



Enterprise Risk Management across the region

David Kong FSA, FSAS, FASM

18 November 2016

Contents

- Deconstructing Enterprise Risk Management (ERM)
- ERM across the region
 - Singapore
 - Malaysia
 - Indonesia
- Implementation of ERM

ERM is...

“...process of **coordinated risk management** that places a greater emphasis on cooperation among departments to manage the organization’s full range of risks as a whole. ERM offers a framework for effectively managing uncertainty, responding to risk and harnessing opportunities as they arise.”

▶ Society of Actuaries

“...the process of **identifying, assessing, measuring, monitoring, controlling and mitigating risks** in respect of the insurer, the group which it belongs to and, if applicable the group which it is in control of. It involves the **self-assessment** of all reasonably **foreseeable** and **relevant** material risks that an insurer faces, and their **inter-relationships**, providing a link between ongoing operational management of risk and longer-term business goals and strategies.”

▶ Monetary Authority of Singapore

“...provides the structure for identifying, quantifying and mitigating risk across the Group. An effective Risk Management Framework is the key to **avoiding significant financial and reputational damage** that arises from inadequate or ineffective control of the risks in the business.”

▶ Philam Life 2015 annual report

“...the process by which companies identify, measure, manage, and disclose all key risks **to increase value to stakeholders.**”

▶ Simergy Consulting

Typical components of ERM framework



What does ERM do?

A sound ERM framework in place would help a company to create, protect and enhance the value to its various stakeholders by:

**Aligning risk
appetite and
strategy**

**Linking growth,
risk and returns**

**Enhancing risk
response
decisions**

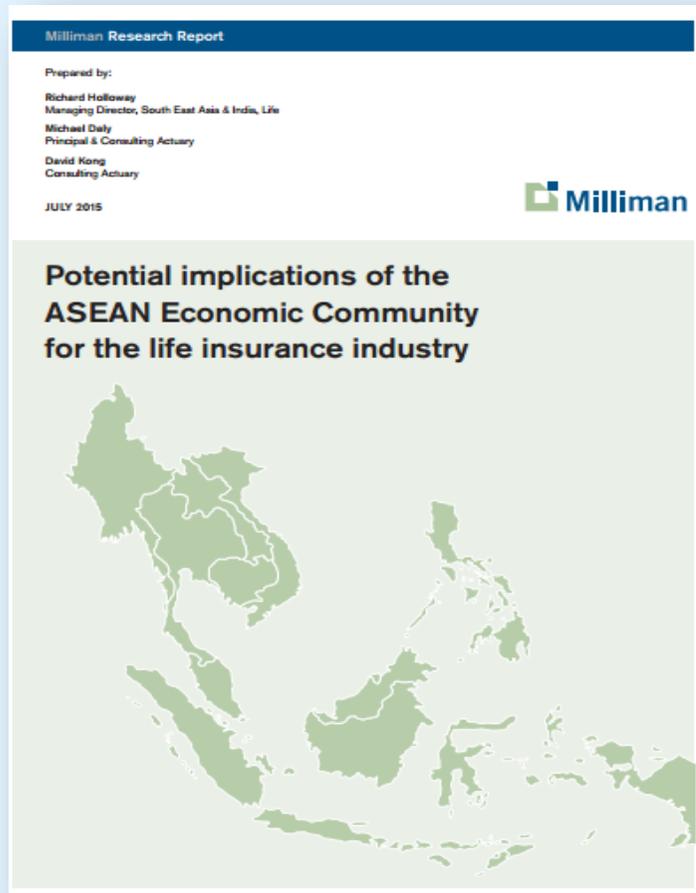
**Reducing
operational
surprises and
losses**

**Seizing
opportunities**

**Managing multiple
and cross-
enterprise risks**

**Improving
deployment of
resources**

Globalisation effect



The Philippines has been ranked #2 in the Milliman ASEAN Liberalisation Index (“MALI”) in 2015.

