IFRS 17 And Technology Solutions

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Introduction

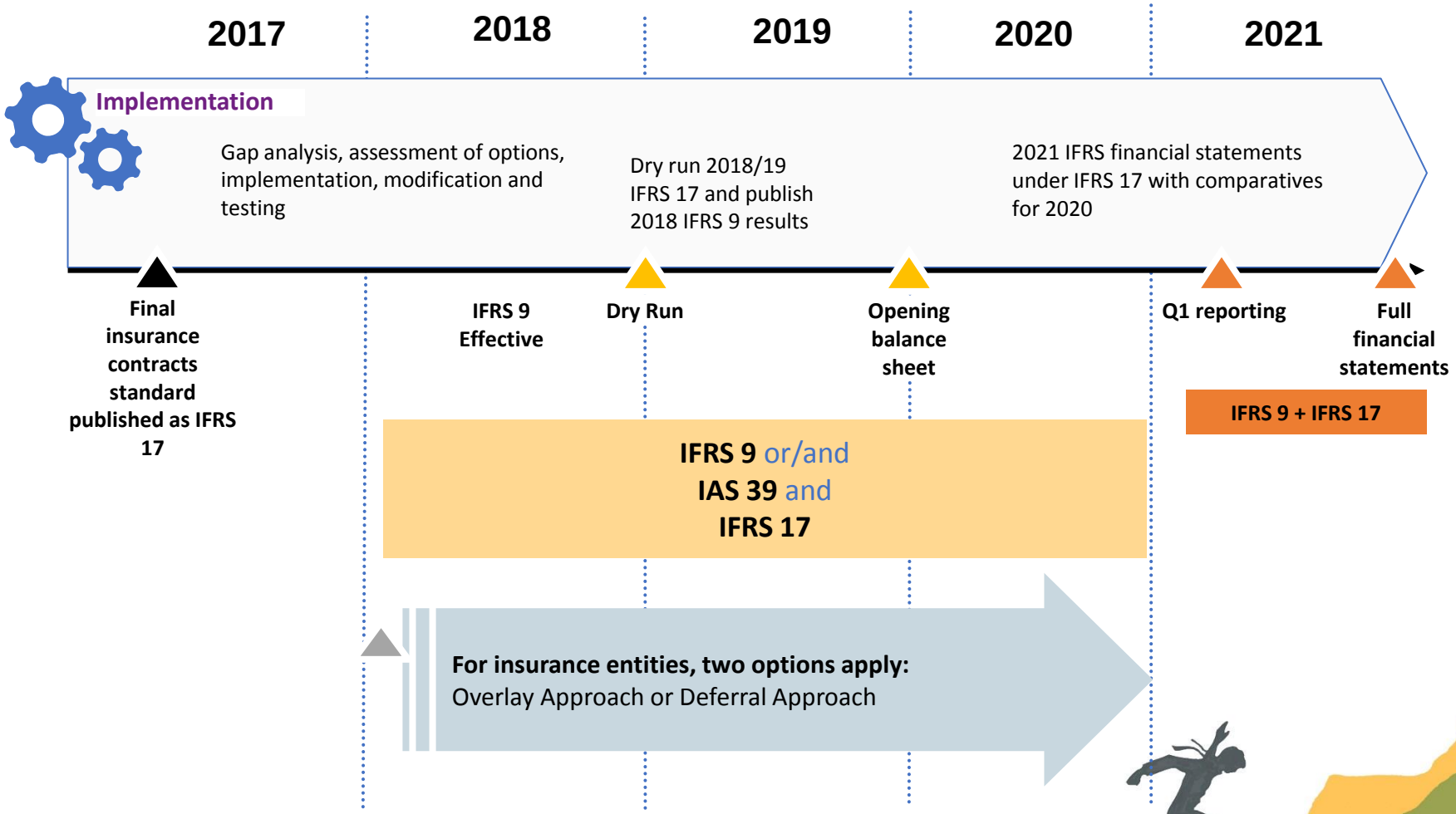
IFRS timeline

Overview of IFRS 17

IFRS 17 reporting – data management, calculations, automation and process efficiency

