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Internal Model Industry Forum IMIF

The Validation Cycle and on-going improvement

Rob Merry and Barney Wanstall



IRM and IMIF



Leading the risk profession



IRM is the leading professional body for risk management. It is an independent, not-for-profit organisation that champions excellence in managing risk to improve organisational performance

IRM has established an industry forum to address the key questions and challenges that insurers face with the use and validation of internal risk models and to work in a collaborative way to develop good practice to ensure that these models add value to the organisation. It has engagement across the industry, including life, non-life and London market insurers and reinsurers, service providers, professional service firms and the Bank of England.



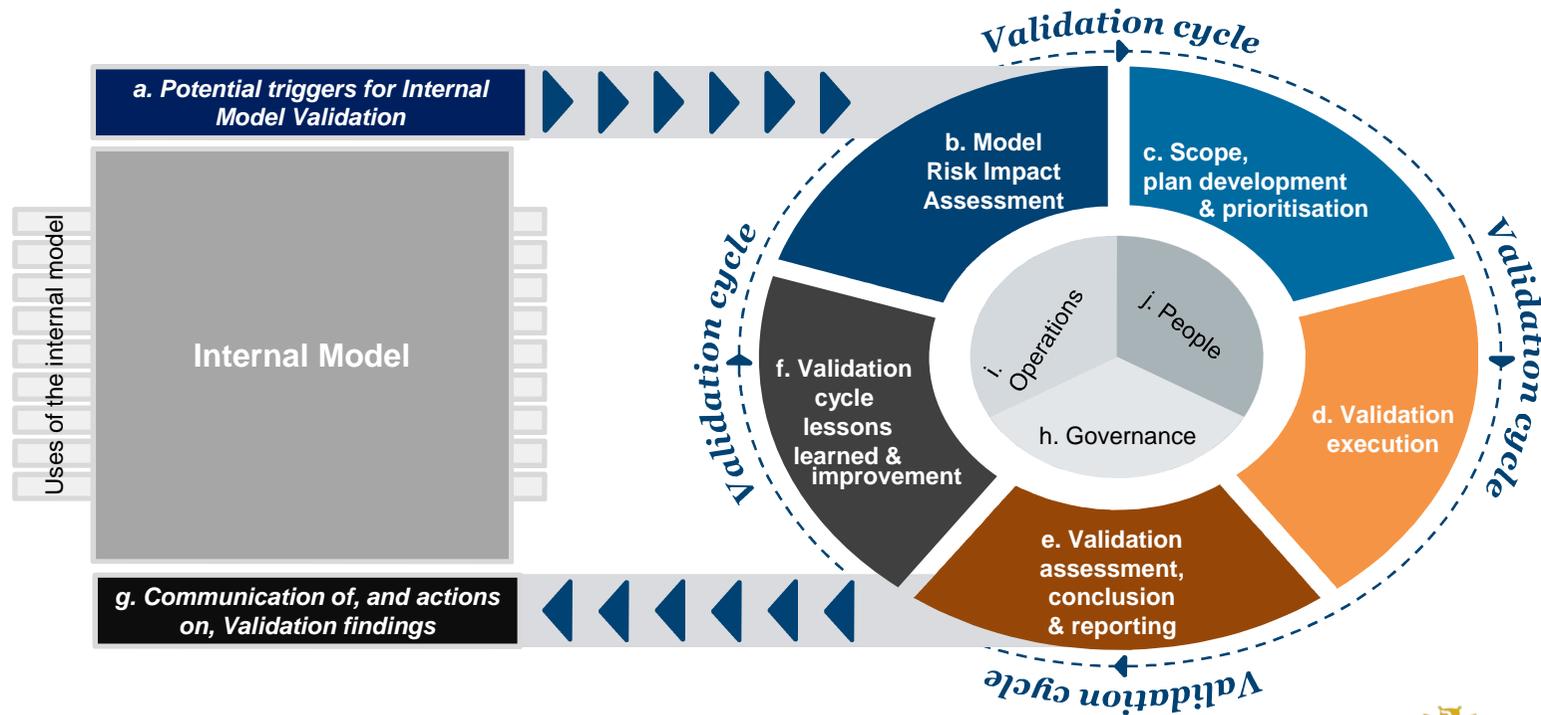
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Validation Cycle and on-going improvement

Purpose	<ul style="list-style-type: none">• Develop an industry-wide best practice Validation Cycle.
Key questions	<ul style="list-style-type: none">• What is the Cycle and who should be involved?• What are the triggers to the Cycle and how should these be prioritised?• What are the outputs of the Cycle for key stakeholders?
Feedback	<ul style="list-style-type: none">• IRM industry experts and PRA (steerco)• Road tests• Industry survey



What is the Validation Cycle?