Rank	Country	Index (0-100)
1	Singapore	70
2	Philippines	58
3	Malaysia	49
4	Indonesia	49
5	Thailand	46
6	Brunei	41
7	Vietnam	40
8	Cambodia	33
9	Laos	33
10	Myanmar	15

Ever growing risks!

Market risk

Reputational risk

Operational risk

Cyber risk

Liquidity risk

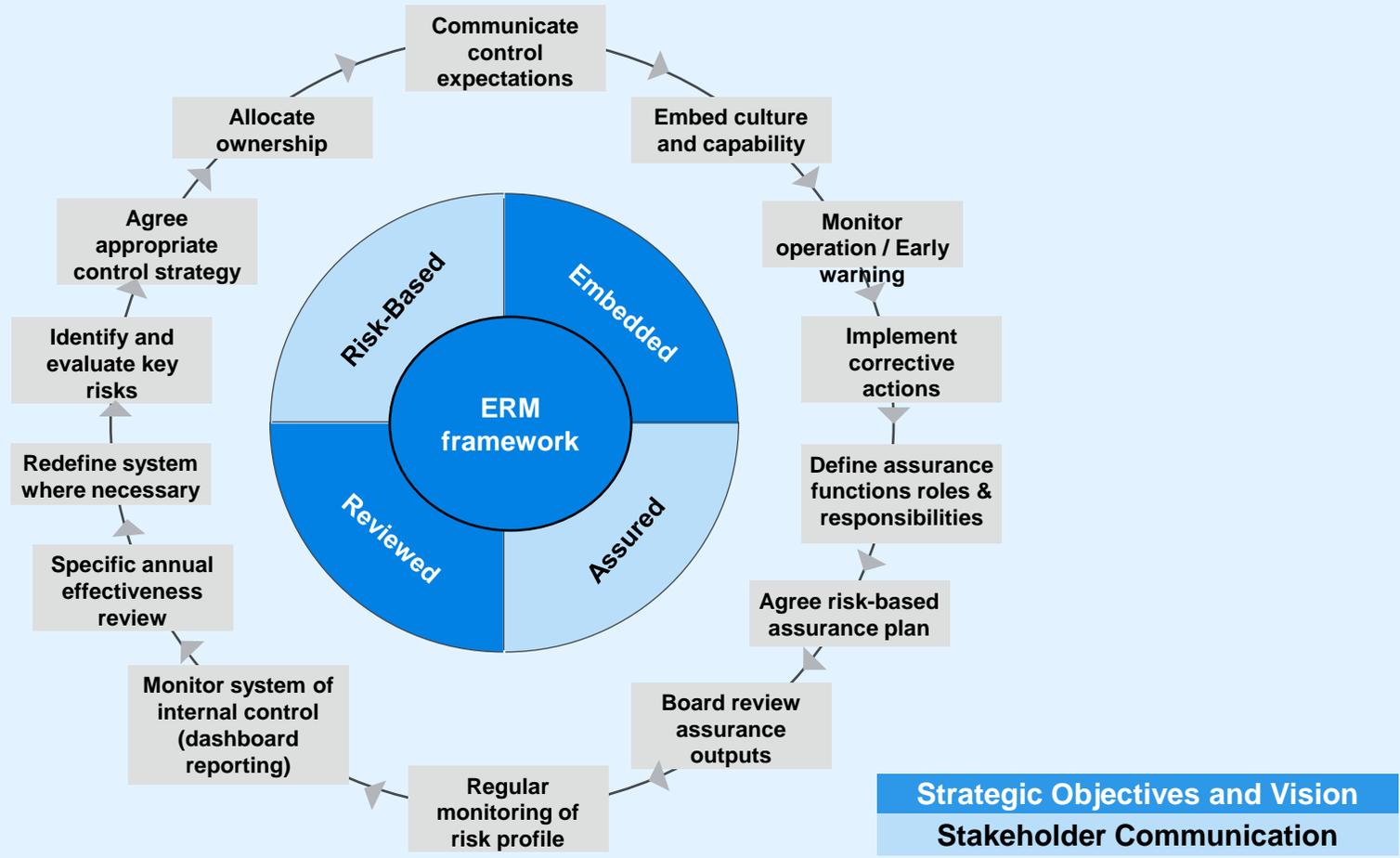
Credit risk

Insurance risk

Strategic/
Business risk

Compliance risk

ERM processes





ERM frameworks around the region

Current ERM regulatory developments in the region

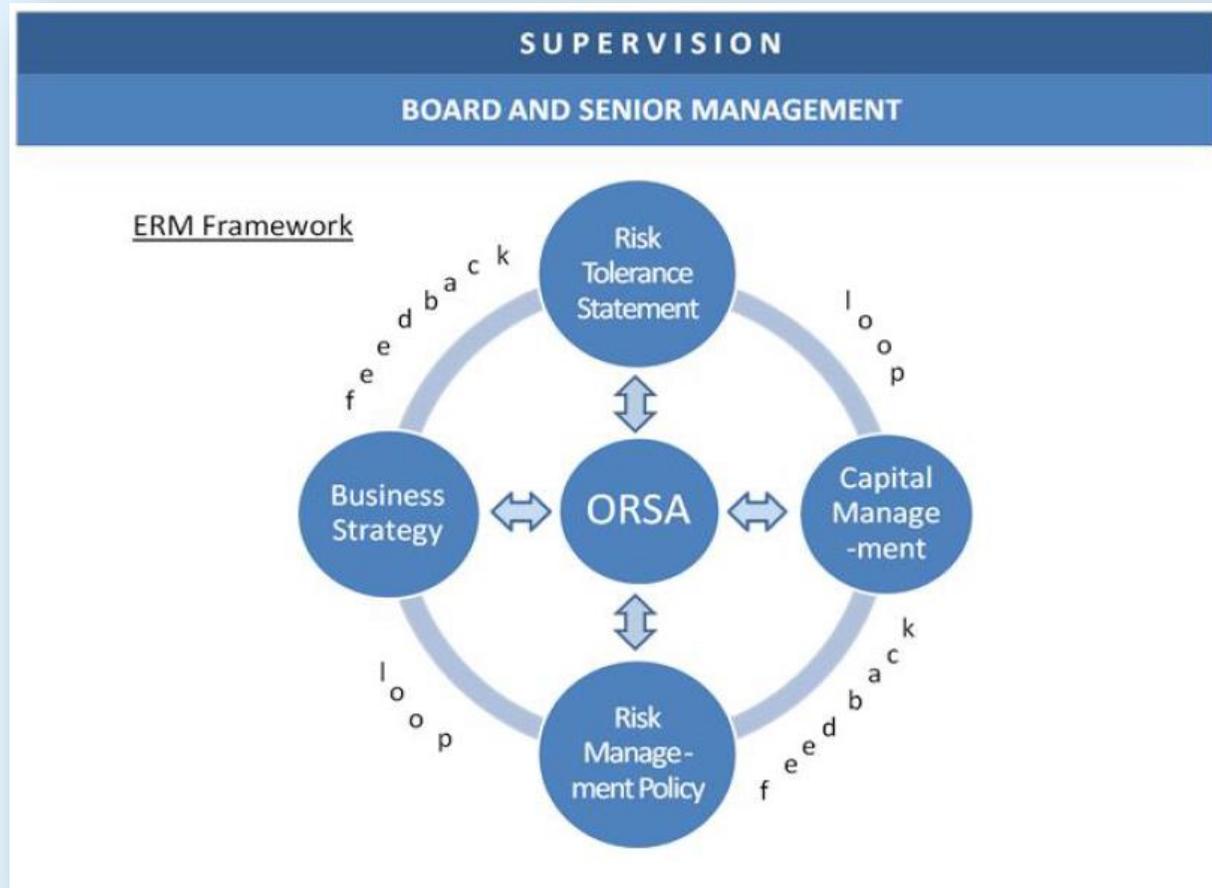


Singapore – Guidelines on ERM



- The Guidelines on ERM for Insurers defines ERM as the "process of identifying, assessing, measuring, monitoring, controlling and mitigating risks in respect of the insurer, the group which it belongs to and, if applicable the group which it is in control of."
- It involves the self-assessment of all reasonably foreseeable and relevant material risks that an insurer faces, and their inter-relationships, providing a link between ongoing operational management of risk and longer-term business goals and strategies.
- Insurers are required to submit an annual Own Risk and Solvency Assessment (ORSA) report to the regulator, to assess the adequacy of its risk management and solvency position.

