



Institute
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Internal Models Approval

How I Got My IMAP Submitted

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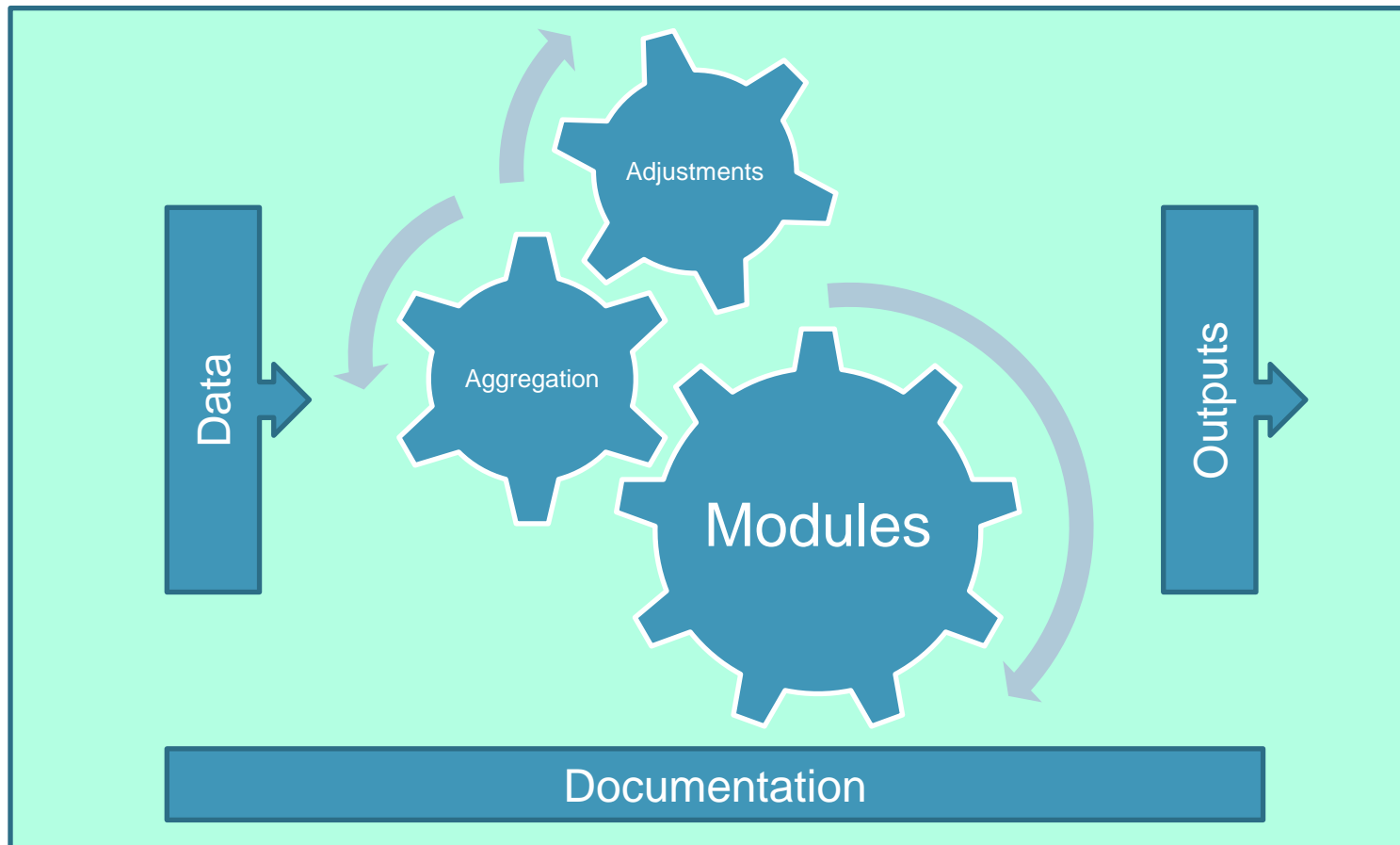


How did I get my IMAP submitted?



Internal Model Application

- What does the Internal Model cover?