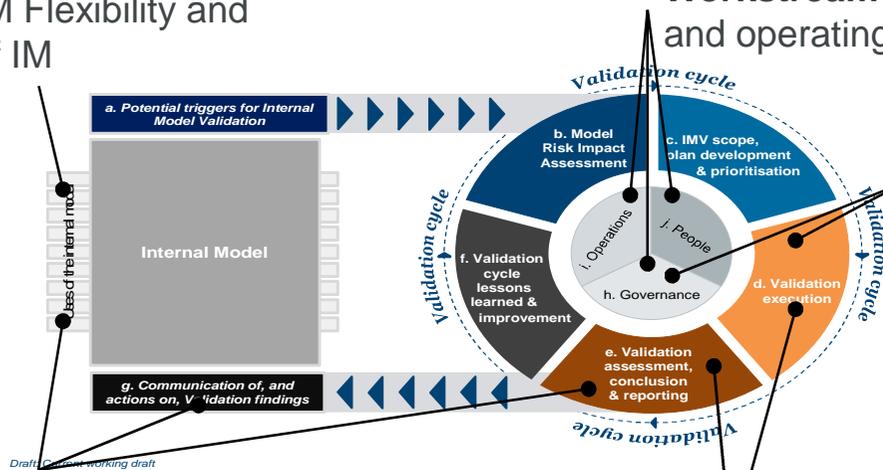


Validation Cycle: Alignment to IMIF workstreams

Workstream D: IM Flexibility and alternative uses of IM

Workstream B: Validation Governance and operating model

Workstream E: Validation tools and Model Change Policy



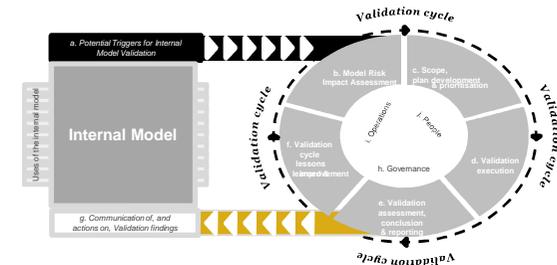
Workstream C: Board’s understanding and challenge of IM and the validation process / Board’s validation MI and reporting

Workstream F: Operational Risk
Workstream G: Dependencies and Diversification



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a. Potential triggers for Internal Model Validation



Key Principles

- **Optimal:** Triggers should give firms effective coverage of both internal and external factors impacting the model.
- **Timely:** The triggers should be timely so validation can take place within the business timeframe for model use.
- **Tailored:** The triggers should be forward looking and tailored to model use.



Benefits for the business

- Model stakeholders preserve their understanding and confidence in the model.
- A continuous feedback loop between model users (e.g. proposition department, risk) and model developers allows users to understand the impact of decisions made.

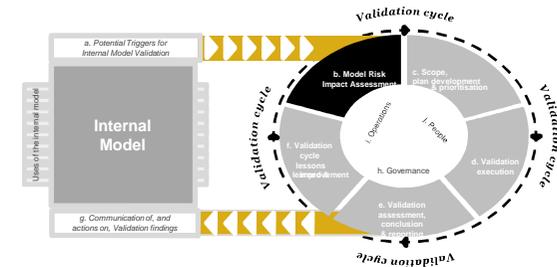


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b. Model Risk Impact Assessment



Key Principles

- **Relevant:** Firms should have a formal mechanism for assessing potential triggers for validation against their internal model risk.
- **Appropriate:** Model risk impact assessment should vary for different uses of the model ensuring models remain fit for purpose. Not all potential triggers result in additional validation.
- **Proportionate:** Assessment should consider proportionality - not all potential triggers result in additional validation.



Benefits for the business

- Validation is carried out only when needed and at the required level of detail.
- Improved understanding on what the model can and cannot do (its limitations).
- Stops firms using the model for purposes it was not designed – thus reducing risk of poor decision making