Singapore – Guidelines on ERM



Singapore – Guidelines on ERM

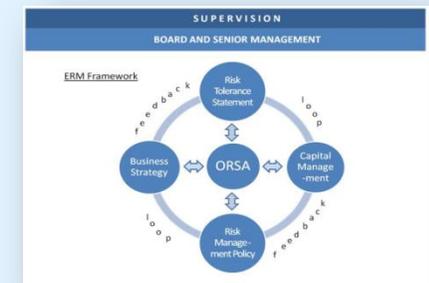


Risk identification & measurement

- All foreseeable risk, including insurance, market, credit, operational, liquidity, legal, reputation, group risks etc.
- Regularly monitor and report to senior management risk levels and key leading indicators;
- Also interrelationship between risks

Risk management policy

- Set up a risk management policy covering management of risk (underwriting, investment etc.), risk retention strategies (reinsurance, use of derivatives, diversification, ALM), risk tolerance limits, process for monitoring risk, relate to corporate objectives



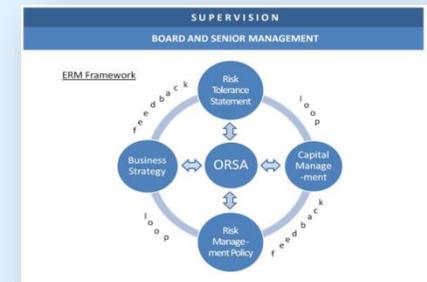
Singapore – Guidelines on ERM



Risk tolerance statement

Risk responsiveness and feedback loop

- Establish and maintain a risk tolerance statement which defines quantitative and qualitative risk tolerance limits, accounts all risk, and interrelationships, to use in setting business plan, clearly document for daily business management
- Effective system put in place to identify/monitor (potential) breaches of risk tolerance limits,
- Able to have good feedback loop, good/timely info about changes in risk profile of group



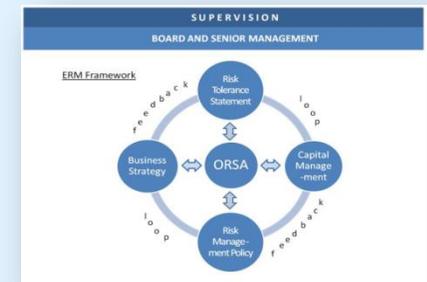
Singapore – Guidelines on ERM



ORSA

Group's ERM framework

- Performed annually
 - Economic & Regulatory Capital – determines overall financial resources required to manage business given risk tolerance/business plans and while meeting regulatory requirements, may or may not calculate EC, may use internal model, assess quality/adequacy of capital resources
 - Continuity Analysis and Stress Testing – projection of future financial position, Stress Testing, Reverse Stress Testing (stress-to-failure scenarios), focusing on capital adequacy position, cash flow position
-
- Could rely on Group's ERM framework as long as fulfils the mandatory requirements in MAS126



Malaysia: Risk Governance



- The Risk Governance policy document sets out the key "principles of sound corporate governance to the assessment and management of risks to ensure that risk-taking activities are aligned with an institution's capacity to absorb losses and its long-term viability".
 - Board must approve insurer's overall risk strategy, including the risk appetite and oversee its implementation
 - Risk appetite to address major risk, risk tolerance levels
 - Considers all risk, including non-quantifiable ones
 - Establishes a risk management function
 - Risk management framework - enables identification, measurement and continuous monitoring of all relevant risk, effective communication
 - Sets up CRO role, or its equivalent
- Should also be read jointly with other documents, including the guidelines on Corporate Governance, Stress Testing and Internal Capital Adequacy Assessment Process (ICAAP), which together form the overall ERM framework.