Internal Model Application

Internal model
documentation



- Methodology documents
- Calibration documents
- Data source documents

Internal Model Application

Internal model
documentation



Internal model
Results



Internal Model Application

Internal model
documentation



Validation
reports



Internal model
Results



Internal Model Application

- Documentation
- Internal Controls
- Data
- IM Governance
- Risk Policy
- Reporting and Disclosure
- Various sub-risk policies
- Expert Judgement
- Use Test
- Validation
- P&L Attribution
- Outsourcing

Internal model
documentation



Validation
reports



Internal model
Results



Governance
documents



Risk policies



Framework
policies



Procedures



Internal Model Application

- ORSA
- Expert Judgement
- Change plans
- Assumption summaries
- Data feeds
- Risk Registers
- Risk Appetite
- Suitability dashboards
- Internal audit reports
- Reinsurance treaties
- AFH reports
- Other Applications

Internal model
documentation



Internal model
Results



Validation
reports



Evidencing documents

Calibration



Use Test



Governance
processes



Other



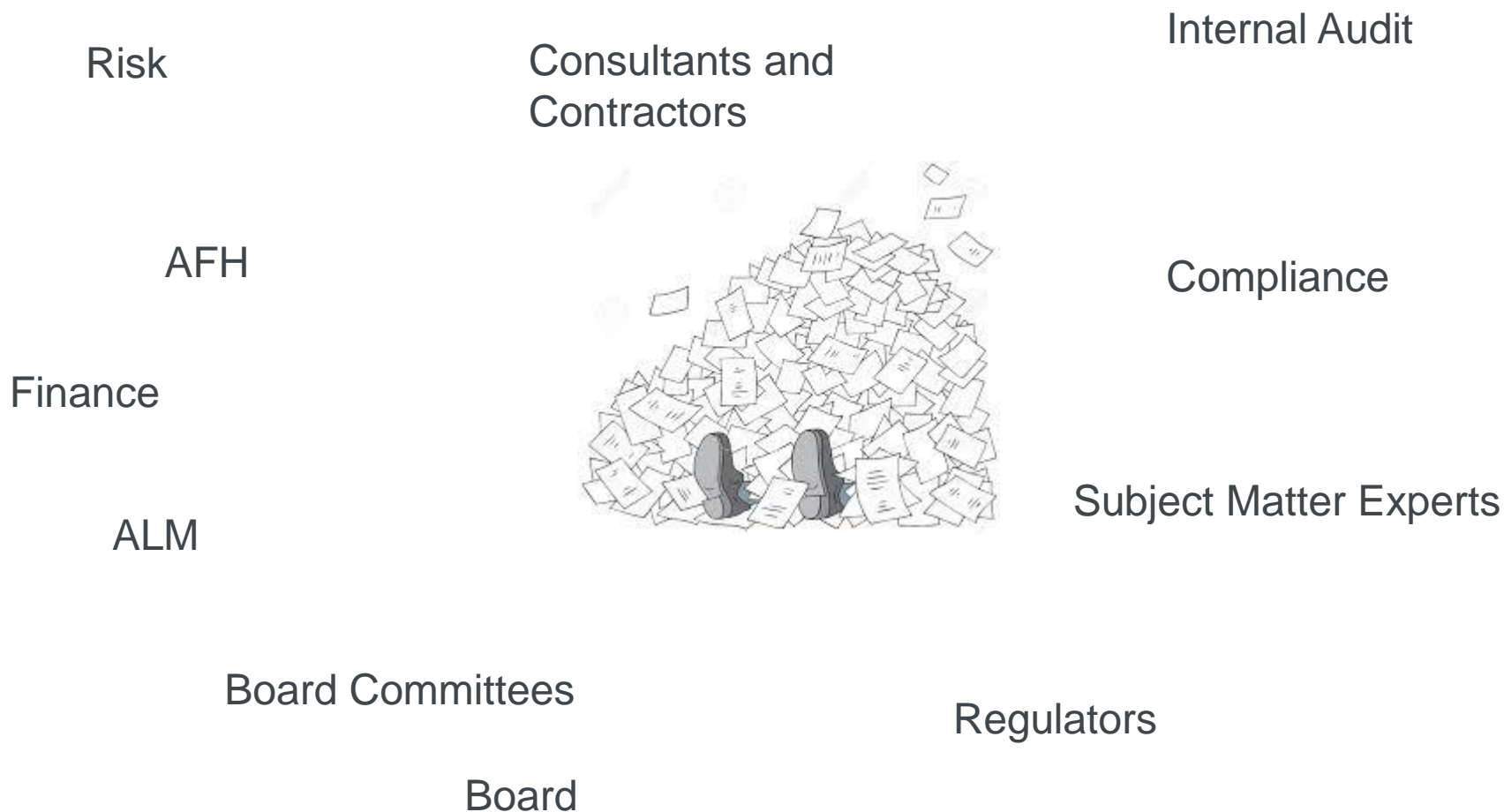
Governance
documents



Procedures



Internal Model Application



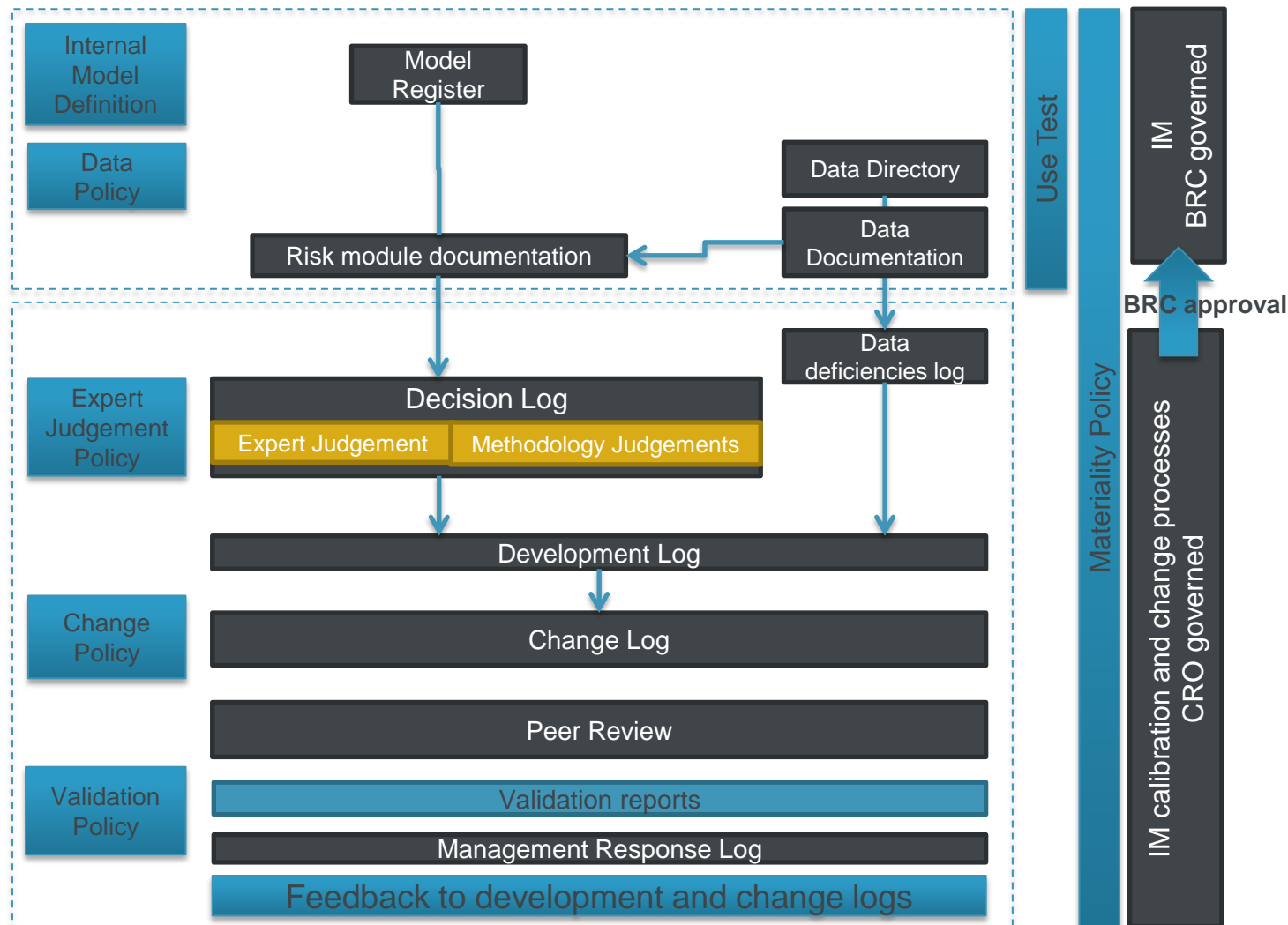
Internal Model Application

