Why a subledger solution can offer the best of both worlds:

Relieve the burden of implementation and add value beyond compliance







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Introduction

Aptitude Software has been living and breathing IFRS 17 for over three years - and we've been implementing our IFRS 17 solution around the globe since Q1 of 2018. Our clients are some of the first major insurers in the world to be entering UAT. Moreover, Aptitude is working with some of the world's largest insurers to re-think the post-IFRS 17 world for the Actuarial and Finance functions. We are helping to define how they move beyond compliance with the Standard to truly leverage the investment they are making.

This whitepaper covers market trends and lessons learned by the industry over the last few years and looks at how insurers are using the potential extension of the compliance deadline to take a more strategic approach and identify benefits beyond compliance. We also identify areas where the Aptitude IFRS 17 solution has added valuable capabilities for our clients.

Increasingly, we see insurers looking to modernise their finance, actuarial and risk functions. This is principally to reduce costs and provide better insight into the key metrics underpinning the business and driving profitability. This is a fast-changing area where insurers are increasingly using new technologies such as artificial intelligence and advanced analytics to drive finance transformation projects. Accurate and trusted data is at the heart of any finance transformation project and is fundamental to its success.

The consolidation and standardization of the data sets gathered from multiple actuarial and finance systems creates a rich, consistent data model that can essentially become a launchpad for a digital finance initiative. Insurers that see IFRS 17 as an opportunity to rethink their finance and compliance processes and future use of data, rather than just a compliance initiative, will achieve far more long-term, sustainable business benefits. They will be in a much better position to deliver strategic foresight to the business to drive business growth.

Vendor selection trends:

why we feel a subledger solution can be the best of both worlds

Broadly we see three options for insurers: actuarial-based solutions, subledger solutions, and in-house builds. Given that IFRS 17 is the first large-scale regulatory requirement placed on the industry in over 20 years, even when compared to Solvency II, it is understandable that many insurers are keen to take their time in choosing between these options.

In-house builds:

a host of unknowns

The in-house build option brings with it a lack of exposure to market best practice as well as a host of unknowns and hidden costs. Do insurers have the capabilities to meet the complex actuarial and accounting requirements and build the data models from scratch? Are they able to perform parallel runs, end to end testing, defect resolution, and solution re-work when the first attempt fails? Can they define new post-implementation processes in their Finance and IT teams?

In-house builds also require firms to draw in lots of subject matter experts from other teams and initiatives, which can impact day to day operations. In our experience, whilst simple insurers can succeed with in-house builds, medium and larger insurers often underestimate the complexity and the cost of maintenace and thus may end up seeking a third-party vendor solution further down the line.

Actuarial solutions:

can they truly meet an accounting requirement?

Many insurers naturally feel more comfortable with their in-house actuarial solutions and have performed analysis on whether a solution that builds on those foundations is feasible. However, in our experience this approach poses three challenges. Firstly, additional actuarial modules and applications are required in order to extend actuarial functionality into the accounting domain and perform data management. Secondly, this extension of actuarial solutions does not mitigate the need to replace or upgrade existing accounting solutions. Finally, defining the capabilities necessary to meet an accounting requirement can be a challenge for actuarial vendors as this is not a core competency.

Subledger solutions:

the best of both worlds

Choosing a subledger solution generally means running a vendor selection process. As a recent EY paper indicates, there are challenges in engaging new vendors and an upfront cost in choosing the right vendor. However, we have seen many insurers pivot away from in-house solutions to a subledger once they have more fully understood the complexities around challenges like integrating actuarial and finance data, the need for robust data management, the need to integrate IFRS 17 and Solvency II output, and the requirement for a robust control environment for both CSM calculations and accounting.

Subledgers can also store and manage data at a very granular level to enable users and leadership to really drill into the drivers of their profitability. Finally, our clients appreciate the value of a pre-built but flexible data model that can be configured in-house to meet their bespoke needs.



Top IFRS 17 implementation challenges

An IFRS 17 project is multi-faceted and impacts the entire organisation. From actuarial and finance, through to administration, investment systems, and reporting and performance metrics.