Malaysia: ICAAP framework



- Overall process by which an insurer ensures adequate capital to meet the capital requirement on an ongoing basis.

Reflects the Company's own risk profile and risk management practices which is set by using stress testing

A capital management plan that takes into account the strategic business direction and the changing business environment

Processes that monitor and ensure the maintenance at all times of an appropriate level of capital which is appropriate with the Company's risk profile.

Malaysia: ICAAP framework



**BOD and senior
management oversight**

**Comprehensive risk
assessment**

**Individual Target Capital
Level (ITCL)**

Stress testing

**Sound capital
management**

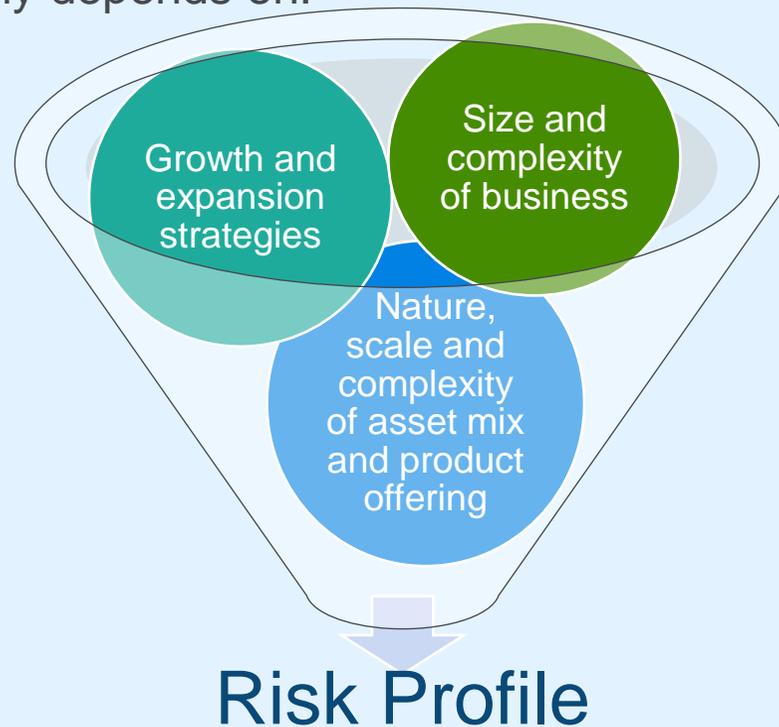
**Monitoring, reporting and
review of ICAAP**

Malaysia: ICAAP framework

Comprehensive risk assessment



- Assessment of the risk profile must take into account all the material risks from the Company's business and operating environment.
- Risk profile of a company depends on:



Malaysia: ICAAP framework

Comprehensive risk assessment



- Risks that are not specifically listed in the RBC framework such as:



