



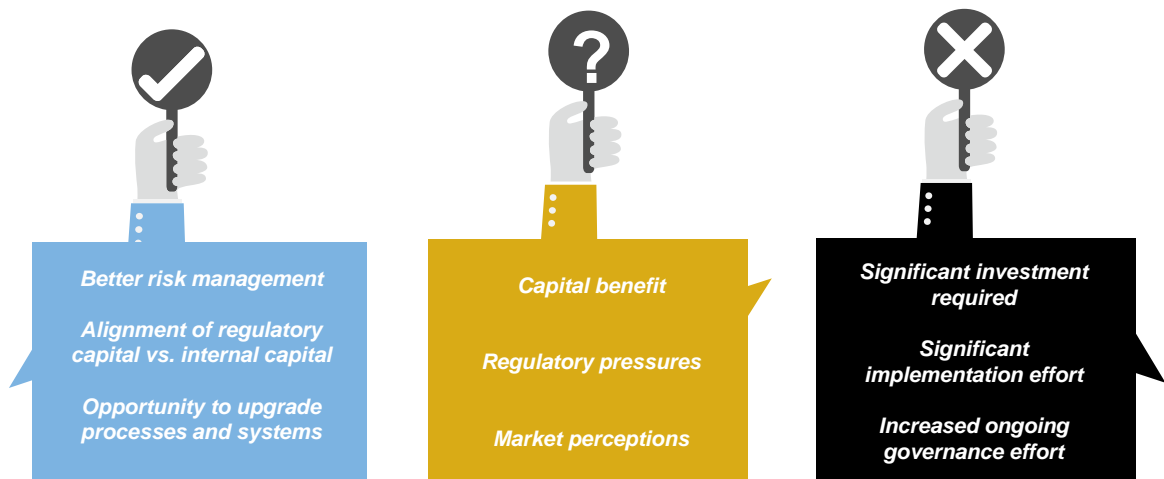
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## The Second Wave: A case study of a Wave 2 IMAP for a large firm

Gary Warman, Harvard Lee

23 November 2017

### The case for Internal Model

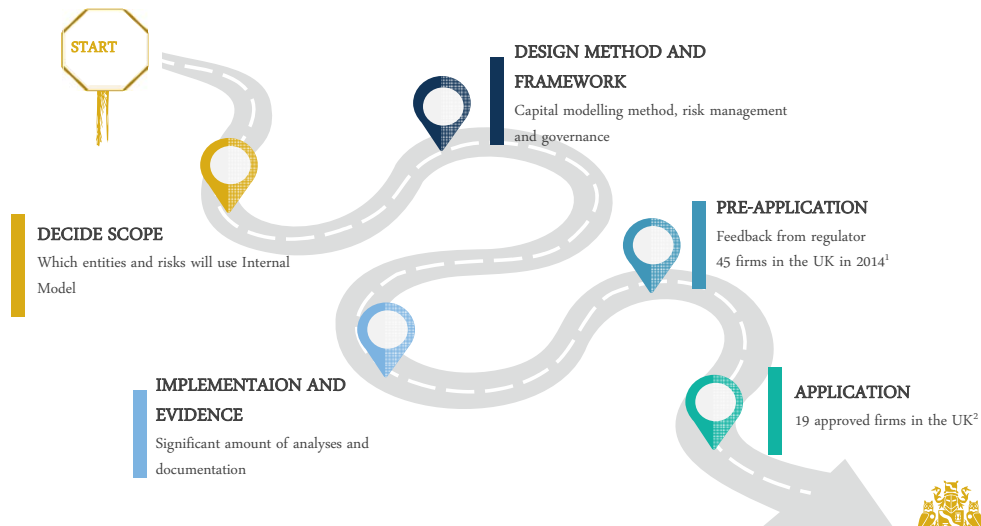


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## Path to Internal Model approval



Source: <sup>1</sup>Solvency II Wire July 2016, <sup>2</sup>PRA SII Internal Model Approvals Dec 2015

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## What firms anticipated was difficult?