We asked our clients to share the IFRS 17 challenges they faced and how the Aptitude IFRS 17 solution has helped to address the difficult aspects of the standard.

Top 10 IFRS 17 implementation challenges

Challenge	Key Question
1. Interpretation of the Standard	What accounting treatment choices do you want to make and how does your solution cope with these?
2. Data volumes and granularity	At what level of granularity do you want to report, and can your solution give you options to optimise this decision?
3. Data sourcing (ETL)	Do you know what data you need to be compliant and do you have a baseline data model to simplify data sourcing?
4. Iterative/agile implementation	Does your solution allow an iterative implementation to make the best configuration decisions as you implement?
5. Actuarial/finance integration	Do you have a robust and transparent solution for integrating actuarial and accounting data?
6. Granular allocations	For your measurement models, can you allocate cost and income at the right level of detail to ensure compliance and optimal reporting?
7. Multi-currency considerations	Where you have currency exposures, does your solution allow transparent FX management and translation?
8. Alignment with Solvency II	Do you foresee benefits in having a single source of data for an IFRS 17 vs Solvency II comparison?
9. Generating optimal IFRS 17 numbers	Do you have the flexibility to model results under different choices to obtain the optimal outcomes?
10. Automation	Does your chosen solution drive process optimisation beyond simple compliance to make the most of your investment?



Solution summary

The Aptitude IFRS 17 solution is designed to provide insurers and reinsurers with a powerful, yet flexible solution to meet their IFRS 17 calculation, measurement, accounting and reporting requirements.

The solution "fits" between an insurer's source and finance systems and is comprised of a number of components that can be selected to meet an insurer's unique requirements and fill the gaps in current system capabilities. Full details are available on request.



2 Key implementation challenges

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1. Interpretation of the Standard

The IFRS 17 Standard is a principles-based regulatory framework and is significantly less prescriptive than Solvency II. The standard continues to evolve as evidenced by the IASB meeting on the 11th December 2019, but there are still areas of uncertainty including measuring reinsurance treaties, treatment of DACs, and Risk Adjustment. Indeed, the TRG admits that there are still over 20 outstanding issues! Insurer's need clarity around these issues as soon as possible, so they can make final technical decisions and progress with their projects.

There are also numerous accounting choices that clients need to make, including posting changes in discount rates to OCI, and the impact of these choices on their results. There are also decisions relating to unit of account, measurement models, and particularly transition approaches which are critical in setting future financial results.

CLIENT EXAMPLE: Interpretations

In our experience, clients are turning to Aptitude and their peers in the market to understand market best practices. They are also looking to their advisors to help them with accounting choices and to assist in developing an IFRS 17 Target Operating Model ("TOM.") Interestingly though, to date we have seen very few organisations who currently have an IFRS 17 TOM.

Solution

In this context there are two main ways where Aptitude Software can help clients:

Firstly, through its Centre of Excellence (CoE), Aptitude incorporates market best practises and functionality into its core product across our global projects. This means real project experience is fed back to the CoE to influence product development and benefit other clients.

Secondly, the two integral components of the Aptitude solution, AICE and AAH, have been designed to give clients a range of options (through simple configuration) relating to how they process the data in terms of content, inclusion/exclusion of data items in specific calculations, and the overall sequencing of calculations. This flexibility is configurable by measurement model (GMM/PAA/VFA), entity, contract type, (direct/reinsurance) and portfolio.

This inherent flexibility means that clients can configure the solution to support entity requirements, accounting choices, market best practices, and multiple variations of key calculations – for example, the LIC and the loss component.

2. Data volumes and granularity

IFRS 17 requires an insurer's entire in-force book of business to be measured at transition and at each subsequent reporting period. Consequently, millions or even tens of millions of policies will have to be measured on a regular basis. This data will have to come from multiple sources including actuarial, administration, claims, and investment systems, and cover both current and historical perspectives.

But there is also granularity to consider. Much of the data required may be held at an aggregated level and thus needs to be disaggregated to the IFRS 17 grouping level. This is particularly relevant for the different types of costs including DACs, Deferred Costs, Investment Income, Service Company Expenses, and Insurance factors such as TVOG, IBNR, Risk Adjustment etc. From our experience, granularity is a bigger problem for general insurers because much of the relevant data is held at loss reserving class rather than IFRS 17 grouping. This topic is dealt with in more detail in Section 6.