Technology solutions

Publication of IFRS 17 is a starting gun not a finishing line



Overview of IFRS 17

IFRS17 preparation progress in the region

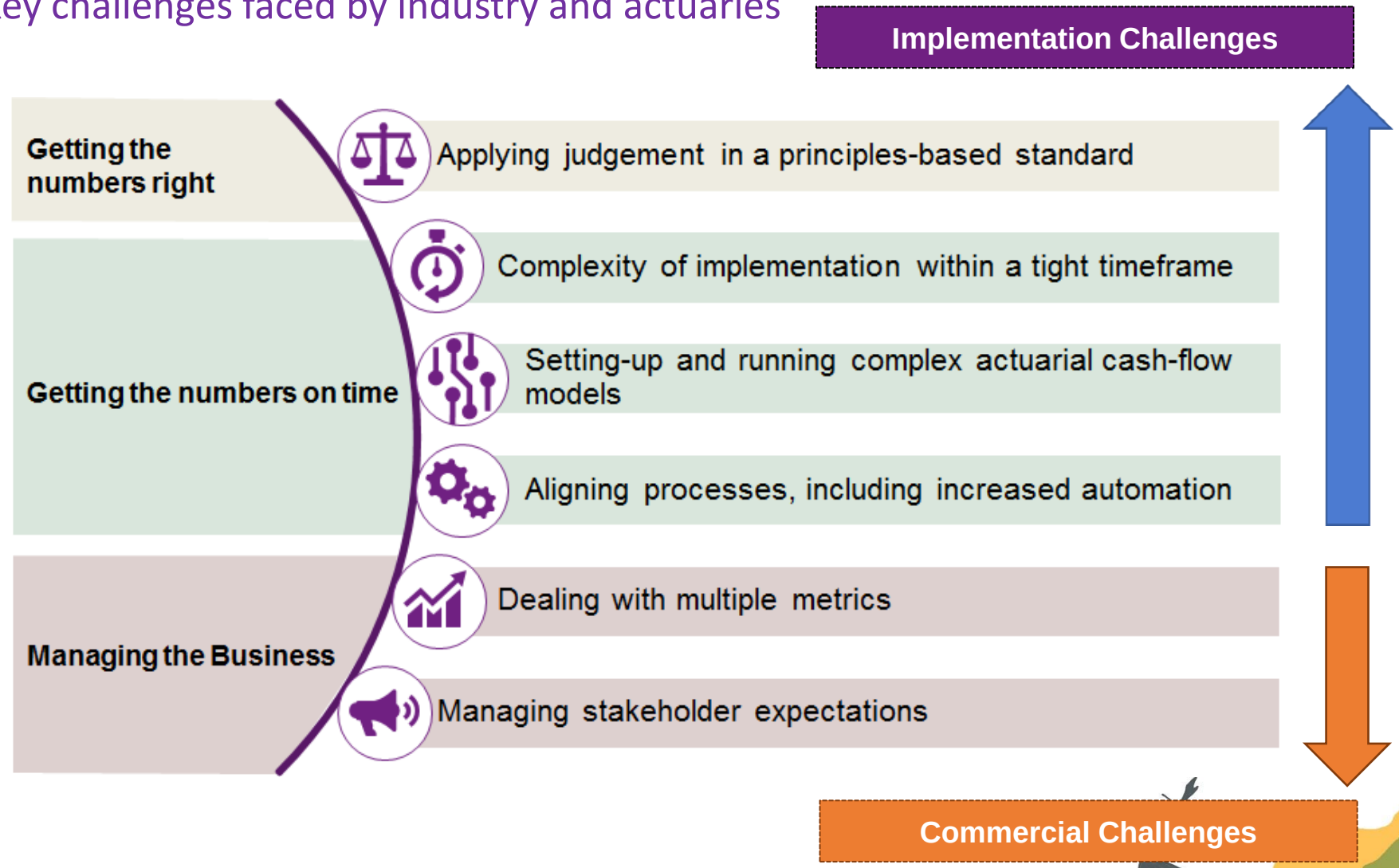
- Korea
  - To implement IFRS in Jan 2021
  - Ahead of other countries in the region due to encouragement of their Regulator
  - Doing financial impact assessment
  - Selected IFRS17 engine or doing software assessment now

- Singapore/Malaysia
  - To implement IFRS in Jan 2021
  - Most have set up IFRS task force, some have set up Actuarial/Finance Transformation Teams
  - Looking into Gap Analysis
  - Working on test model to assess feasibility of their existing system
  - Working/exploring automation of financial reporting processes

- Thailand
  - To implement IFRS in Jan 2022
  - Have/in the progress of setting up IFRS task force
  - Considering Gap Analysis
  - Doing IFRS17 software assessment, exploring automation of financial reporting processes

More than a compliance exercise

Key challenges faced by industry and actuaries



Why to invest in technology solutions and IFRS preparation now?

Understand the financial impact

What are the potential differences prior vs after IFRS implementation, in terms of P&L and Balance Sheet?

Change in product development direction?

Single premium saving products lose their attractiveness – capital intensive, unable to recognise all profits at inception post IFRS17 implementation

Focus on less capital intensive products, eg. ILP

Profitability and EV management

Understand the profit emerging patterns for different types of products. How will EV change after IFRS17?

Capital efficiency management

What is the appropriate level of available capital? New business strain, EV vs required capital are some good indicators

Reporting efficiency enhancement (for near future consideration)

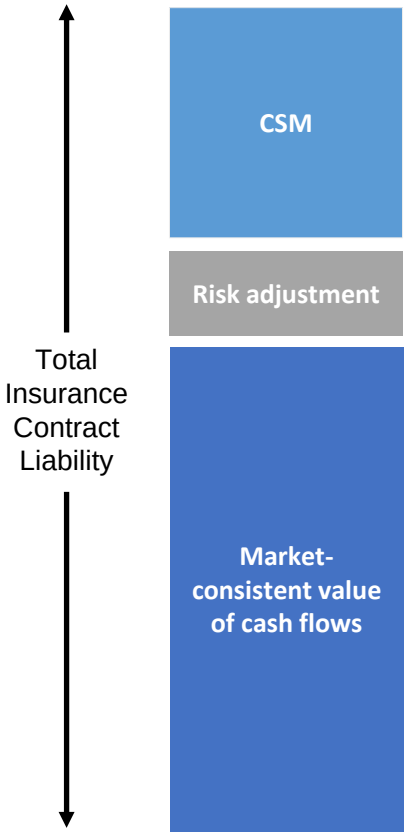
Look into data management and reporting processes

