the enterprise. Not just financial Risks
  - The earlier you hear about it, the easier it is to deal with in an emerging risk.
  - The critical factor is to have a highly visible commitment on the part of the senior executive team to make risk management an integral part of the managerial decision-making process.
- Keep continuing the movement of Risk Management to LOD1, more accountability.
- **Fuse the culture** within the company, at **each level** of the organization. Making risk everyone's concern, shift the mindset, the policies, systems and processes.
- Because risks constantly emerge and evolve quicker and quicker, it is important to understand that ERM is an **ongoing process**.
- Employ **Predictive Analytics** and **machine learning** technics (not to predict future, but identify hidden facts that could impact strategic decisions)

What should we focus on

- **Deal with data proliferation:** Advanced analytics and data visualization tools will evolve and be very helpful in understanding risk and its impact—both positive and negative. Using **Big Data** we need to be able to identify evolving risks, and relate them to other areas of risk.
- Create **Neural Networks** to identify and map interrelationships. Previously unrecognizable relationships, trends and patterns can be uncovered, providing a rich source of information critical to managing risk.
- Exploit **Machine Learning** to monitor customer and staff sentiment, etc.
- Replace laborious and inaccurate risk assessments & risk reviews with **Automated Processes**
- Real Risk Aggregation using Scenario Analysis and then **Bayesian modelling** to apply their effect on one another.
- Focus on staff **soft skills training** for collaborative working and the ability to sell the benefits of Risk Management to every level of the business from those working in business units that may be reporting risks and incidents, to line of business managers, senior management and the Board.

What should we focus on

- Switch the mindset from a constraint to a business **opportunity,** in order to gain a competitive advantage.
- Improve information flow and collaboration
  - From bottom to top
  - From top to bottom
  - And across the siloes


REUTERS / Dominic Ebenbichler

Thank you

For further information:
marco.pisani@refinitiv.com
+39 02 66129.412