



Institute
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Internal Models Approval

How I Got My IMAP Submitted

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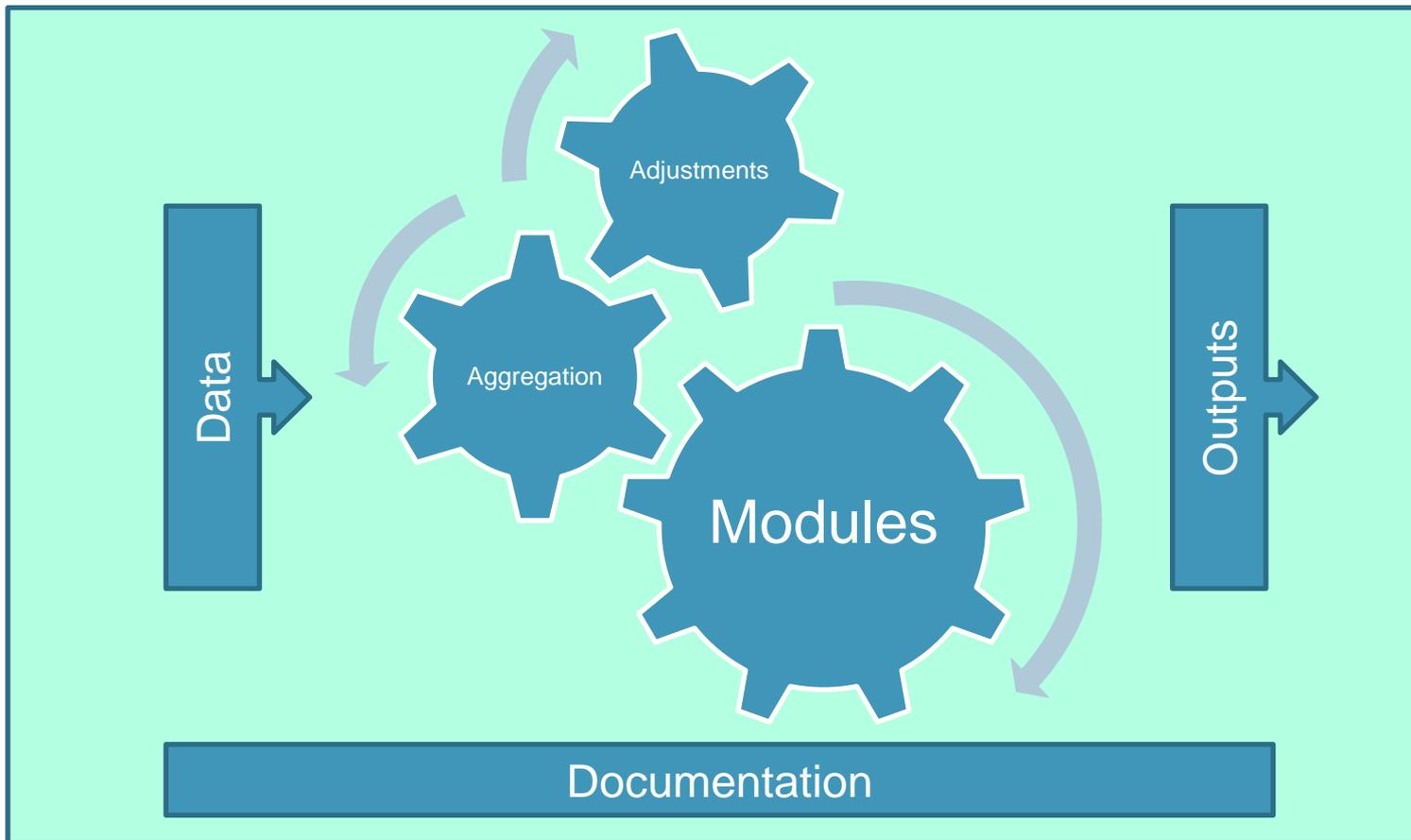


How did I get my IMAP submitted?