Solution

The AICE engine is designed to be horizontally scalable to support high-volume processing, but ultimately the infrastructure costs will reflect the volumes of data to be processed. Some clients wish to run the solution with the most granular data (assuming it is available) to get the maximum insight into what underpins the published IFRS 17 disclosures. Others take a more pragmatic approach about what is achievable and required over and above compliance.

AICE addresses the volume issue in the following ways:

 Rather than feed AICE every future cashflow for contracts, the solution can accept present value (PV) inputs. Whilst AICE can perform discounting on undiscounted inputs; there are significant volume-related logistical benefits to the actuarial system supplying PV datasets to AICE. We would normally expect the discounted or undiscounted cash flows to be provided for the start date of the period through to the lifetime of the contracts. As an alternative the solution can operate on the basis of Present Values.

CLIENT EXAMPLE: Data volumes

If an insurer has a book of business comprising **1 million policies**, then typically the associated IFRS 17 actuarial model will usually generate between **8 to 10 different types of cash flows** (possibly more – for some products we have seen 20 plus cash flow types). Thus, at any one point in time there will be, say, **9 million cash flow cells**.

But for life contracts the modelling horizon might be 40 years – which equates to **480 monthly** times periods. **Multiply 9 million cells by 480 time periods gets you 4.32 billion!** Then, of course some of those contracts could be reinsured.



Our PV Model requires three of the following four inputs in order to calculate the correct results:

- PV T==0: PV as at the date of the Actuarial Data Valuation
- PV T1: This is the PV as at the end of the period for which these valuations/assumptions are considered to be valid. Note that the time period between T=0 and T=1 is configurable.
- Expected cashflows for the period between T=0 and T=1 along with an indication of the Frequency and Advance/Arrears assumptions.
- Discount rate or curve
- Data inputs (e.g. expected claims cash flows) can be presented at any granularity from contract coverage/ rider level through to the IFRS 17 Group level and this can vary between different cash flow types. The IFRS 17 calculations are ultimately performed at the Group level, however the granularity of the supplied data will dictate the extent of the analysis possible for Management Information purposes. The AICE product itself does not perform any allocations but Aptitude offers other products that can support the preparation of more granular data to be fed into AICE.

CLIENT EXAMPLE:

Actuarial data volumes for one of our clients was a major problem from a processing and storage perspective and by adopting a PV basis, the data volumes were reduced by a factor of twenty.

- In practice, many clients consider that the insight gained by having more granular cash flow types (e.g. sub-types of claims) and more granular model runs for Analysis of Movement (AoM), outweighs presenting this data at the policy coverage level. So, when it comes to data granularity there are three dimensions to consider:
 - IFRS 17 Group => Sets of Contracts => Policy => Coverage/Rider
 - Minimum standard cash flow types (PREMIUM/CLAIM/EXPENSE) => any level of sub-division with the standard types
 - Single model runs (encompassing all financial/non-financial changes) => multiple discrete model runs

CLIENT EXAMPLE: Transition

Considering ways to load transition balances is now emerging as a focus for our clients. Consequently, we are looking at ways to onboard in-force business at transition date in a way that is consistent with the fulfilment cash flow basis outlined in the Standard which requires a CSM transition adjustment value - typically in the form of a future value.

The solution currently expects the future value (or more generically the CSM transition adjustment) to be calculated externally in the actuarial environment. This has been the approach taken by our clients to date. AICE has now been enhanced with capability to handle the future value in several ways utilising existing functionality.

AICE is also designed to run in the cloud. So insurers can utilise extra processing power only when they need it - thus reducing cost.

3. Data sourcing

IFRS 17 affects almost the entire business IT data and systems landscape, which has often been developed over time and grown through acquisition, with little integration. Thus, the biggest implementation challenge is the physical sourcing of all the data and the ETL data preparation activities that are needed to meet the calculation and reporting requirements of the Standard and to support MI requirements.

