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Actuarial Data Needs Today and in the Future

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Agenda

- Data Requirements for Disclosure
- Data Requirements for Actuarial Analysis
- Case Studies



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Data Requirements for Disclosure

Expertise
Sponsorship
Thought leadership
Progress
Community
Sessional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

Drivers for Change

There are a number of key drivers for increasing the sophistication of data solutions across firm's operating model

Profit Measurement

- Portfolios sub-divided by inception date and duration
- Sufficient levels of granularity

Actuarial Analysis

- Additional analysis and review time
- Understand key drivers for change

Performance Management

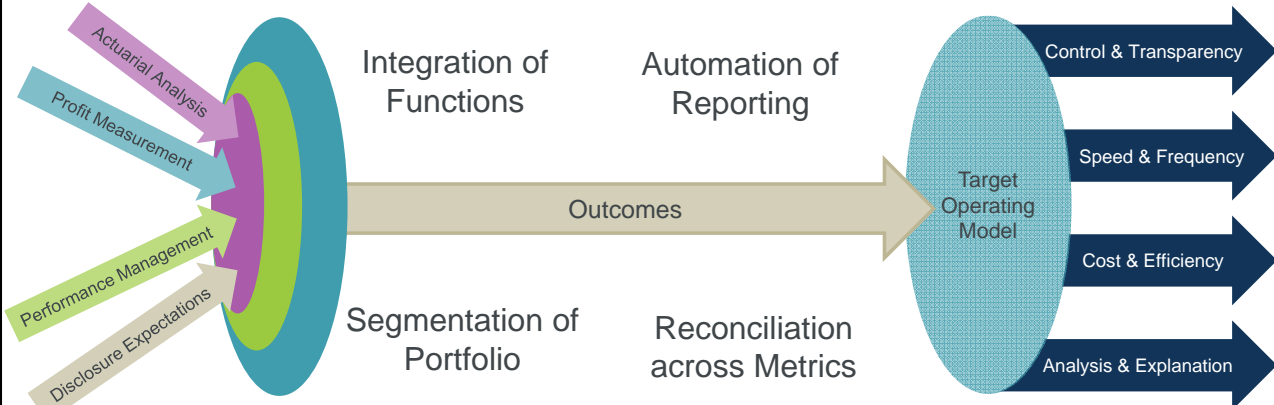
- Communication to capital markets
- Aligned to disclosure regime

Disclosure Expectations

- Tighter deadlines
- Growing complexity
- Market consistency

Expected Implications for Target Operational Model

As firm's seek to meet new requirements there are some key enhancements expected to impact operating architecture

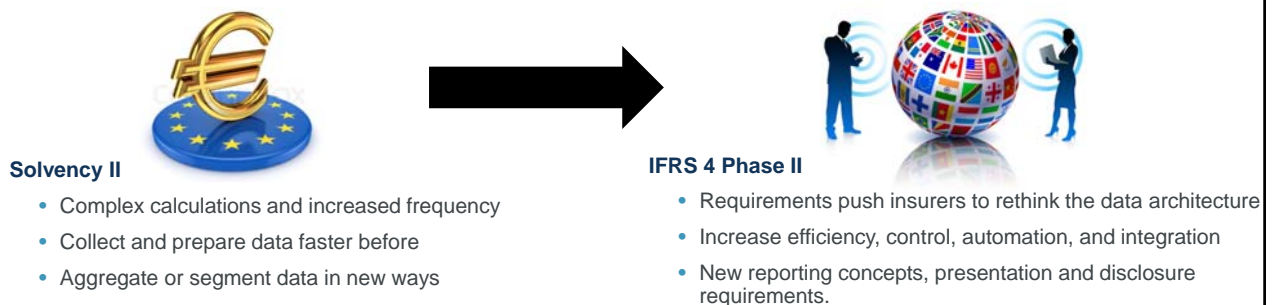


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How transferable are today's solutions?

Data and system solutions developed for Solvency II need to be validated against upcoming IFRS 4 Phase 2 to avoid extensive rework



How have firms answered the Solvency II data problems?



Historic?



Granular?



Flexible?



Enough?