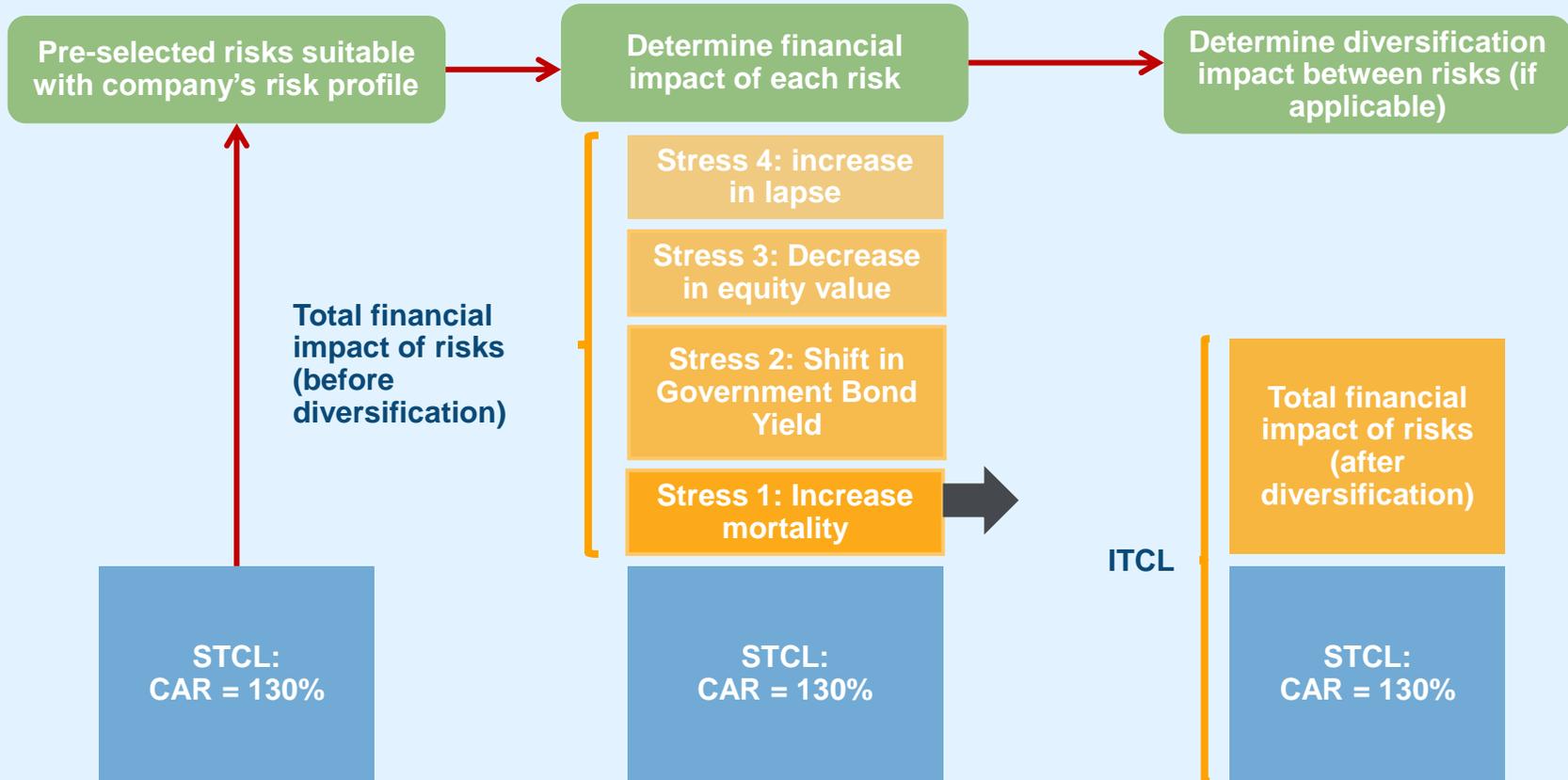
Malaysia: ICAAP framework

Comprehensive risk assessment



Malaysia: ICAAP framework

Individual Target Capital Level (ITCL)



Indonesia: Risk-based supervision



- Regulation No.10/POJK.05/2014 requires all non-bank financial institutions (“NBFI”), which includes insurance companies, to perform self risk assessment against a set of pre-defined risk categories.



Objectives

- To understand the inherent risks of NBFI’s.
- Enhance the supervisory process of NBFI’s.
- Moving from ‘compliance-based’ supervision to ‘risk-based’ supervision.

Indonesia: Risk-based supervision



- The risk categories stipulated in the regulation include:



- According to the guidelines, except for Management and Governance risks, all other risks should be considered from two perspectives below:



Indonesia: Risk-based supervision



- Each company is required to assign numerical rating from 0 to 4 according to its assessment of the risk levels in the organisation based on the following table:

Risk Rating	Risk Level
$0 < x \leq 1$	Low
$1 < x \leq 1.5$	Medium Low
$1.5 < x \leq 2$	Medium High
$2 < x \leq 3$	High
$3 < x \leq 4$	Very High

- Aggregation of each risk category is then performed using prescribed risk weightings.

Indonesia: Risk-based supervision



Management risk

Risk of management failure in achieving the organisation's objectives as a result of a failure in preserving a team of managers who are competent and act with integrity.