Insurers will need systems capabilities to collate, clean, and store vast amounts of data at a sufficiently granular level. This could result in a 'make do and mend' approach which, while it may speed things up in the short term, it is unsustainable in the long run. To add to the challenge is the increasing pressure for improved turnaround times.

In our experience, an insurer may have many different actuarial models for IFRS 17 from which results have to be extracted, in addition to multiple core administration, claims and premium collection systems for actual data. Providing the contract data needed for the IFRS 17 calculations may be further complicated if the legacy systems have been the subject of conversions and migrations over the years. Indeed, many insurers now outsource their administration systems to a third-party administrator which adds another layer of integration

Source administration systems will also need to provide data at sufficient levels of granularity to enable portfolios/cohort to be sub-divided by inception date and duration to calculate the CSM. Increased data granularity is needed to support the formulation, management, and record keeping for portfolios/cohorts.

This may lead insurers to look at consolidating and replacing legacy systems in addition to reviewing their actuarial and financial systems.



CLIENT EXAMPLE: Source Systems

One of our clients had over 150 source systems which needed to be integrated into our solution. From an actuarial perspective, there may be many actuarial models that provide IFRS 17 data. One European insurer we spoke with had over 300 actuarial models with IFRS 17 relevant data.

Whilst Aptitude encourages clients to think strategically about data preparation, there is a very real danger that overly ambitious data preparation initiatives can spiral out of control and struggle to meet timescales and costs. The data preparation design must be mindful of delivering a solution that meets the basic requirements initially but that can adapt to future regulatory and business changes.

Solution

Aptitude's solution comes with a pre-defined data model which lays out the data required to achieve compliance. This makes the data sourcing challenge simpler and easier as clients have a model to work from. Aptitude can also assist in data sourcing by providing solutions, such as the Aptitude Platform, or advice which draws on our vast experiencing in building end-to-end accounting and subledger solutions.

The Aptitude solution also comes with data accelerators such as comprehensive insurance, finance, and actuarial data models and a predefined set of data input templates specifying the type and format of the data required. This provides a valuable "target" model for ETL routines and simplifies the task.

4. Iterative/Agile implementation

Most of our clients are adopting an iterative and agile rather than a "big-bang" approach to their IFRS 17 project.

This is perhaps unsurprising as many are trying to avoid the issues they had in their Solvency II and legacy replacement projects. In our recent experience, clients want interim deliverables rather than a single, complete delivery.

CLIENT EXAMPLE: Project Phasing

As an example, many clients are phasing their projects to align to the measurement models. For example, many are starting with GMM, then progressing to VFA, and then on to PAA. Reinsurance has typically been the final deliverable due to the remaining uncertainty in the Standard and the potential complexities. The ability to phase deliverables is seen by our clients as critical to building confidence in both the solution and the project. The other approach we have seen in the market is to structure the project by line of business – Life, P&C, Health, Pensions etc.

Solution

Allowing clients to move from theory to practice by giving them the ability to define test cases with sample data and run these through the solution to see results and to validate the theory, is a major win. The test cases typically start with a simple initial measurement and then extend to include subsequent remeasurements under a variety of different use cases.

To facilitate this, Aptitude can provide templates and an out-ofthe-box, configurable Chart of Accounts (CoA) to allow the test cases to be run end-to-end, as early as possible. This activity usually runs in parallel to the background data preparation activities that will ultimately deliver the 'real' data to the solution.

5. Actuarial/Finance integration

For many of our clients, the issue of determining the boundary between their actuarial and accounting systems is challenging.

There is no single answer to this dilemma – it will depend on existing systems and capabilities and any new components that the organization plans to buy or develop. Some clients are adopting an actuarial driven approach, others an accountingbased approach. In reality, the two must fully integrate to support IFRS 17.

Whilst Aptitude's solution is an accounting engine/subledgerbased solution and not actuarially centric, it has been enhanced to handle the IFRS 17 calculations with the addition of the AICE engine. AICE is designed specifically to receive and process data from client's actuarial and policy administration systems. This approach leverages the knowledge and capability of the client's actuarial systems to generate the expected cash flows, processes these through AICE in the context of the models supported under IFRS 17, (GMM/VFA/PAA) and generate the necessary accounting entries at the desired level of granularity via the subledger. Subsequent measurements are applied to the results of previous measurements which are managed in a highly controlled manner in the mature subledger.

