



Agenda

- Introductions
- Operational Risk: Why model?
- Modelling operational risk
 - How difficult can it be?
 - Inputs
 - Turning the handle
 - Outputs
- What can you do next?
- Questions

Operational Risk: Why model?

“The risk of loss arising from inadequate or failed internal processes, personnel or systems, or from external events”

- Around a quarter of life insurers cited this as one of their top 5 risks in their Solvency Capital Requirement under Solvency II.
- Affects all aspects of the insurer’s operation.
- Can be actively managed.
- Potential for capital add on.
- Specific to YOUR company.

Modelling operation risk is not the correct choice for all companies but challenge will still lie in justifying why this is the case.

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Modelling operational risk: how difficult can it be?

Common grumbles from actuaries:

“The risk team gives us the risk assessments and we just plug the numbers in.”

“We don’t have the skills in our team.”

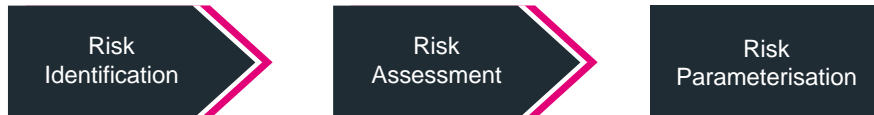
“It’s just guess work anyway.”

“Actuaries don’t need to be involved with operational risk.”

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Modelling operational risk: Inputs



Key Challenges:

- Explanation, explanation, explanation
- Anchoring to past events
- Finding the right people in your business
- Lack of data
- Linking inputs with outputs

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Modelling operational risk: More than just turning the handle

“And here’s where the actuaries come in...”

Key challenges:

- Bridging the understanding between inputs and outputs
- Types of models: scenarios, loss distributions or hybrid?
- Model governance and controls
- Setting correlations
- Analysis of results
- Effect of risk mitigation and controls
- Integration within internal model

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Operational risk: What do you do with the outputs?

Key challenges:

- Confidence of what the capital figure means.
- Allocation of capital to different business areas.
- Understanding your risk appetite.
- Managing operational risk, demonstrating use test.

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What can you do next – partnering with your business to better manage your operational risk

Easy

- Read through your operational risk documentation – does your data and expert judgement align?
- Talk to your operational risk team – how can you get more involved with the process?

Medium

- Make your model an inherent part of the process – are some risks highly sensitive? Is the model aligned with your overall capital e.g. correlations?
- Implement adequate control and governance on your operational risk model output – is this risk in line with others?

Difficult

- Actively manage your operational risk capital e.g. Is operational risk taken into account when implementing large IT projects?
- Clearly articulate what your target operational risk capital is and how you will get there

Or is it?

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Operational risk: Nirvana



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Operational risk: Nirvana

“And they lived happily ever after.....”



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Thank you



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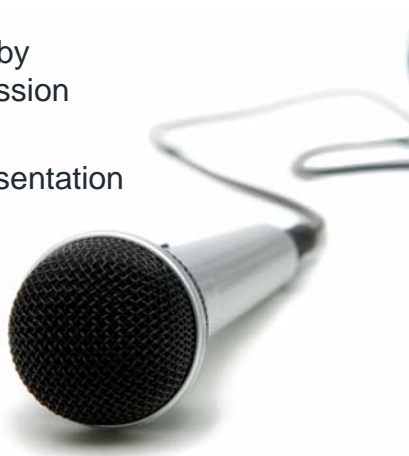
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Questions or comments?

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