Identify the gap, refine the processes for timely and accurate financial reporting

- **IFRS Gap Analysis - the exercise to discover the gaps and identify actions**
- **Technology Solutions - the tools to enhance reporting efficiency and help decision making**

IFRS 17 Reporting
- Calculations
- Data management
- Automation and process efficiency

IFRS17 – key calculation components



Contractual Service Margin

- Effectively a balancing item that eliminates day one gain
- Cannot be negative except for reinsurance
- Released as services are provided
- Adjusted to reflect impact of changes in best estimate assumptions in respect of future service thereby reducing profit variability
- CSM discount rate "locked" at inception except for directly participating business
- Modified "variable fee" approach for direct participation business

Cash Flows

- Explicit
- Unbiased
- Entity perspective
- Within contract boundary

Time Value of Money

- Reflect liquidity characteristics of cash flows
- Consistent with observable market prices
- Exclude factors not relevant to the cash flows

Risk Adjustment

- Compensation the insurer requires for bearing uncertainty
- May reflect diversification within and between portfolios
- Disclosure of confidence level

Fulfilment cash flows

Contractual service margin roll forward

CSM Progression – General Measurement Model

	CSM at start of period
+	CSM for new contracts
+	Interest at locked in rate
+/-	Changes in cash flows
+/-	Currency exchange
-	CSM allocated to period
	CSM at end of period

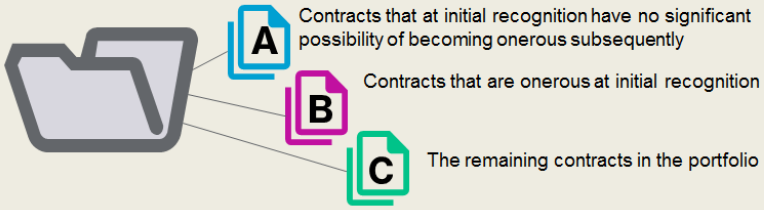
- Changes in cash flows
  - Experience adjustment for premium received
  - Changes in estimates of cash flows relating to future service
  - Difference between expected and actual investment component paid in the period
  - Change in risk adjustment for future service
  - CSM cannot be negative/loss reversal
- CSM allocated to period
  - Allocation based on coverage units
- CSM at end of period
  - Profit not yet recognised

Some other areas that will require actuarial judgement

Grouping of contracts

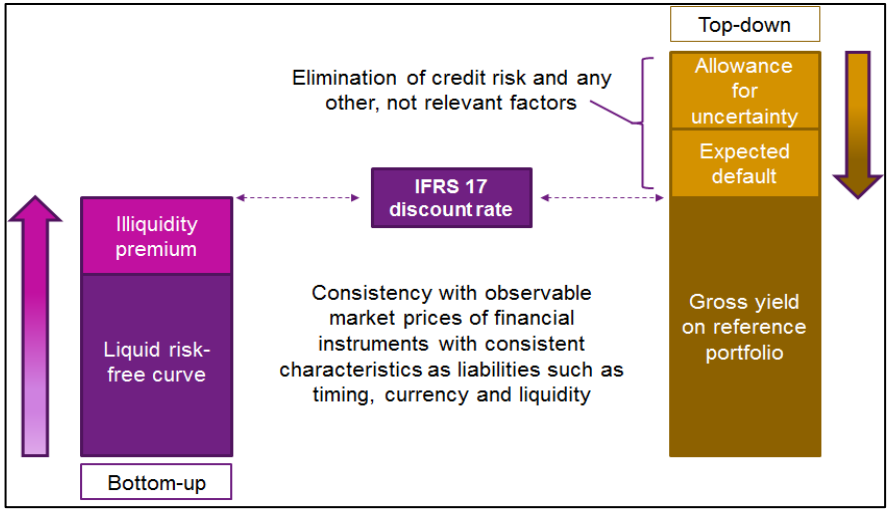
1 **Contracts initially to be split into "portfolios", meaning contracts that are subject to similar risks and managed together.**

2 **Each portfolio is then divided into three groups:**



3 **Contracts in each group need to be sub-divided into annual cohorts**

Discount Rates



Risk adjustment principle

Purpose of the Risk Adjustment

To reflect the compensation that the entity requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk

- Required to disclose equivalent confidence level
- Risk adjustment set from the perspective of the insurer
- What risk measure to use VaR or TVaR and how to calculate the related cost? Which percentile?
- How to account for and allocate diversification benefits?