Solution

There are conflicting arguments as to whether IFRS 17 is an actuarial or accounting driven initiative. In practice the Aptitude solution can support both approaches:

- Firstly, the Aptitude solution can simply process the actuarial cash flows through the AICE engine to generate the IFRS 17 calculations and business events to drive the accounting transactions. In this context, AICE is acting as a calculation and business event generator and passing required information on to the Aptitude Accounting Hub (AHH) to process. This is the approach currently favoured by our clients. The actuarial cash flows are loaded into AICE which then undertakes the calculations and automatically converts them into accounting transactions and postings.
- Secondly, we appreciate that some clients may wish to drive the accounting transactions and postings directly from the results output of the actuarial engine. This is perfectly feasible from an Aptitude perspective as the AICE calculation engine can be decoupled from AAH and linked directly to the client's actuarial engines. This requires the mapping of the actuarial/actual results data directly into the AAH infrastructure.

6. Granular allocations

Allocation of expenses, ceded reinsurance commissions, and claims data are fundamental for the granular measurement and reporting that IFRS 17 requires.

In practice, few insurers will have this data at the portfolio, cohort, and contract level - hence the need for new allocations. Virtually all our clients have found that IFRS 17 requires a significant number of new allocation processes as well as the ability to apply calculation and allocation processes to actuarial output data. This is driven by the need for granularity in the disclosure reports and perhaps even more granularity from an MI perspective. Several of our clients are effectively operating two sets of books – one for IFRS 17 regulatory reporting on a quarterly Portfolio measurement basis and a second book based on monthly MI reporting at a contract level.

The table below sets out some of the allocation types we have seen in our client projects.

Allocations				
DACs	Risk Adjustment			
Service Company Expenses	Earned Premiums			
Investment Management Expenses	Valuation Cash flows			
IBNR/IBENR	Claims Payment Patterns			
Claims Handling Expenses – ULAE/ALAE	TVOG/Fair Value (for VFA)			
Ceded Reinsurance Commissions	Risk Adjustment			

Insurers already have a number of existing allocations and typically they are undertaken on a spreadsheet basis. One of our clients has over 80 different allocations based on a complex array of spreadsheets and this number will doubtless grow with the introduction of IFRS 17. Changing, auditing, and adapting these spread sheets would be a major headache.

Solution

To solve this problem, several of our clients are using the Aptitude Allocation Engine (AAE) to undertake and automate complex IFRS 17 and Solvency II. AAE allows clients to develop and test simple and complex allocation processes and then deploy them to a production environment. A key advantage is that the new allocations can be easily created, and changes made within a fully auditable framework. This is allowing clients to reduce or eliminate the number of allocation spreadsheets they have.

7. Multi-currency considerations

Most of our implementations are based on multiple entities consolidating up to a group so multicurrency support is essential. Even for single entities, there may be multi-currency considerations as contracts and reinsurance treaties can be denominated in different currencies (e.g. premiums in one currency and claims in another.)

The complications of dealing with multi-entity, multi-currency requirements across an increasing number of regulatory regimes is driving insurers in to financial transformation programs.

An important aspect of IFRS 17 is that the effect of currency exchange differences in the carrying amount of the CSM for the period must be taken into consideration. It also means that treating insurance contracts as monetary items means that groups of insurance contracts in a foreign currency are retranslated to the entity's functional currency using the exchange rate applying at each reporting date.



CLIENT EXAMPLE: Onerous contracts

Currency impacts can have unforeseen circumstances. For example, a portfolio (or a contract) that may be marginally profitable at the entity level may become loss making when consolidated to the group level due to currency factors.

Solution

The Aptitude solution has the capability to manage multi-currency inputs to IFRS 17 Group calculations, as well as FX, revaluations and recalculations in the subledger. It can also handle multi-country IFRS 17 interpretations to accommodate the varying accounting policy decisions at the country level.