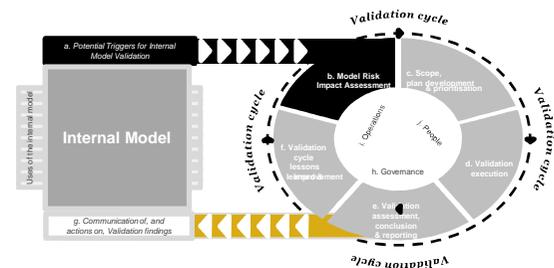


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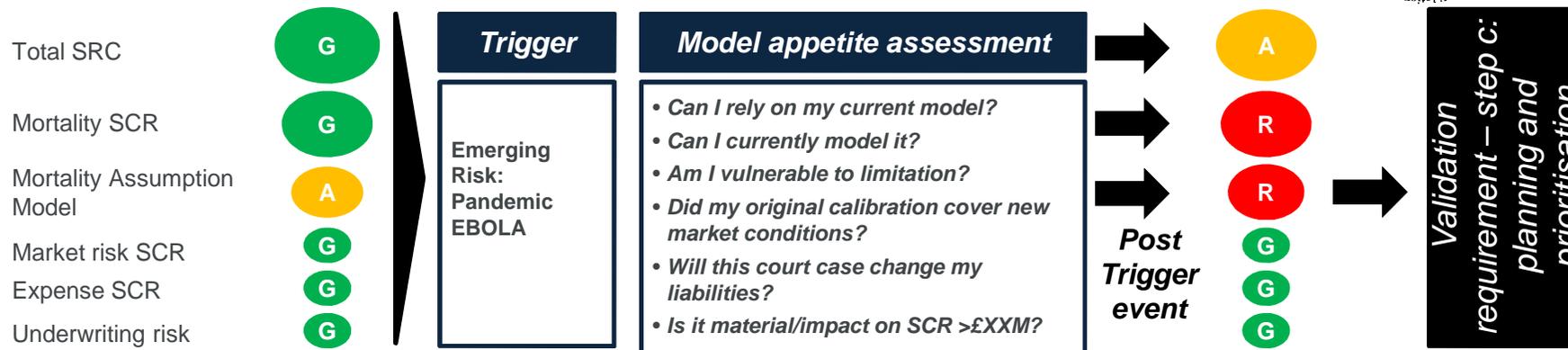


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A worked example of trigger events and model risk impact assessment



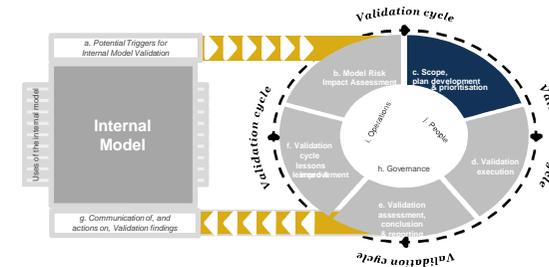
Model constituents (as at last validation)



Model Appetite		
RED	AMBER	GREEN
<ul style="list-style-type: none"> • Board's lack understanding • Aggregated SCR > x+ % SCR • Individual SCR element > x+ % SCR • Remediation work against major validation findings > x month over due date 	<ul style="list-style-type: none"> • Board concerns over model output Aggregated. SCR > x% SCR • Individual SCR element SCR > x% • Remediation work against major validation findings > x month over due date 	<ul style="list-style-type: none"> • Board confident with model output • Aggregated SCR < x % SCR • Individual SCR element SCR > x% • No required significant remediation activity against work major validation findings



c. Scope, plan development & prioritisation



Key Principles

- **Plan:** Firms should develop and maintain an internal model validation scope and plan.
- **Appropriate:** Plans need to reflect materiality, proportionality, business need and the outputs from the trigger assessment. It should include both “top down” and “bottom up” validation.
- **Timely:** plans need to ensure actions are carried out at the right time
- **Contingency:** Validation should include planned variability and unpredictability.



Benefits for the business

- A nimble and efficient internal model validation process that does what is required, as quickly and cheaply as possible.
- It also ensures that validation supports model uses rather than hinders it
- The results of the validation along with the plan demonstrate to external stakeholders that robust internal governance and control processes exist.

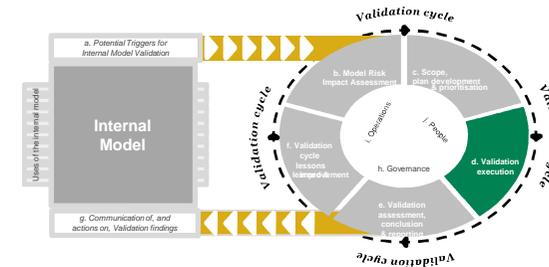


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d. Validation execution



Key Principles

- **Independence:** Validation should be carried out with an independence of mind and encourage free thinking.
- **Correct skills:** Individuals with the risk skills, experience and knowledge are crucial.
- **Improvement:** Firms should expect the validation process to become more efficient over time.



Benefits for the business

- Provides comfort to the Board that the model results are appropriate for use around the business and do not vary significantly from established market practice.
- Validation should become more cost effective over time as the business gets better at the process and targets the validation (core vs additional).