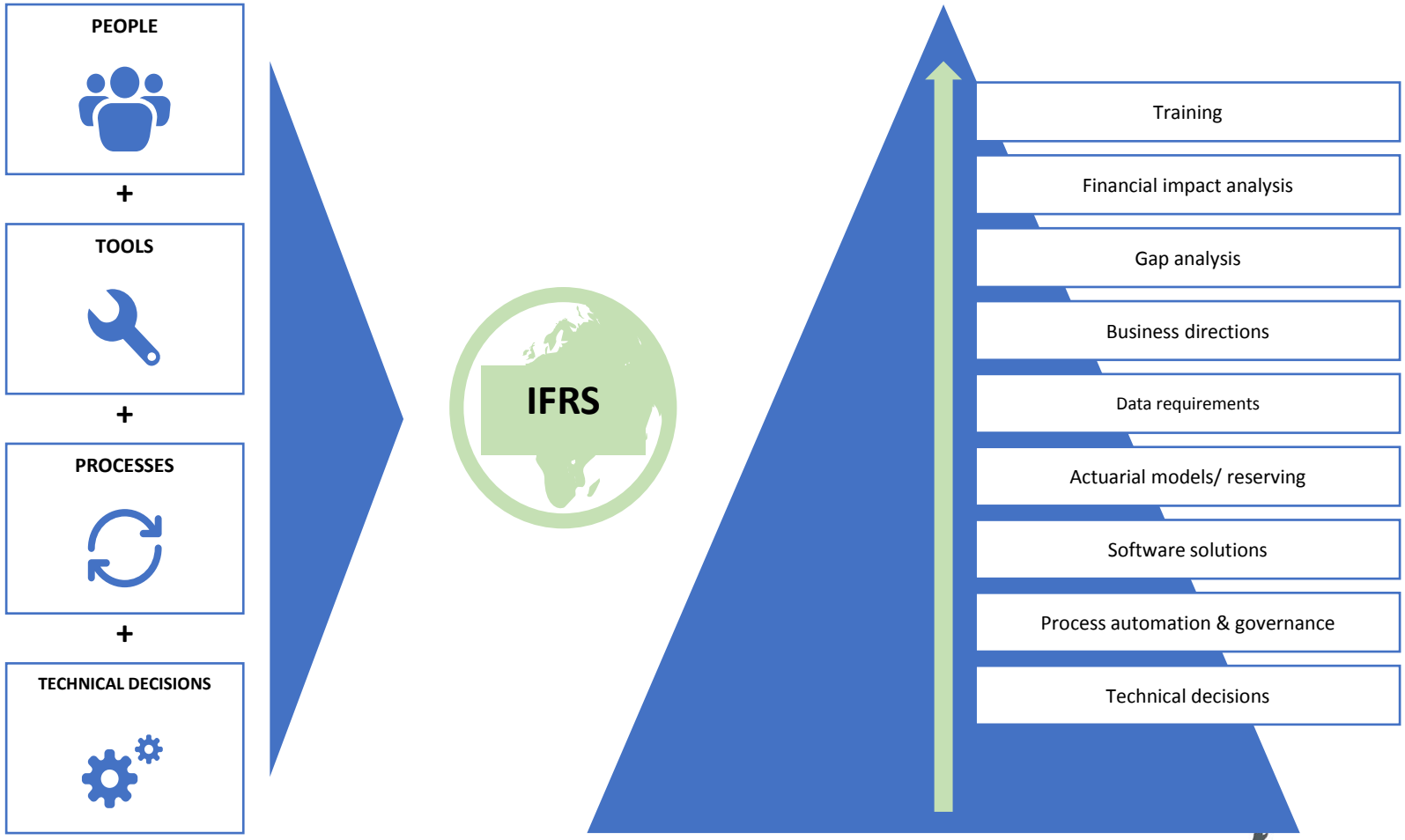
Statement of Comprehensive Income

So what happened to written premiums?

Statement of Comprehensive Income	
	2021
Insurance contract revenue	X
Insurance service expenses	(X)
Insurance service result	X
Investment income	X
Insurance finance expense	X
Net financial result	X
Profit/Loss	X
Discount rate changes on insurance liability (optional)	X
Total comprehensive income	X

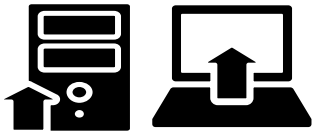
- Insurance contract revenue and service expenses exclude any deposit components
- Revenue and expense are recognised as earned or incurred
- Insurance contract revenue represents the transfer of promised services and comprises:
  - Expected claims
  - Risk adjustment
  - CSM
  - Acquisition cash flows
- Insurance finance expense is excluded from insurance service (underwriting) result
- Accounting policy choice to present insurance finance expense either
  - fully in P&L or
  - in P&L and OCI