### Evolving standards and expectations

- Regulations were still moving
- 'Bar' is being raised

### People involved

- Not just an actuarial project
- Impacted large parts of the business

### Still have a business to run

- Dependencies on key staff
- Other business initiatives

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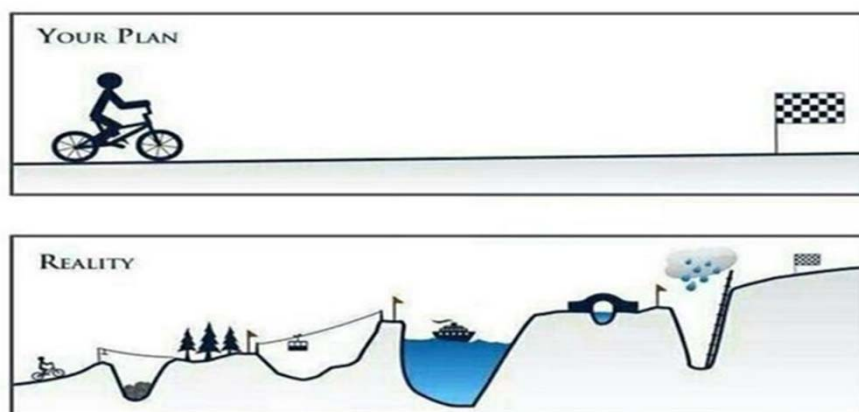
## Development of the Internal Model



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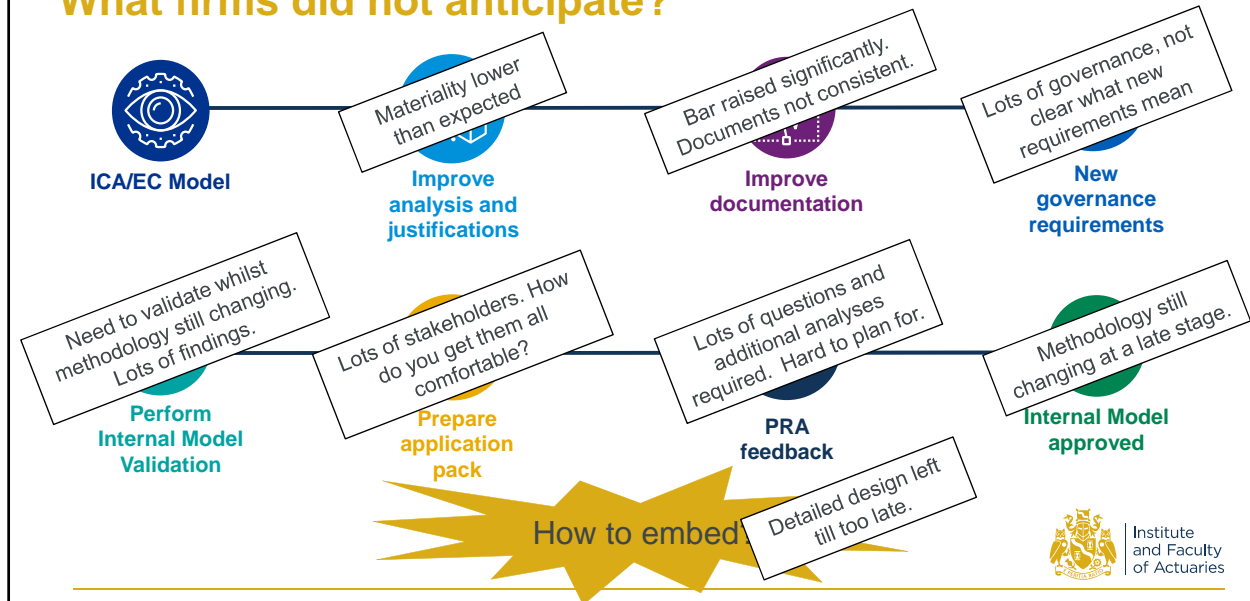
## What did it feel like?



