



# Advanced ERM (Enterprise Risk 2 days

## Who should attend?

- Chief Risk Officers
- Risk managers
- Managers and Directors responsible for the risk management function or process
- Heads of Internal Audit
- Heads of Assurance functions
- Senior Finance professionals
- This course will be particularly useful for delegates that have previously attended the ERM course – although this is not a prerequisite

## After completing this course you will be able to

- Implement appropriate and varied techniques for the identification and assessment of risks
- Generate measurable value by aligning the ERM framework with corporate performance expectations
- Foster a culture that reinforces appropriate risk-taking to balance value creation and value protection
- Clarify ERM accountabilities of all employees from executives to the front line
- Implement key risk indicators (KRI's) for each line of business
- Enhance achievement of corporate objectives by linking performance targets, and risk management actions
- Develop risk appetite statements and apply risk tolerance techniques

## Why you should attend

The turmoil in the world is continuing – with increasing public unrest fluctuating oil prices, natural disasters of a scale thought unimaginable, volatile stock markets and world economic uncertainty.

**In this time of global uncertainty how do you steer a course through these difficult waters?**

**The answer is to recognise the only real link between all these events – RISK – and then to try to anticipate, manage and then exploit such risks at an enterprise level.**

**In many organizations risks have been identified as a result of control failures or as a result of pressure from regulators or Government. The primary intent has often been to tick the box and avoid criticism**

**Thankfully many organisations have realised that much more is needed and have developed an Enterprise Risk management (ERM) approach.**

**This has ensured that risks that were previously managed in isolation can be aggregated and prioritized across the entire business.**

**However, stopping here is like driving a plane on a highway – it might go faster than the cars but it hasn't reached its full potential.**

**Advanced ERM goes one step further. Risks are scored based on business materiality with each risk being evaluated and compared by it's financial, legal, reputational, and regulatory impact, and classified by the effect they could have on the business.**

**New understandings of risk emerge, and efficient controls can be implemented to tackle what really matters to the business. And drive competitive advantage**

**In short the focus becomes strategic value instead of managing costs.**

## **CPE credits**

**Participants can earn up to 14 CPE credits in the Management Advisory Services field of study**

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## Course Outline

### Day 1: Taking ERM to the next level

#### Characteristics of an advanced ERM process

- Board-level commitment to ERM as a critical decision framework
- A dedicated risk executive in a senior level position to drive the process
- An ERM culture that encourages full engagement and accountability at all levels of the organization
- Engagement of stakeholders in risk management strategy development and policy setting
- Transparency of risk communication
- Integration of financial and operational risk information into decision making
- Use of sophisticated quantification methods to understand risk and demonstrate added value through risk management
- Identification of new and emerging risks using internal data as well as information from external providers
- A move from focusing on risk avoidance and mitigation to leveraging risk and risk management options that extract value
- **ERM case studies (banking and FMCG)**
- New paper on ERM and the role of Executive management will be shared

#### Exercise 1 – The challenges involved

#### Keeping your eye on the big prize

- ERM spans all lines of business and is governed at the enterprise level
- ERM spans all types of risks, across all business units, functions, processes, and systems
- Identifies and assesses risk events, plans and executes a response to them
- **Identifying principal risk factors (Vodafone case study)**
- Provides transparent, risk-adjusted business performance management

- ERM focuses on risk events that impair the enterprise from fully achieving objectives

## Exercise 2 – The big picture

### Exploring Global ERM Scenarios

- In this interactive session, delegates will explore global risk scenarios and then discuss the implications for their organizations.