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

Internal model documentation



Validation reports



Internal model Results



Governance documents



Risk policies



Framework policies



Procedures

- 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 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



Governance documents



Procedures



Evidencing documents

Calibration



Use Test



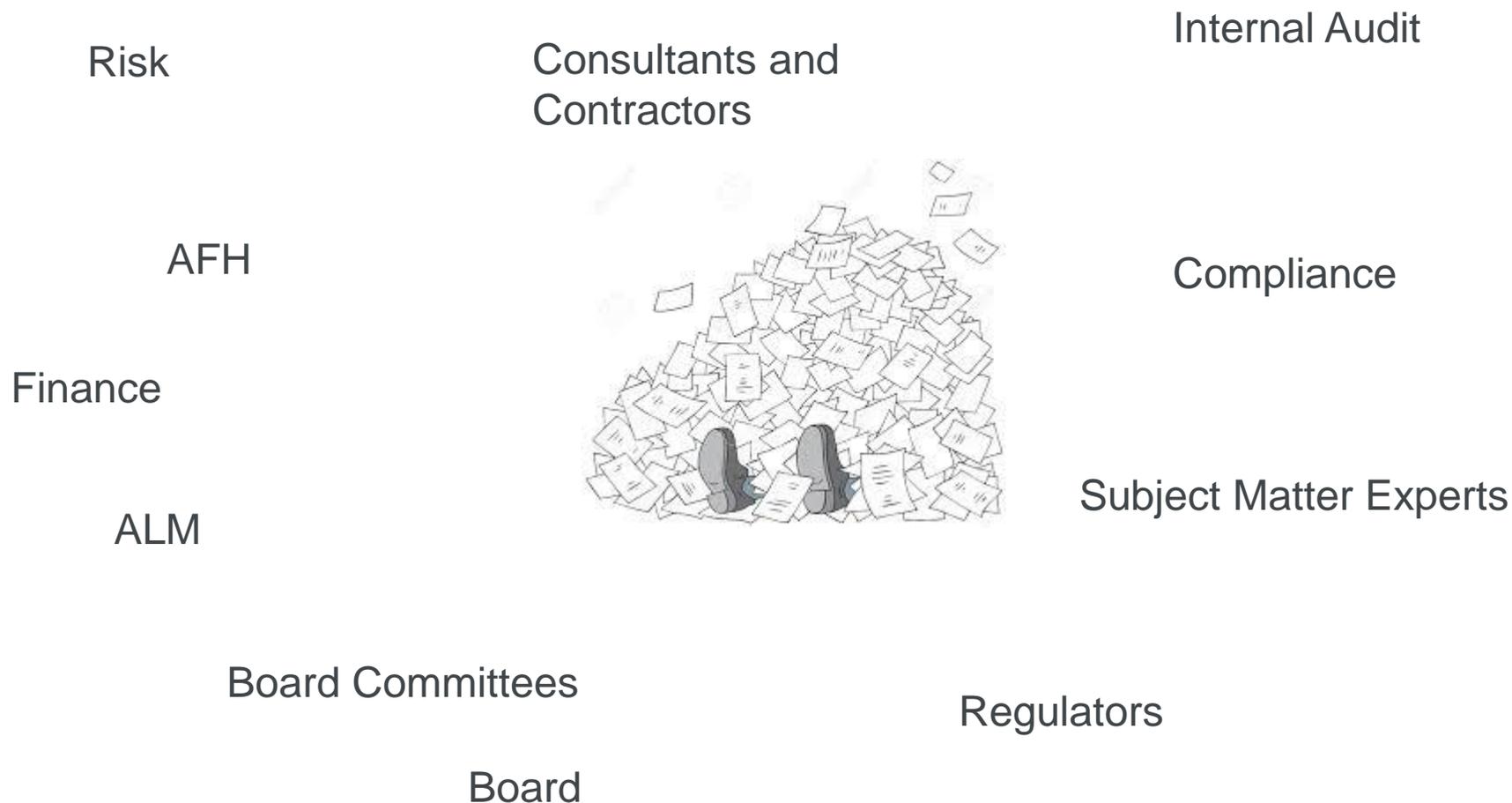
Governance processes



Other



Internal Model Application



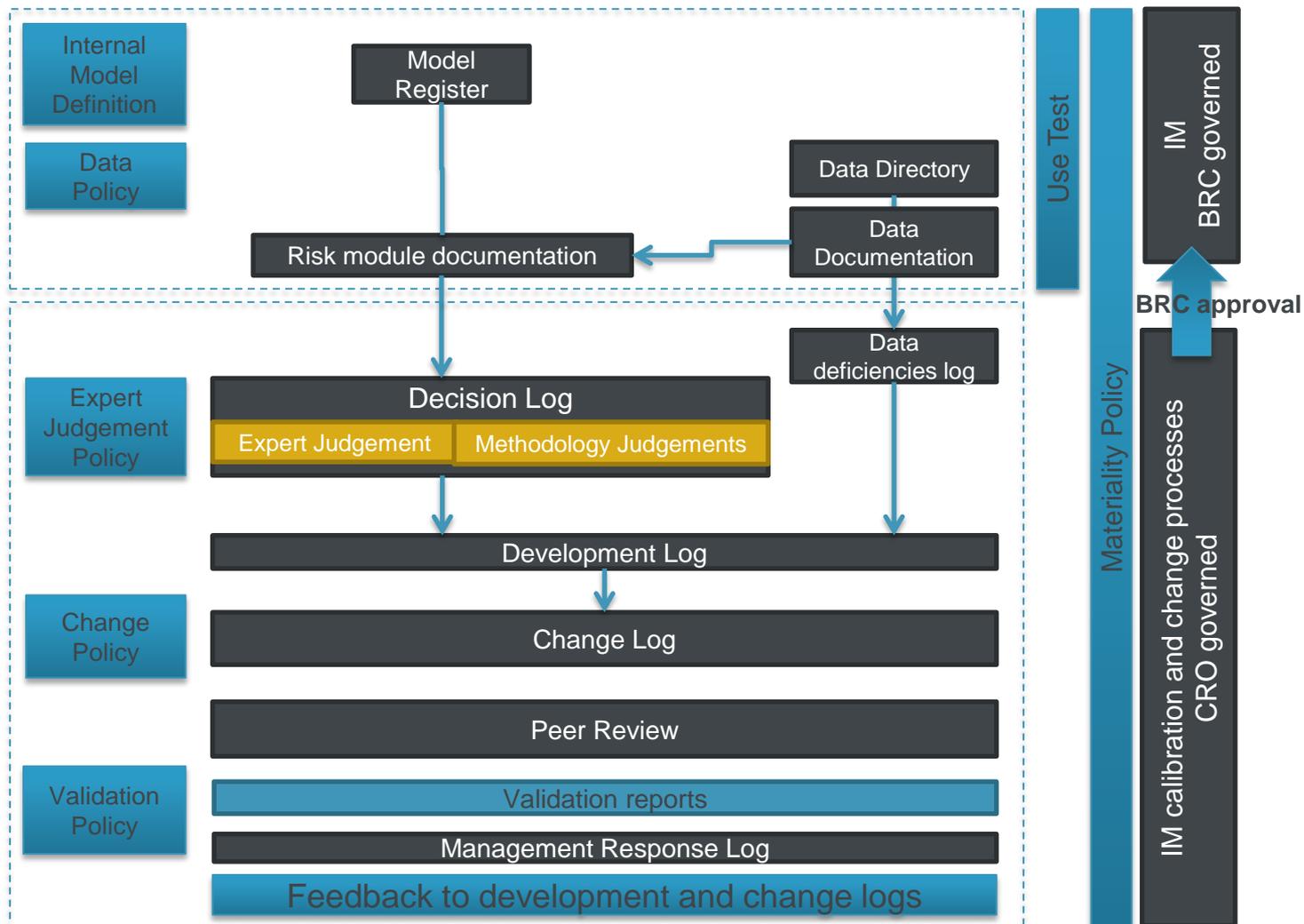
Internal Model Application

- 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

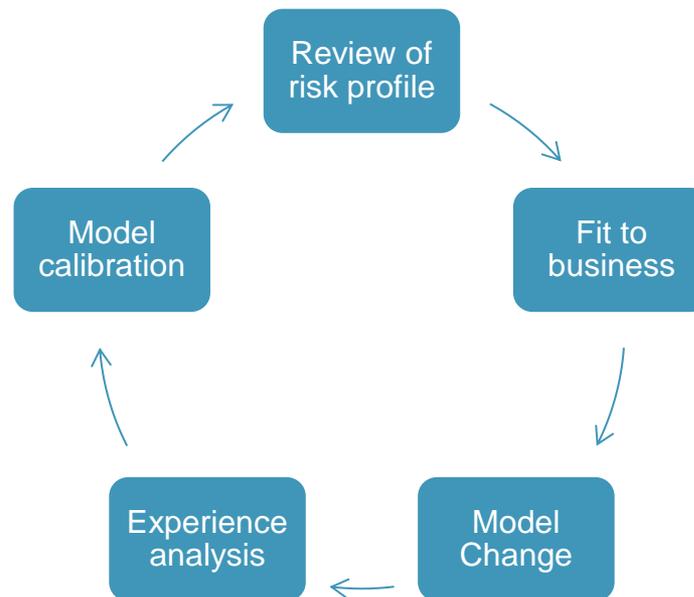
What does ownership mean and entail?

- 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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