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## What firms did not anticipate?



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## UK Internal Model firms



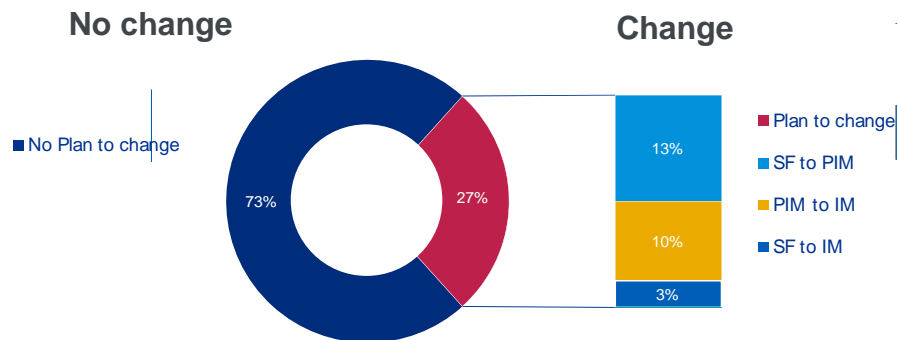
Source: PRA SII Internal Model Approvals Dec 2015

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## More UK Internal Model firms?

Are you planning to change your current Solvency II status?



Source: KPMG 2017 TPS Survey

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## It must be easier now?



- Still requires significant effort
- Revised view from regulators on application process



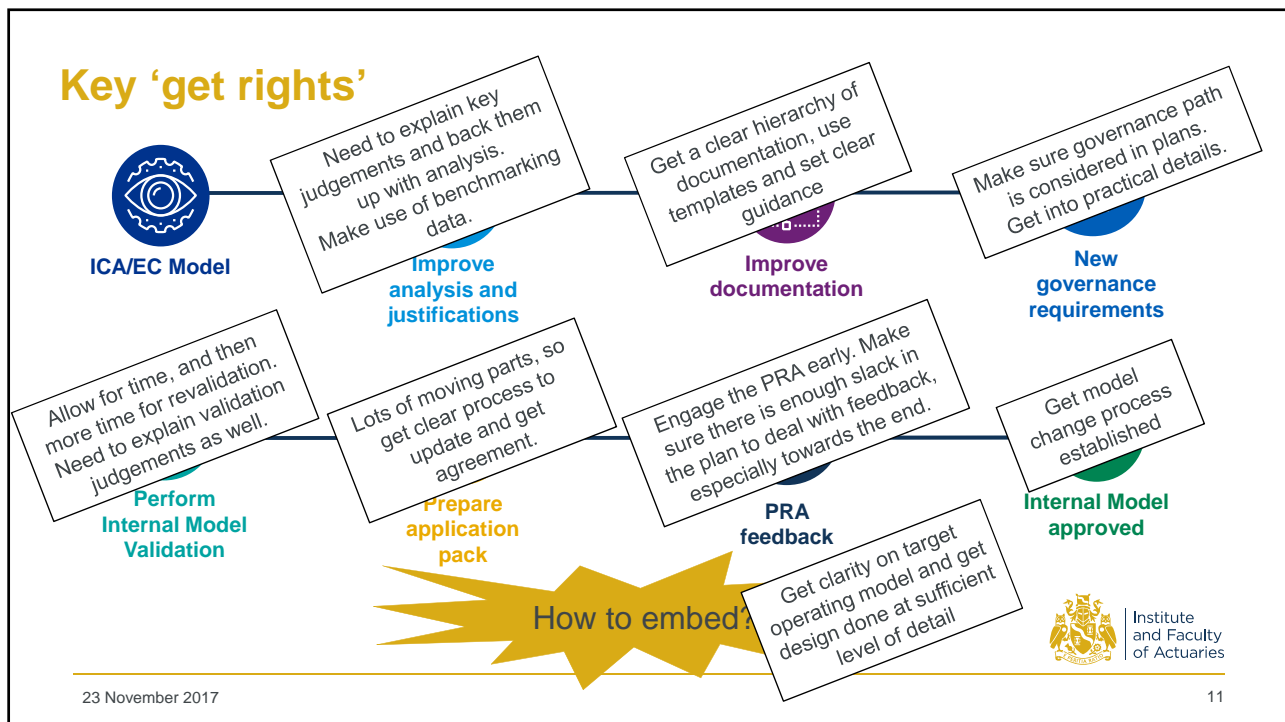
- Regulations and interpretation have settled
- There is IMA experience in the market
- Benchmarking data is available
- More clarity on risk calibrations



