



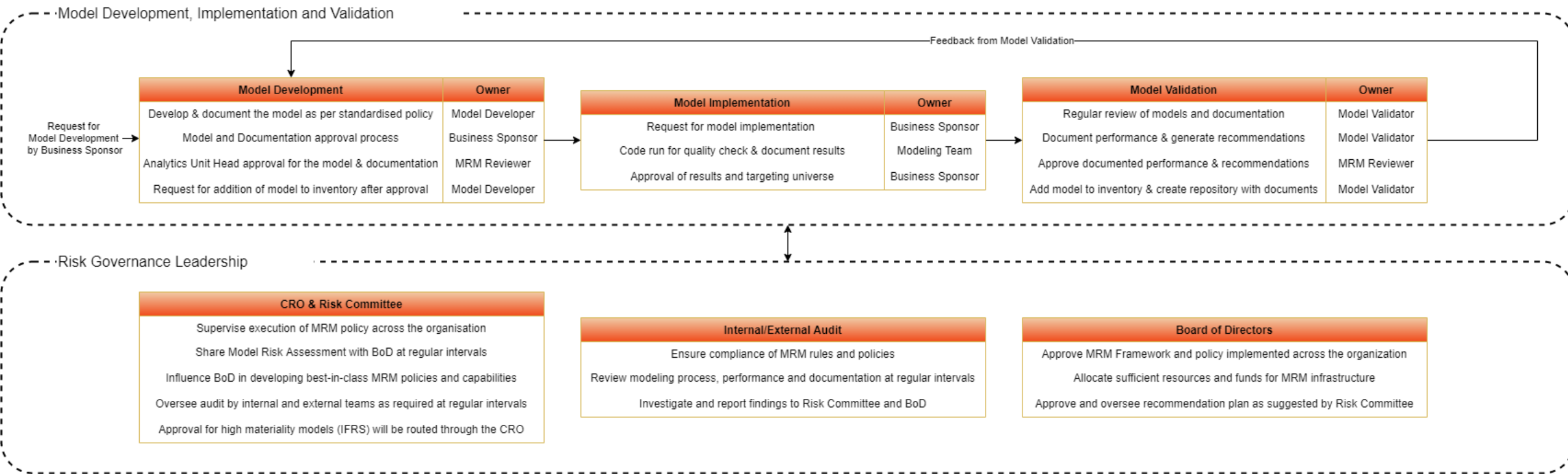
# incedo

## Model Risk Management

*Checklist*



# WORKFLOW WITH RESPONSIBILITIES



# ORGANISATION & GOVERNANCE

## OWNER

Risk Management Committee

- Supervise and execute the defined MRM policy defined by the Board
- Share the findings on high impact/high materiality models, validation results and create a mitigation plan
- Influence the board on creating best in class compliance procedures and MRM capabilities
- Document overall model risk assessment for the portfolio and share it with the board for approval
- Consider adverse and ongoing external environment into the evolving strategy

## APPROVER

Senior Management & BoD

- Approve defined MRM framework and policy and ensure implementation
- Approve the Model Risk Appetite Statement for the bank
- Allocate sufficient resources and funds for MRM infrastructure to ensure regulatory compliance
- Drive actions based on audit results across the organisation
- Review the overall MRM framework annually
- Review the model reports on a quarterly basis for high impact models and on a half yearly basis for low impact models

## REVIEWER

Internal Audit/External Audit

- Review the MRM framework and policy for completeness and conceptual soundness
- Audit the strategy and documentation on an annual basis and on a more regular basis during adverse external situations, for example, COVID
- Document and present the gaps to the senior management for approval

# MODEL DEVELOPMENT

## OWNER

Model Developer

- ☐ Develop model end-to-end based on the established standardised procedure
- ☐ Document model building process in a standardised format:
  - ☐ Model Objective
  - ☐ Modelling Framework
  - ☐ Data Quality Check
  - ☐ Modelling Process
  - ☐ Assumptions and limitations
- ☐ Ensure the model satisfies minimum performance criteria
- ☐ Verify that the model is aligned with the implementation strategy

## APPROVER

Business Sponsor

- ☐ Ensure the model is in line with the business expectations
- ☐ Verify that the model is aligned with the implementation strategy and can be integrated with the existing IT systems

## REVIEWER

Analytics Unit Head/MRM Reviewer

- ☐ Review the model performance, modeling process, conceptual soundness, etc of the model and flag any potential concerns or issues
- ☐ Ensure the model is in line with the business expectations

# MODEL IMPLEMENTATION

## OWNER

Modelling Team

- ☐ Check the quality of the code in terms of business requirements to ensure error-free implementation
- ☐ Code run by modelling team with results in terms of eligible base based on model shared with business sponsor over email
- ☐ Make changes in the modelling pipeline/code based on ad hoc requests from business sponsor/user

## APPROVER

Business Sponsor/User

- ☐ Send request for implementation of model to the Model Ops Team
- ☐ Analyse the implementation run results and approve if the performance satisfies minimum defined criteria
- ☐ Suggest any changes based on any changes in eligibility criteria or changes in campaign strategy etc

## REVIEWER

Business Sponsor/User

- ☐ Ensure the correctness of the implementation logic, infrastructure, targeting base, etc

# MODEL VALIDATION

## OWNER

Model Validator

- ☐ Document the validation performance on the following components:
  - ☐ Statistical Soundness
  - ☐ Conceptual Soundness
  - ☐ Ongoing Monitoring
  - ☐ Business Impact Analysis
- ☐ Analyse the performance against industry or internally defined benchmarks, assign a RAG status and recommendations on consequent model usage
- ☐ Review the model documentation in case of high impact models

## RECOMMENDATION

MRM Reviewer/Analytics Unit Head

- ☐ Ensure the model is in line with the provided documentation and the methodology, usage and implementation of the model are incremental for business
- ☐ Approve the documented performance
- ☐ Analyse the results to gain insights and create a mitigation plan to strategize for the future of the model

## IMPLEMENTATION

Model Developer and Business Sponsor

- ☐ Review the suggested changes to the model and call out any challenges
- ☐ Make the changes as suitable to the performance and use of the model