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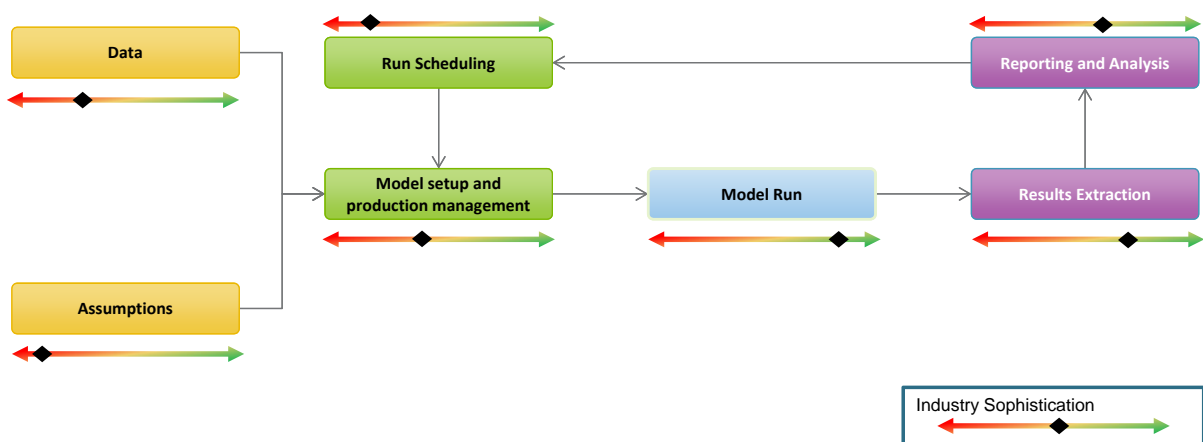
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Data Requirements for Actuarial Analysis

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Current Improvements to Architecture

The focus for improving actuarial processes has been centralised on a few key areas and industry sophistication is varied particularly when reviewing the holistic process.

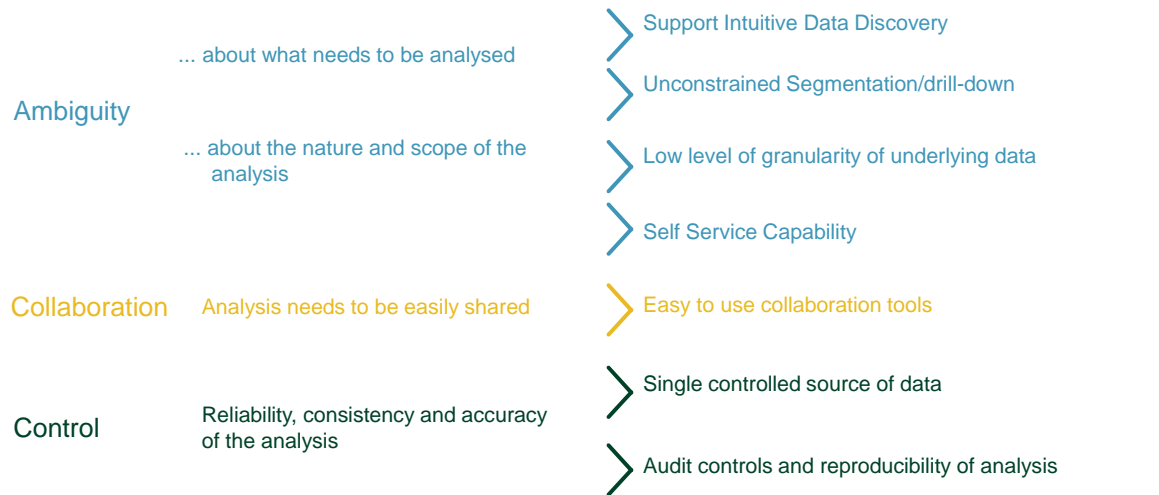


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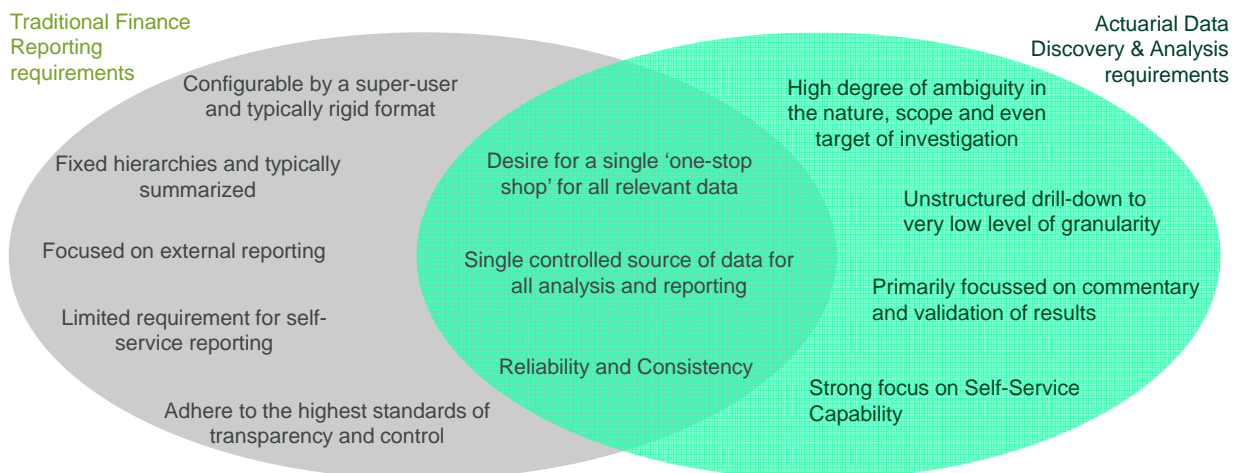
Functional requirements

The requirements for tools which support actuarial analysis are driven by a number of factors



Reporting, Analysis & Data Discovery

The analysis needs of the actuarial community differ substantially from Traditional Finance oriented requirements.