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## Royal London – a bit about us

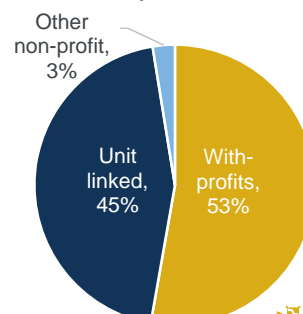
- Largest mutual life, pensions and investment company in the UK.
- Expanded through various legacy acquisitions
- Significant recent growth

**£100bn** funds under management

**9m** policies

**8** ring fenced funds

Insurance product mix



All figures as at 30 December 2016

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## Royal London – why are we doing this?

*Better risk management*

*Alignment of regulatory capital vs. internal capital*

*Opportunity to upgrade processes and systems*

*Capital benefit*

*Regulatory pressures*

*Market perceptions*

*Significant investment required*

*Significant implementation effort*

*Increased ongoing governance effort*

- **No obvious capital benefit BUT.....**
- Right thing to do as certain risks not in Standard Formula
- Outlier in the market given size and scale if remained on Standard Formula
- Aligns regulatory and internal view of capital

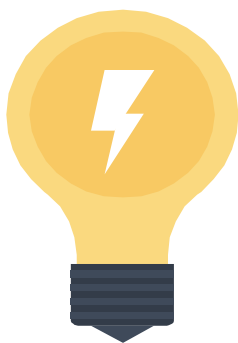


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## Royal London – what we set out to do differently



### Systems

- Integrated cashflow and capital models
- Not legacy model plus capital model “over the top”

### People

- Used our best people and recruited experience from the market
- Engaging with the industry as well as through our delivery partners
- Look to learn from peers who had gained approval

### Planning

- Engaged PRA early, be transparent with plans, risks and challenges
- Contingencies in planning to allow for ‘unknown unknowns’



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## Royal London – our Internal Model approach



### Scope of Internal Model

- Internal model approach for all risks and all funds



### Systems

- MG Alfa – not Prophet or Risk Agility
- Cloud technology



### Methodology

- Simulation approach
- Proxy modelling using LSMC and ESG rebasing, fully automated
- Management actions modelled outside cashflow models



### Implementation approach

- Phased implementation by fund
- Starting from most complex and material funds first
- Engagement plan agreed with regulator

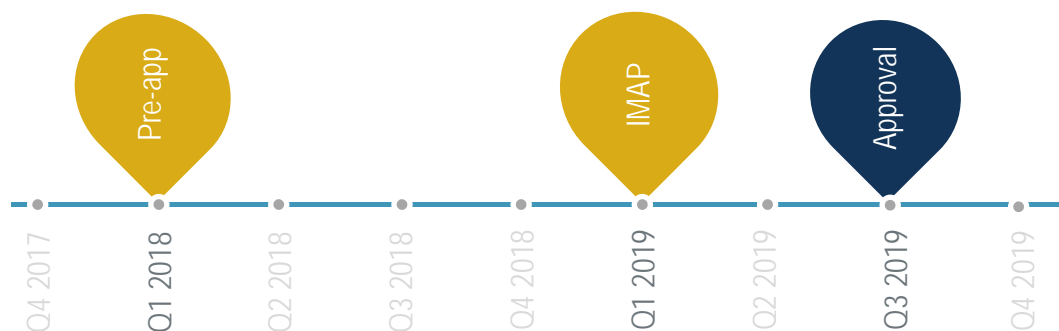


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## Royal London – our application timeline