Implementing IFRS 17 requires a holistic approach …



IFRS 17 will require new, slicker calculation engine and models

More granularity and complexity in B/S and P&L for Insurers

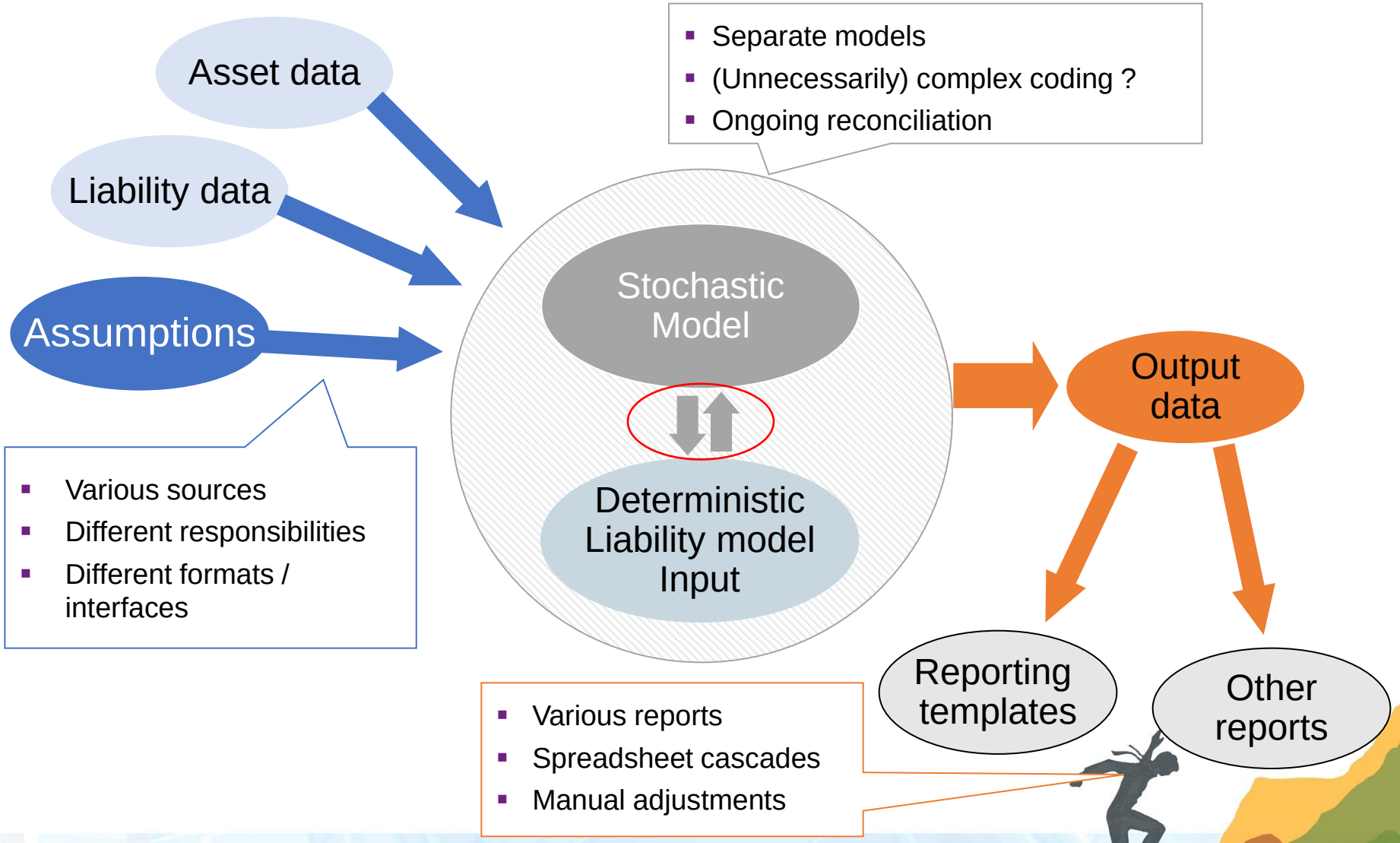


Model Capabilities / IFRS Requirements

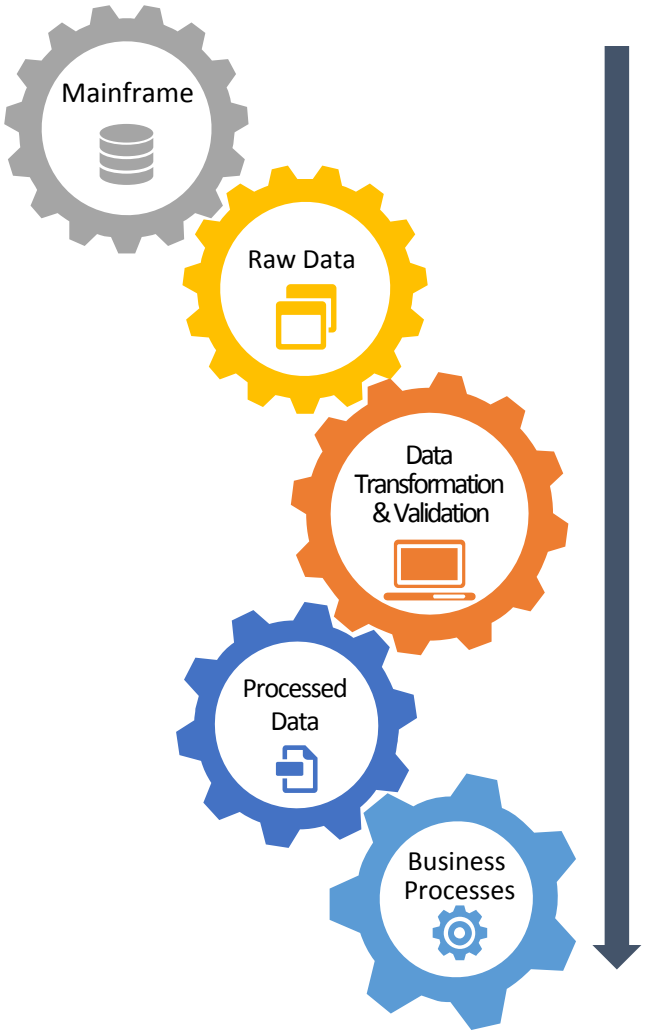
Cash flows and discount rates	Risk adjustment
Par business Variable Fee Approach	Contractual service margin
Segmentation and contract boundaries	Reporting and disclosure requirements