Appointment and dismissal

Composition and proportion

Competency and integrity

Leadership

Governance risk

Potential failure in implementing good governance practices across the organisation.

Governance guidelines

Transparency

Accountability

Responsibility

Independence

Fairness and equality

Risk management

Indonesia: Risk-based supervision



Operational risk

Potential failure in fulfilling commitments to policyholders as a result of the failure of internal process, human error, IT systems, etc.

Inherent risk

- Complexity of organisation – organisational structure, human resources, corporate actions
- IT and systems
- Fraud and legal issues
- Disruption to company's business

Management & Control

- Policies and procedures
- Administrative activities
- Management of information systems and technology
- Management of human resources
- Management of third party service providers

Asset & liability risks

Potential failure in management of assets and liabilities

Inherent risk

- Asset management
- Liability management
- Mismatch of assets and liabilities

Management & Control

- Awareness among directors/management
- Management of asset and liability risks
- Management of investment risks
- Controls in asset valuation

Indonesia: Risk-based supervision



Potential failure in meeting policyholder liabilities due to inadequate underwriting, pricing, reinsurance and/or claims management processes.



Inherent risk

- Significance of insurance risk to the overall business
- Product mix and types of benefits
- Persistency, mortality, morbidity
- Structure of reinsurance in place

Management & Control

- Management's understanding of insurance risk and monitoring of insurance risk
- Product design
- Pricing
- Underwriting
- Liability valuation
- Reinsurance
- Claims
- Product distribution
- Independent review

Indonesia: Risk-based supervision



Strategy risk

Potential failure in fulfilling policyholder liabilities as a result of failure in planning, setting and implementation of strategy, inappropriate decision making and/or the organisation being less responsive to external changes.

Inherent risk

- Appropriateness / suitability of strategy according to the business environment conditions
- Strategic positioning of organisation

Management & Control

- Planning and adopting of strategy
- Implementation of the strategic plan

Capital risk

- Capital adequacy
- Source of additional capital



Implementation of ERM

Practical considerations of ERM implementation

Strong board sponsorship and commitment

- Strong involvement/commitment from the BoD and senior management of the company
- Clear and aligned priorities

Need for culture change

- Paradigm shift
- Enterprise-wide approach
- Early involvement with right people

Alignment of Incentives

- Buy-in from all levels. Early involvement
- Adequate and aligned incentive schemes.
- Small incremental milestones can be useful

