



# 18<sup>TH</sup> EAST ASIAN ACTUARIAL CONFERENCE

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## Practical Guide of Operation Risk Management: From Practitioners' Perspective

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# Agenda

- Introduction of Operational Risk
- Risk Categories
- Quantifying Risks
- Recording Data and Setting Up System
- Managing Risk
- Decision Making
- Lessons Learned
- Summary

# Operational Risk : What is it?

- Part of the risk considered under ORSA
- Risk of loss resulting from inadequate or failed internal processes, people and system or from external events
- In a nutshell, things that can go wrong when running a company.
  - Issues not associated with insurance events or investment events
  - Lead to lose of Money

# Risk Categories : what can go wrong?

- Internal
  - Fraud
  - System Failures
  - Execution, delivery and process management
  - Clients, products and business practice
  - Employment practice and work safety
- External
  - Damage to physical asset
  - Fraud
  - Political



# Recording Data and Setting Up System

- Internal “claim” system
  - Claim reporting
    - Help desk with people to answer the phone
    - Web/app access reporting
    - Case handlers
  - “Claim” recording
    - “Event” needs to be reported, case file created, processed as if it is an insurance claim
    - Reference number, occurrence date, type of claim, claimant, location, loss amount...etc.
  - Once claims are coded and recorded consistently, they can be analyzed.

# Quantifying Risks :

If you can't measure it, you can not manage it

- What is risk?
  - “Potential” to a loss, not loss itself
  - Uncertainty
  - Ultimately, needs to have monetary impact
- Need to convert risk into numbers.
  - Standard deviations
  - Variance
  - Economic Capital
  - Others

# Use of the data : what to do with the data?

- Calculate risk indicators
  - Occurrence of certain events may change the likelihood of loss occurrence
- Monitoring company's risk profile
- Monitoring the results of risk management initiatives
- Capital charge calculation
  - Models, severity, frequency, correlations among risks...etc

## Decision Making : What actions to take?

- Change internal process
- Change internal audit focus
- Change department structure
- Change responsibility of employees
- Change operating policies
- Develop risk policies



# short-cut : how to start?

- The most common areas to focus
  - People
    - Internal, external
  - System
    - Claim
    - Cash flow related
    - Underwriting
    - Others
  - Property

# Reporting : how to communicate?

- To board and senior management
  - Part of an overall report that looks at various company risk including operation risk
  - Risk profile report or risk dashboard report
- To risk owners
  - Assessment of risk compliance

# Implementation : who to do what?

- 3 lines of defense
  - Risk owners need to comply with relevant policies/guidelines
  - Risk management/ Compliance department need to ensure risk owner comply with risk management policies/guidelines
  - Internal Audit (part of board) provide independent review
    - Report goes to the board
  - Not operation risk specific

# Lessons Learned : what not to do

- Things Not to do in an internal operating guideline:
  - Qualitative requirement
    - You need to do this **appropriately**.
  - Things that does not require physical activity
    - **Think** about capital requirement when designing a policy.
  - Vague requirement
    - You **may** want to check with market practice.
  - Based on hypothetical situation
    - **If** there is an issue, then you need to review.
  - Things without an owner
    - **Actuary** needs to be notified if there is a problem.
  - Does not define time requirement
    - Actuary to conduct an operation risk management review, **as needed**.
  - Promise for the future
    - Actuaries need to set up an operation risk system **in the future** (or next 3 to 5 years) .



# Summary

- Operation risk is looking at what can go wrong when running a company.
  - People, system and property are three key areas to look at.
- Internal “claim system” for company
- Part of the enterprise risk management
  - Implemented, reported and managed with other risk