### Risk Attitude

- The need to define risk as the need to get things right – not what can go wrong
- ‘Ring fencing’ risk exposure - never allow one part of the business to impact the whole organisation
- Determining and communicating your attitude to risk and your required risk culture to managers and stakeholders
- Recognising that reputation is both your biggest asset and the biggest risk you face – and one you cannot insure
- Not waiting until you are required to provide evidence of effective risk management by regulators or legislation – this will usually be too late

## Exercise 3 – Determining risk attitude

### Risk appetite and risk tolerance

- What is risk appetite
- The difference between risk appetite and risk tolerance
- Defining risk limits
- Risk profiling
- Developing risk appetite statements
- Examples of risk appetite statements

## Exercise 4 – Defining risk appetite

### The ERM challenges

- Why the ERM process often fails to engage management
  - Risks recorded are much too general
  - Causes and effects are confused with risks
  - Only residual risk is concentrated on
  - Various different methods are used for scoring risks
  - Benefits are difficult to determine
  - The register is spread sheet based
  - The process is far too complex
- The Risk register solution

## Exercise 5 –The advanced ERM risk register

### Day 2 ERM risk measurement techniques

#### Risk Measurement methods

- The need for quantitative risk analysis
  - Structured Interviews
  - Risk workshops
  - Delphi (expert analysis)
  - Ishikawa diagrams (fishbone analysis)
  - Failure mode and effect analysis (FMEA)
  - Scenario planning
  - Root cause analysis
  - Monte Carlo analysis
  - Bayesian networks
- The pros and cons of the various methods

#### Risk workshops

- The power of workshops
- Techniques for successful risk workshops
- The need to involve peer groups
- Establishing a risk workshop
- Facilitation techniques

## Exercise 6 –Risk identification workshop

#### Delphi (expert analysis)

- Getting consensus from experts of different backgrounds and perspectives
- Comparing the opinions of qualified experts from different fields
- Determining acceptable risk by using experts to assess e.g total credit given versus credit available or to establish creditworthiness criteria
- Worked example

#### Ishikawa (fishbone) analysis

- Very effective in evaluating risks with multiple causes
- Steps in fishbone analysis
  - Problem identification
  - Primary and secondary causes
  - Establishing priority criteria
  - Preparing fishbone diagram
  - Analysing the output

## Failure mode and root cause analysis

- Evaluation of potential failure modes for processes
- The likely effect on outcomes and/or product performance
- Risk reduction measures to eliminate, reduce or control the potential failures
- Impact, probability and detection criteria
- Determination of RPN (risk priority number)
- Worked example of FMEA

### Exercise 7 FMEA exercise

## Scenario planning

- Why risks identified are often too generalised e.g loss of key personnel
- The need to evaluate various scenarios for each generic risk
- The techniques and success factors

### Exercise 8 Disaster scenario exercise – power failure

## Fault tree analysis

- Systematic method of System Analysis
- Examines the system top down
- Used to investigate potential faults
- Quantify contribution to system unreliability
- Worked example

## Monte Carlo simulations

- Mathematical technique that allows people to account for risk in quantitative analysis and decision making.
- Provides a range of possible outcomes and the probabilities they will occur
- Determines a probability distribution
- The types of distribution
  - Normal(bell curve)
  - Uniform
  - Triangular
- Uses of Monte Carlo simulations
  - Used to price complex financial instruments
  - To determine the VAR (value at risk)
  - Determining the option to expand, contract, or postpone a project

### Exercise 9 Monte Carlo exercise

## Bayesian networks

- Bayes theorem
- Adding more data to an original idea to enhance decision making
- Use of Bayesian networks
  - Will it rain tomorrow
  - Visiting the doctors
  - Banking sector

### Exercise 10 Bayesian network exercise

## Emergent risks

- There is no clear boundary with other types of risk
- Emergent Risks cannot often be easily anticipated
- At early stages they are often low probability / high impact
- Areas for consideration
  - Political
  - Regulatory
  - Legal
  - Security
  - Technology
  - Environmental
  - Knowledge

## Key risk indicators (KRI's)

- Banking banana skins
- Identifying these in advance
- Examples of KRI's
- How to develop effective KRI's

### Exercise 11 KRI's