- All whilst implementing a GAR compromise and other strategic changes at the same time



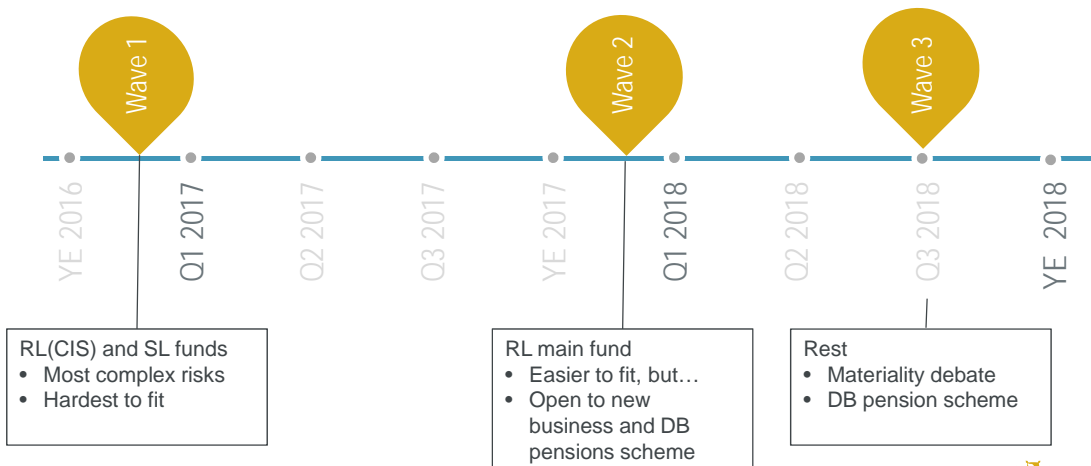
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## Royal London – our model release timeline



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## Royal London – our experience so far

- PRA wants to see documents after formal governance and validation for pre-application



### Achievements

- Methodology stable but pre PRA feedback
- Internal model approach implemented for 85% of funds
- Documents substantially written
- Good relationship with regulator



### More to do

- Internal model validation and remediation
- Dependencies on other strategic projects
- Managing consistency between multiple layers of documentation
- Embedding into the business



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## Royal London – prioritising the completion of CAP/SAT

### Challenge

- Not all documents will be ready by pre-application
- Validators have identified a number of findings on available documentation
- We know we can't all remediation done by pre-application
  - To do so would effectively mean we are ready for a full application!!

### Approach

- "Triage" needed to determine which actions are material and which we can "tell the story" regarding their status
- Assessment based on the likely impact on CAP/SAT completion to drive prioritisation of action remediation
  - But care needed – some "very minor" remediation actions can impact across multiple compliance assessments (i.e. 1 finding can move many assessments from 'compliant' to 'partially compliant' or 'non-compliant')
- Address findings that have the biggest impact



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## Royal London – dependencies on other projects

### Challenge

- A number of major projects could significantly impact the Internal Model methodology and results
- Some of these projects could be implemented close to the formal application date
- There is insufficient time to update all the methodology documents, results and re-validate them in-flight

### Approach

- Develop addendums to the CAP/SAT for pre-application
- The underlying documents will be unchanged but the addendum will set out the impact of the projects on IMAP – along with financial quantification
- All documents will be updated by formal application



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## Questions

## Comments

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