Education and Training

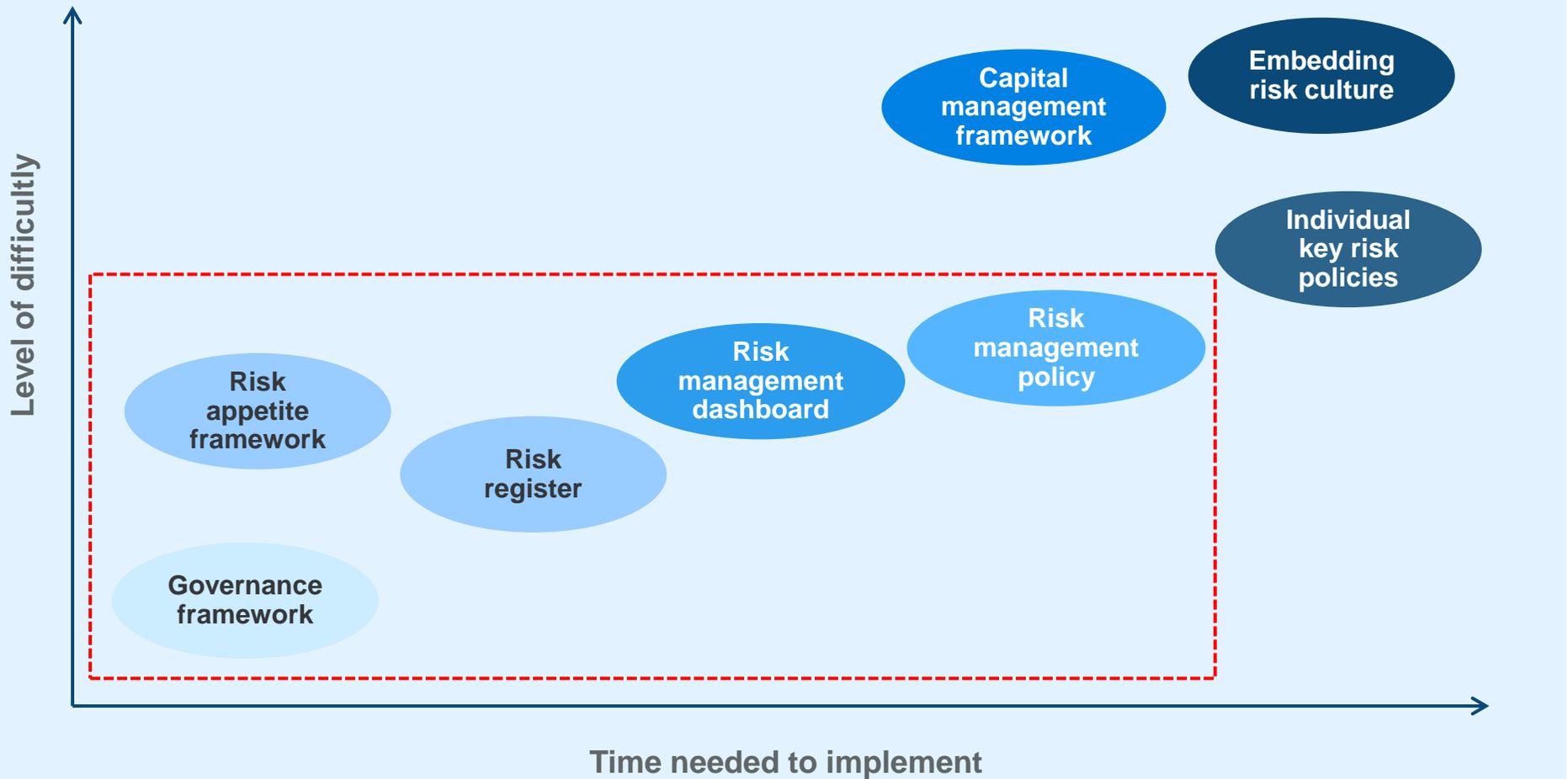
- Education on nature of risk, identification and measurement of risks, building of risk maps, utilisation of risk software and change management etc.
- Help appreciate the importance and benefits of ERM in their work,
- Embedding risk culture within the company.

ERM functions

Key roles of selected functions within ERM framework

Actuarial	Risk management	Compliance	Internal audit
<ul style="list-style-type: none">• Calculate technical provisions and capital requirements.• Express opinion on underwriting policy and reinsurance arrangements.• Contribute towards the quantification and modelling of risks.• Assist in company budgeting and strategic planning	<ul style="list-style-type: none">• Develop, implement and monitor the risk management policy.• Identify and assess existing and emerging risks.• Maintain a company-wide and aggregated view on the risk profile.• Report details on risk exposures and advise the Board with regard to (strategic) risk management matters.	<ul style="list-style-type: none">• Assess the adequacy of the measures to prevent non-compliance.• Report on the undertaking's compliance or non-compliance with existing and potential future laws, regulations and internal guidelines.• Promptly report any major compliance problems.	<ul style="list-style-type: none">• Assess the adequacy and effectiveness of the internal processes and control systems.

ERM roadmap



Closing remarks

- Insurers are facing more risk than ever
- ERM ensures structured, consistent risk mitigation efforts
- Implementation is key
- Involves all stakeholders, paradigm shift required!



Q&A

Contact details:

David Kong FSA, FSAS, FASM
Consulting Actuary
Email: david.kong@milliman.com

Disclaimer

This presentation is intended solely for educational purposes and presents information of a general nature. It is not intended to guide or determine any specific individual situation and persons should consult qualified professionals before taking specific actions. Neither the presenters, nor the presenters' employer, shall have any responsibility or liability to any person or entity with respect to damages alleged to have been caused directly or indirectly by the content of this presentation.