Calculation engines and reporting systems need more flexibility but also ensure robust, reliable, repeatable and timely delivery of required figures

Actuarial model processes need to be industrialized



Data Management - what does data process best practice look like?



Additional features

Be transparent and easy to use

Remove the black box typically associated with data processing.

Be flexible and adaptable to business requirements

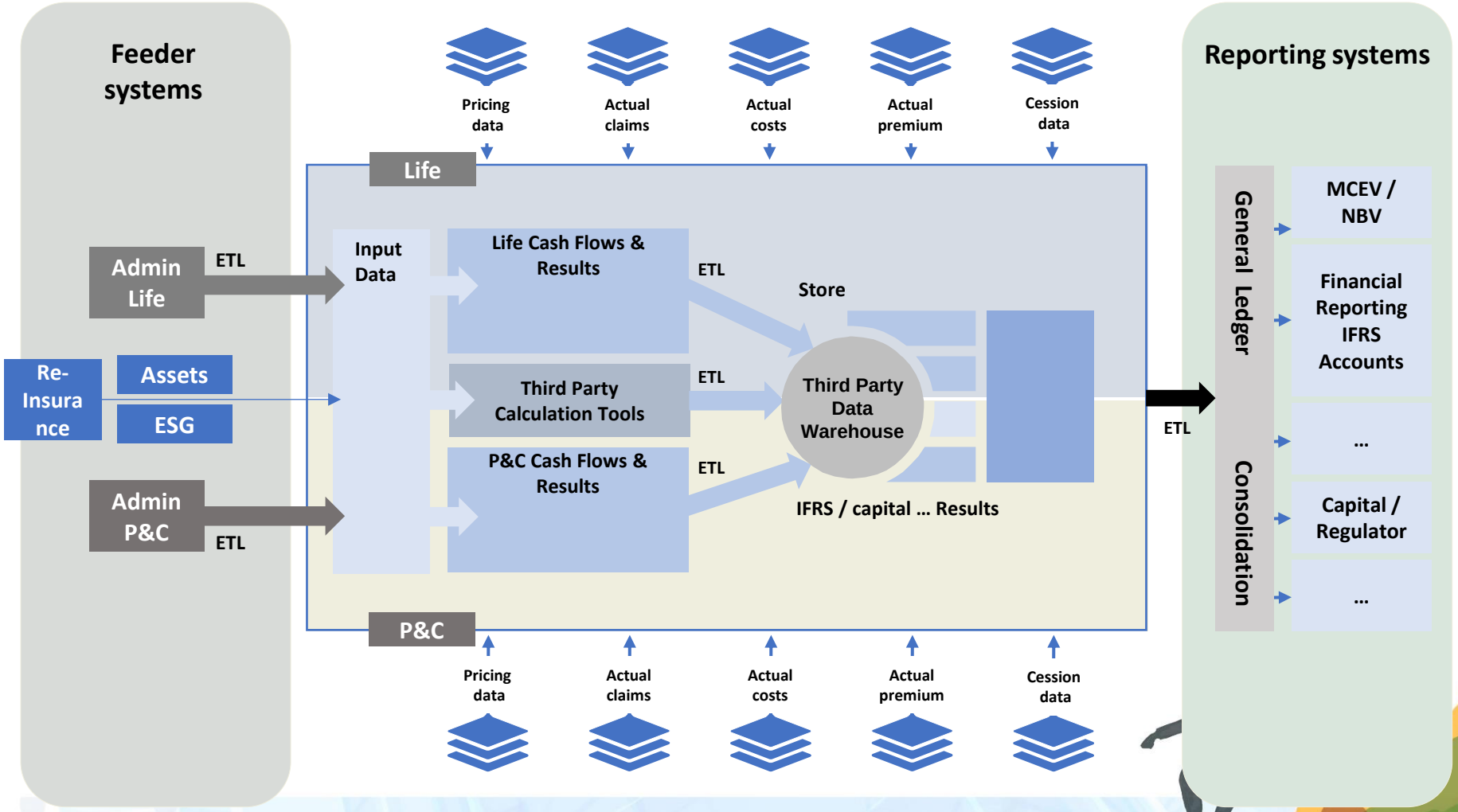
With requirements constantly evolving, having flexibility can help simplify downstream reporting processes and adapt more quickly.

