Institute and Faculty of Actuaries

Better Decision Making ERM

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Better Decision Making ERM

- Context
- Principles & High-level Approach
- The Business Plan
- Decision Making
- BDM ERM in Practice
- Summary

Better Decision Making ERM

- **Context**
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Better Decision Making ERM Context

- What is ERM?
- Is ERM real?
- Can actuaries add value to ERM?

Better Decision Making ERM Context

- What is ERM?

Better Decision Making ERM

Table 1
ERM definitions and descriptions from academic journals

Dickinson (2001)	ERM is a systematic and integrated approach of the management of the total risks a company faces.
D'Arcy and Brogan (2001) Casualty Actuary Society	ERM is the process by which organizations in all industries assess, control, exploit, finance and monitor risks from all sources for the purpose of increasing the organization's short and long term value to its stakeholders.
Harrington et al., 2002	ERM is the idea that emerged in the late 1990s that a firm should identify and (when possible) measure all of its risk exposures — including operational and competitive risks — and manage them within a single unified framework in contrast to the silo approach to risk management.
Meulbroek (2002a)	Integrated risk management is the identification and assessment of the collective risks that affect firm value, and the implementation of a firm-wide strategy to manage those risks.
Barton et al., 2002	Enterprise-wide risk management shifts risk management from a fragmented, ad hoc, narrow approach to an integrated, continuous, and broadly focused approach.
Verbrugge et al. (2003)	ERM is corporate-wide, as opposed to departmentalized, efforts to manage all the firm's risks — in fact, its total liability structure — in a way that helps management to carry out its goal of maximizing the value of the firm's assets. It amounts to a highly coordinated attempt to use the right-hand side of the balance sheet to support the left-hand side — which, as finance theory tells us, is where most of the value is created.
Liebenberg and Hoyt (2003)	Unlike the traditional "silo-based" approach to corporate risk management, ERM enables firms to benefit from an integrated approach to managing risk that shifts the focus of the risk management function from primarily defensive to increasingly offensive and strategic. ERM enables firms to manage a wide array of risks in an integrated, holistic fashion.
Kleffner et al., 2003	In contrast to the traditional "silo" based approach to managing risk, the ERM approach requires a company-wide approach to be taken in identifying, assessing, and managing risk.
Miller and Waller (2003)	Integrated risk management is consideration of the full range of uncertain contingencies affecting business performance.
Sobel and Reding (2004)	ERM is a structured and disciplined approach to help management understand and manage uncertainties and encompasses all business risks using an integrated and holistic approach.

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ERM definitions and descriptions from standards setting organizations, industry publications, industry associations, consulting firms, and rating agencies

(AS/NZS 4360 Risk Management Standard, 1995)	Risk management is the culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects.
Holton (1996)	ERM is about optimizing the process with which risks are taken.
Banham (1999)	Goal of ERM is to identify, analyze, quantify, and compare all of a corporation's exposures stemming from operational, financial, and strategic activities.
Arthur Andersen (Described in Deloach and Temple (2000))	ERM is a structured and disciplined approach [that] aligns strategy, processes, people, technology and knowledge with the purpose of evaluating and managing the uncertainties the enterprise faces as it creates value … .It is a truly holistic, integrated, forward looking and process-oriented approach to managing all key business risks and opportunities — not just financial ones — with the intent of maximizing shareholder value for the enterprise as a whole
Miccolis (2000)	ERM is a rigorous approach to assessing and addressing the risks from all sources that threaten the achievement of an organization's strategic objectives.
Deragon (2000)	ERM simply seeks to manage interrelationships systemically, in order to minimize variation, reduce inherent risks, and increase positive synergies.
Tillinghast-Towers Perrin (2001)	ERM is generally defined as assessing and addressing risks, from all sources, that represent either material threats to business objectives or opportunities to exploit for competitive advantage.
Institute of Internal Auditors (IIA, 2001)	Enterprise risk management is a rigorous and coordinated approach to assessing and responding to all risks that affect the achievement of an organization's strategic and financial objectives.
Casualty Actuary Society (CAS, 2003a)	ERM is the process by which organizations in all industries assess, control, exploit, finance and monitor risks from all sources for the purpose of increasing the organization's short and long term value to its stakeholders.
Committee of Sponsoring Organizations (COSO) (2004)	ERM is 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.
S&P (2008)	We see ERM as an approach to assure the firm is attending to all risks; a set of expectations among management, shareholders, and the board about which risks the firm will and will not take; a set of methods for avoiding situations that might result in losses that would be outside the firm's tolerance; a method to shift focus from "cost/benefit" to "risk/reward"; a way to help fulfill a fundamental responsibility of a company's board and senior management; a toolkit for trimming excess risks and a system for intelligently selecting which risks need trimming; and a language for communicating the firm's efforts to maintain a manageable risk profile.
ISO 31000 (2010)	Risk management is coordinated activities to direct and control an organization with regard to risk.
Risk and Insurance Management Society (RIMS) (2011)	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.