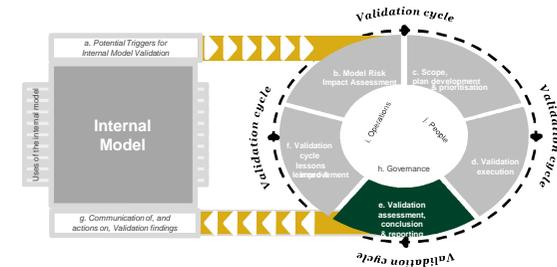


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e. Validation assessment, conclusion & reporting



Key Principles

- **Clear Reports:** Firms need reports that clearly communicate conclusions to stakeholders.
- **Clear Conclusions:** Reports need clear conclusions and an overall fit for purpose rating.
- **Recommendations:** Reports should include recommendations to reduce model weaknesses.
- **Risk Framework:** Validation findings should explicitly link to the firm's risk management framework (including the ORSA) so the risk of using the model are acknowledged.



Benefits for the business

- Provides independent quality assurance over the model and comfort that the model is fit for purpose
- Feeds into model development and better, more informed business decisions.
- Assures external stakeholders that robust internal governance and control processes exist.

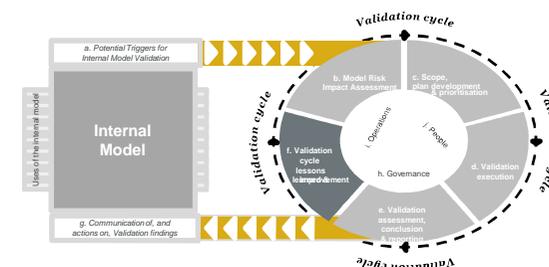


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f. Validation cycle lessons learned and improvement



Key Principles

- **Efficiency:** Validation must become quicker and more embedded so that it becomes an integral part of ensuring the model runs well rather than a one off activity.
- **Embedding:** sufficient on-going validation in the running and development of the model will provide firms with cost effective assurance through the business as usual activities.
- **Fit for purpose:** Firms should continually assess the validation cycle to ensure that it is fit for their business.



Benefits for the business

- A changing and developing validation approach is a powerful evidence of a healthy model rather than a constantly changing model.
- Models need to keep abreast of environmental changes and validation ensures these changes are appropriate.
- Embedding validation in the business as usual cycles gives stakeholders timely assurance when it is needed.

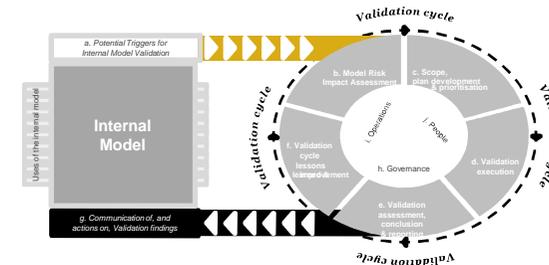


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g. Communication of, and actions on, Validation findings



Key Principles

- **Clarity:** Firms should have a clear communication strategy and plan for the communication of their validation results (how, when and whom).
- **Demand:** There should be a regular cycle of reporting of validation results (push) as well as an on-going firm appetite to request the results of validation (pull).
- **Buy-in:** Appropriate senior input should be provided at various stages of the validation results communication.
- **Management response and actions:** Firms should have a clear process for responding and remediating findings raised by validation activity.



Benefits for the business

- Clear and effective communication of validation findings enables continued efficient improvements in the model and further education of key stakeholders: expanding the firms understanding and confidence of the model and its use; and evidences the validation process for regulatory purposes

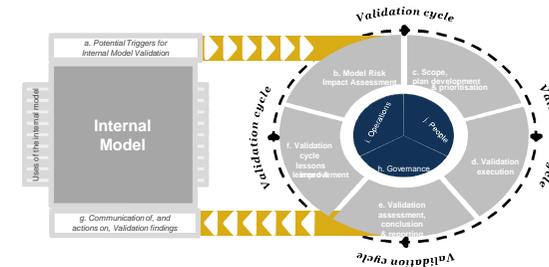


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h. Governance, i. Operations and j. People



Key Principles

- **Undue influence:** Validation governance allows the validators to remain independent and free from undue influence.
- **Skills:** They have access to the required skills, knowledge and experience for the validation cycle.
- **Succession:** There is an appropriate talent management process for IMV.



Benefits for the business

- Ensures on-going challenge, allowing understanding and knowledge to be shared.
- Broader understanding of an internal model and a firm's risk management system.
- Minimises the opportunity for a material failure or oversight in the in the performance of the validation cycle.



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Overarching benefits of the Validation Cycle



Risk Management

- Comfort to the Board that the model results are appropriate for use.
- Better, more informed business decisions.
- Model assurance.
- Independent perspective on robust processes with strong controls.



Understanding

- Facilitates wider business understanding of the model.
- Confidence to use the models.
- Enhancing talent and understanding of risk management.



Efficiency

- Cost / resource usage.
- Clear prioritisation of validation activity.
- A model which improves over time.



The working group



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Questions?



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