Provide management information reporting and a strong audit trail

Facilitate management understanding of data quality through clean and intuitive reports. Automated audit reporting gives a low maintenance process and helps ensure requirements are met.

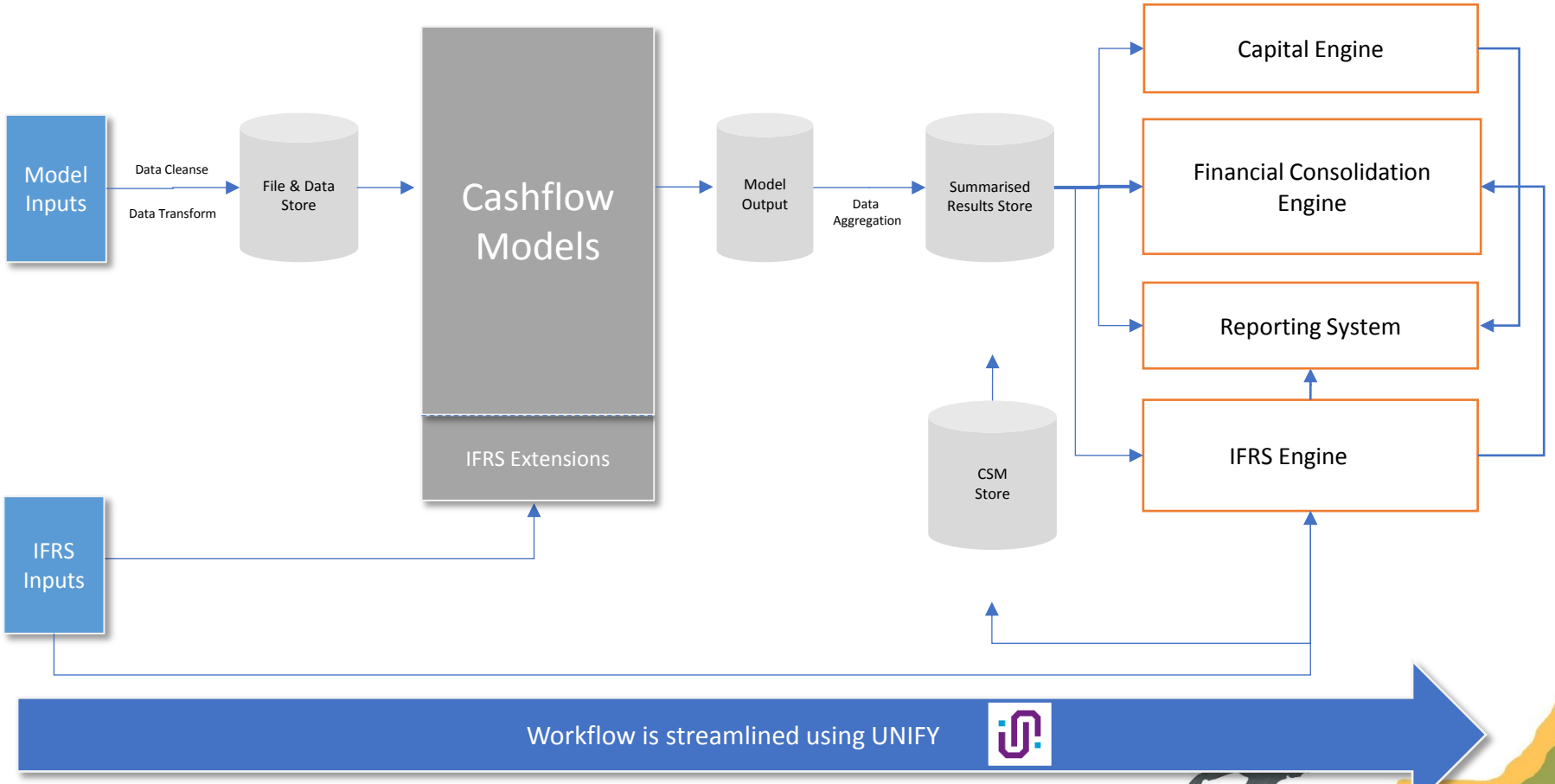
Implement IFRS 17 content at the right place