Enterprise Risk Management: Review, Critique, and Research Directions, Philip Bromiley, Michael McShane, Anil Nair, Elzotbek Rustambekov

Better Decision Making ERM Context

<u>What is ERM?</u>

- No single accepted definition
- Emerging concensus
  - Managing firm more important than components
  - Not only traditional risks, includes strategic risks and competitor actions
  - Not just a problem, also an opportunity
- No (academic) link found to value
- Huge range of subjects for research
- Businesses like it like that?

Better Decision Making ERM Context

Is ERM a value-adding activity?

- Is it meant to be?
- Will it mean more resource?
- Will we have to be different from the industry?
- Is the CRO seen as a value driver or a compliance manager?
- Will moving away from the current process threaten regulatory compliance?

Better Decision Making ERM Context

“…virtually all literature is silent on how to deal with the myriad cultural, logistical, historical challenges that exist and are unique to all organizations… Many of the articles describe what the process should look like and how it should function, but there are few that provide details of how to get to that step. Many of the articles use great overarching statements that seem very much like motherhood statements. There was a distinct lack of information on how to bring all the silos together… The impact of corporate culture on ERM implementation and practices is not well addressed in the literature.”

- Attributed to Fraser et al in the Bromily paper

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Can actuaries add value to ERM?

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Better Decision Making ERM
Principles & High-level Approach

BDM ERM

An ERM reporting approach that considers the business plan, how decisions affect the business plan and how the results deviate from those expected,

and thus,

how to improve the quality of decision making.

Better Decision Making ERM Principles & High-level Approach

BDM ERM

- part of ERM reporting
- an addition to the ERM toolkit
- may rely on other parts of the ERM programme

Better Decision Making ERM
Principles & High-level Approach

Overarching Principle

Risk is added or subtracted from

a business as a result of decisions made

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Principles & High-level Approach

Consequence

If risk depends on the decisions made, then

how those decisions are made is of intense interest

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Principles & High-level Approach

Communication

The best expression

of the expected outcomes from decision making

is the business plan

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Better Decision Making ERM
The Business Plan

- BDM ERM business plan may be different from existing plans
- Separate
  - business-as-usual plan and
  - impact of developments
- Range more useful than point estimates
- Automatically addresses materiality
- Provides a route to consider new developments

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Decision Making

Commission Delegated Regulation (EU) 2015/35

Article 259

Risk Management System

1. Insurance and reinsurance undertakings shall establish, implement and maintain a risk management system which includes the following:

(a) a clearly defined risk management strategy which is consistent with the undertaking's overall business strategy. The objectives and key principles of the strategy, the approved risk tolerance limits and the assignment of responsibilities across all the activities of the undertaking shall be documented;

(b) a clearly defined procedure on the decision-making process;

Better Decision Making ERM
Decision Making

How to make Better Decisions

- Seriously consider at least two robust options per decision
- Challenge robustly to avoid heuristics/natural biases
- Find some distance
- Set robust review points and mean them

Better Decision Making ERM
Decision Making

<u>How to make Better Decisions</u>

- Seriously consider at least two robust options per decision
  - Seldom just one choice
  - Consider concurrent options
  - Imagine if your favourite option disappeared
- Challenge robustly to avoid heuristics/natural biases
  - How do you counter confirmation bias?
  - Devil’s advocate. Six Thinking Hats
  - What would be the conditions for this to be the best option?
- Find some distance
- Set robust review points and mean them

Better Decision Making ERM
Decision Making

How to make Better Decisions

- Seriously consider at least two robust options per decision
- Challenge robustly to avoid heuristics/natural biases
- Find some distance
  - Zoom in, zoom out
  - What would my successor do?
  - Pilot to test assumptions
- Set robust review points and mean them
  - Check outcomes against the plan

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Better Decision Making ERM
In Practice

How does BDM ERM add to effectiveness?

How does it work?

Board agrees a plan

- with results shown as corridors
- with risk mitigation expressed via the impact on outcome corridor
- with shock risk shown explicitly and separately

Board agrees the decision-making process

Better Decision Making ERM
In Practice

How does BDM ERM add to effectiveness?

<u>How does it work?</u>

Board reviews results

- of business as usual
- of developments in progress or just implemented

using, inter alia, the output from the decision-making process and

- a formal comparison of actual with expected

Better Decision Making ERM In Practice

How does BDM ERM add to effectiveness?

<u>What does it achieve?</u>

Single space for high quality Board challenge

No silos

Appropriate materiality

Natural risk appetite

Better Decision Making ERM
In Practice

How does BDM ERM add to effectiveness?

<u>The Role of the Chief Risk Officer?</u>

Continually able to say…

…whether we are going to meet the plan?

…why we are deviating from plan?

Counterpart to the CFO

Better Decision Making ERM
In Practice

How does BDM ERM add to effectiveness?

For actuaries?

Natural risk enumerators

Projections relatively simple

Assumption setting

Actual versus Expected is natural territory

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Better Decision Making ERM Summary

- Risk is added or subtracted through decisions made
- The business plan is the summary of expected outcomes
- The BDM ERM business plan may split activity by risk characteristics
- Follow up is crucial
- Decision-making process is important
- There are techniques to proofing decisions
- The CRO has a proper role in this process
- Actuaries are well suited to supporting BDM ERM

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The End