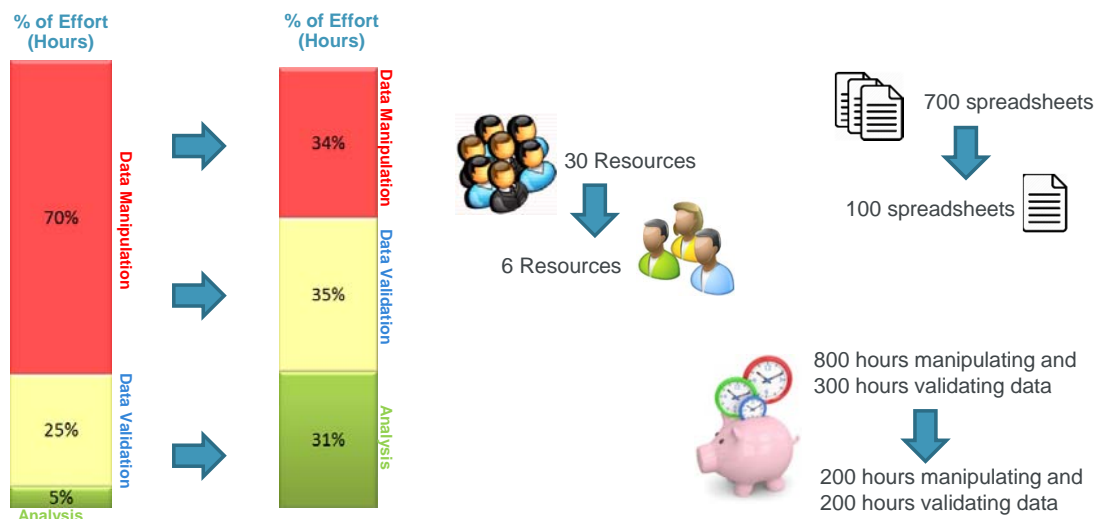


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US Statutory Reporting – example benefits

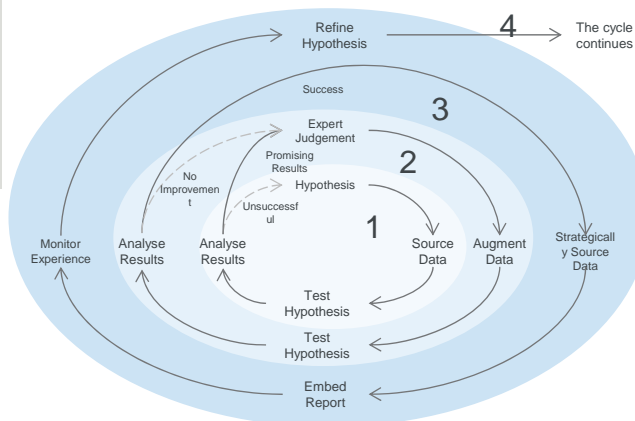


Analysis of Change

The Analysis of Change is an example of actuarial analysis where modern reporting tools can support significantly enhanced investigations

- Important piece of management information, audit control and relation with reported results
- Aim is to provide narrative around movements across reporting periods.
- Investigation of unexplained has a large amount of ambiguity in true target of investigation

- Automated production provides more time for analysis
- Modern reporting tools allow for unconstrained investigation, unlimited drill-down and rapid segmentation
- Hypothesis driven approach refines requirements from subject matter experts and business users
- Standardisation across group can be implemented



Experience Analytics

Data architecture solutions can also improve actuarial experience investigations by providing consistency across the business and allowing the analysis to be fast, data-driven and value-adding.

Current challenges and pain-points

- ✗ Actuarial resources investing time in sourcing, scrubbing and aggregation of data
- ✗ Inconsistent data sources and treatment to valuation
- ✗ Multiple sources of data used in analysis – may not be entirely consistent with each other and cumbersome to manage
- ✗ Requires manual intervention
- ✗ Monitoring done with varying frequency and sophistication across products / divisions
- ✗ Data pre-aggregated as calculators often can't handle volume of raw data, limiting options for later analysis

Market leading approach

- ✓ With the right architecture and holistic view of the business, consistency can be achieved across previously siloed business units
- ✓ Experience monitoring can be produced immediately and is able to support tight valuation deadlines
- ✓ Investigation can be data driven, rather than forcing actuaries to make decisions up-front due to the need to pre-aggregate
- ✓ Consistent approach to investigations in frequency, scope and sophistication
- ✓ Manual intervention reduced – improving control and speeding up process

Questions

Comments

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