- What are we asking for in the application?
 - Design and calibration of the calculation kernel
 - Sufficiency of documentation
 - Appropriateness of data inputs
 - Appropriateness of model outputs

Trust!

- How can we demonstrate to the regulator that we can be trusted to keep the model appropriate?
 - Maintain the strength of the calibrations
 - Ensure a fit to changes in risk profile
 - Inform the regulator of changes to what they have approved
- Robust and appropriate system of governance

Internal Model Governance



Implementation

- Developing and documenting an Internal Model is only the first step
- Implementing and governing the model going forward is the next challenge

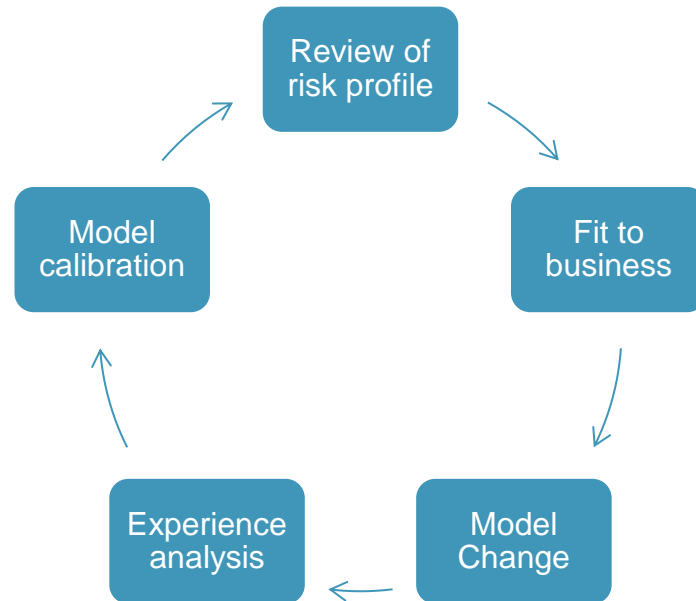
What does ownership mean and entail?

- Differences in interpretation of 3 lines of defence leads to different governance models
- Regulations require that IM is owned by CRO (“line 2”)
 - Requires calibration and ongoing development governed from line 2?
- Alternative is that model is run and developed by “line 1”
 - How can CRO sign off on methodology changes without having in-depth and up-to-date knowledge of the model?
- Effective Risk MI and quality of interaction between lines 1 and 2 become essential to monitor appropriateness of the model and ensure risk coverage
 - Where Risk MI and interaction is limited, rapidly emerging risks may lead to corporate failure

Validation

- Ongoing validation becomes a key part of the regular governance of the model

- Is the model fit for the business, has our risk profile changed?
- Is the model still appropriate for how it is used in the business (“use test”)?
- Has anything changed in our experience or in external data
- What changes are needed either to methodology or calibration



- What does independence mean?
 - Functionally independent from development? Independent from users?
 - Calibration of the model should be independent from users?

Summary

- IMAP is only the start
- Demonstrating an effective governance framework is key for approval and on going appropriateness
- Firms need to consider what is meant by ownership and how the CRO can effectively discharge his/her duties
- Differing interpretations of the roles of lines 1 and 2 can lead to incomplete internal model coverage and poor governance
 - Where Risk MI and interaction is limited, rapidly emerging risks may lead to corporate failure
- Validation must be part of the on-going governance rather than a multi-million pound annual commitment



Questions



Comments

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