Design and orchestrate seamless “End-to-End” process through workflow engine



IFRS reporting process

Using workflow software to streamline process in a controlled environment

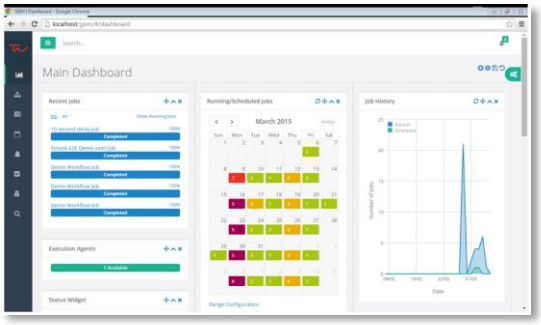


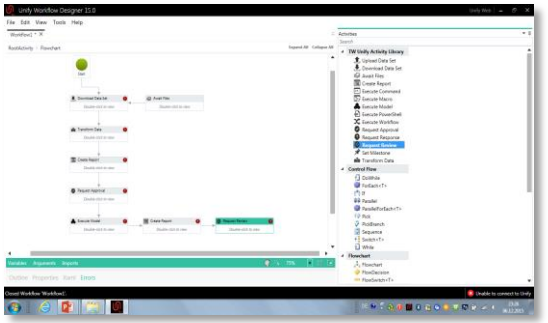
Integration, automation and governance

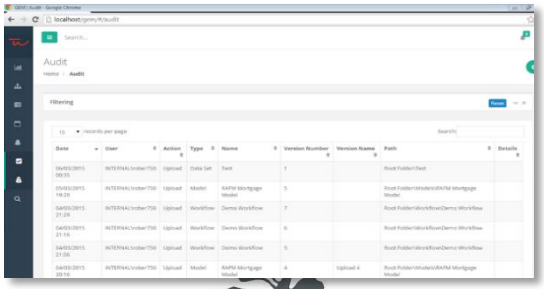
Workflow framework wrapping around your actuarial/financial tools

A transformational solution that enables your company to rise to a higher standard of performance in actuarial process management

Security	Governance	Auditability	Integration
Enterprise wide access utilising user based access control, with information stored in enterprise repositories, providing for enterprise level	Centralised storage and version management of inputs, outputs, calculation engines and process workflows	Logging of all activities and tracking of changes for mandatory levels of auditability	Integration across Life and GI software tools, in-house data-warehousing solutions and 3rd party applications e.g. ESGs, Excel etc.
Automated workflow	**Monitoring**	**Traceability**	**Scalability**
Design and scheduling of sophisticated processes and work-flows for fully automated end-to-end processing	Reporting of work flow progress and individual work item notification for necessary management visibility, including progress against key milestones	Formal authorisation of models, data and other information for traceability (lineage of results) and accountability	Ability to integrate with the full range of WTW on-demand grid solutions to deliver scalable resources to the most sophisticated problems





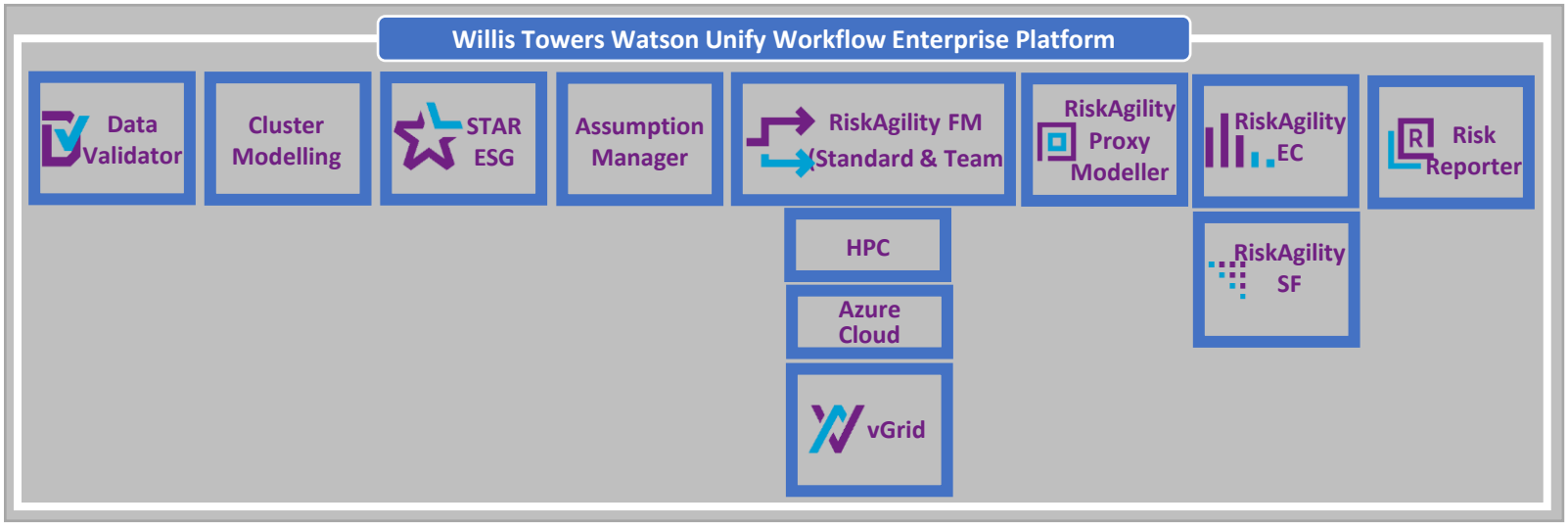


An example of robust technology solutions road map

An example of robust technology solutions road map

IFRS17	Business Planning	Product Pricing	Business Valuation	ALM	Capital budgeting	Risk Valuation

Best of breed tools integrated into fully automated end-to-end process



Our solutions can also work in conjunction with other vendor products

Questions