CLIENT EXAMPLE: Currency transactions

There is also the issue of where to deal with currency transactions - in the actuarial environment or the accounting environment? From our clients' perspective, the consensus is the accounting environment. If all currency considerations are embodied in the actuarial models, there is the potential of hidden and unmanaged FX exposure, along with timing inconsistencies and mismatches. Some actuarial systems perform FX revaluations whilst others don't, so how do insurers consolidate and manage this FX exposure? Furthermore, not all inputs for IFRS 17 calculations come from the actuarial systems. Data can also come from policy administration, claims, expense, and asset systems - each of which will have to deal with currency considerations. Complex currency scenarios include:

- 1. Premiums might be in one currency, with claims in another;
- 2. In some contracts, the currency of claims settlement differs from the currency of loss while others have fixed foreign currency rates;
- 3. A reinsurance treaty may cover multiple entities creating a myriad of currency interactions;
- 4. Investment funds are often multi-denominated and;

The list goes on.

The feedback from most of our clients is that currency conversions are best undertaken centrally and ideally in an accounting engine/subledger.

8. Alignment with Solvency II

The key performance metrics for our insurance clients are driven by profit, cash flow, and capital – thus IFRS 17 and Solvency II (SII) are critical measurement metrics. Consequently, viewing the business with both an SII and IFRS 17 lens is important internally in order to explain differences to the market and rating agencies.

Outside of Europe many countries are adopting a SII type regime, or a risk-based capital equivalent. The United States has a long running risk-based capital regime and they are considering adapting this to achieve SII equivalence. The broad-based principles below apply regardless.

A direct reconciliation would appear to be impractical considering the differences between the two reporting regimes. However, a significant number of our clients are looking to develop a SII/IFRS 17 comparator built on a baseline delta approach. The diagram below highlights the main differences to be considered:

	Solvency II - Capital oriented	IFRS 17 - Profit oriented
Key metric	Solvency Capital Requirements (SCR)	Contractual Services Margin (CSM)
Coverage	All contracts	Excludes investment contracts (e.g. ERM's)
Discount rates	EIOPA prescribed	Top-down/Bottom-up reflecting liabilities
Risk	Risk margin (greater range of risks - Op Risk) 6% CoC	Risk adjustment - not prescribed
Profit recognition	Spread over lifetime	Day one gains recognised immediately
Reinsurance	Presented gross of Reinsurance (RI). Seperate RI asset mirrors direct contracts	All contracts measured gross of RI with separate RI asset - specific requirement for RI held
Granularity	Homogenous risk groups (typically line of business)	Portfolios/Cohorts
Acquisition costs	Portfolio level - included in liability cash flow	No deferral - Expensed as incurred
Simplification	No equivalent	PAA model
Separtating components	Separation of non-distinct investment components, derivatives etc	No separation
Business combinations	Additional recognition and remeasurement at point of transfer	Recognised as if written from inception

*The interaction between IFRS 17 and Solvency II is especially relevant for insurers which apply matching adjustment treatment to some or all of their portfolios

Consequently, an insurers' business planning and forecasting models will need to align with both SII and IFRS 17 requirements and models for evaluating potential investments and acquisitions. Educating external stakeholders, including analysts, and rating agencies will be a major challenge particularly during the transition period. Clear and transparent communications will help stakeholders navigate their way through the changes to regulatory and statutory reporting, improve confidence, and help mitigate any adverse impacts on share prices and ratings.

Solution

From a conceptual point, SII can be regarded as just another GAAP to process through our solution and on to the subledger for analysis and reporting. Running multi-GAAP, multi-entity, multi-currency environments is standard functionality. Thus, given the data, results and inputs of the SII actuarial models (similar in theory to IFRS 17) the solution can be configured to produce SII accounting transactions and the resultant balance sheet. Client requirements in this space tend to be very specific and we work with clients in the initial scoping analysis to define the solution.

As previously highlighted, a direct reconciliation is not practical due to the fundamental nature of the differences. Nonetheless several of our clients are interested in what they term an 'SII v IFRS 17 comparator.' This currently is not an out-of-the-box capability in the solution given the bespoke nature of the requirement. We are, however, discussing how an SII comparator might be engineered into our solution and will be accelerating this work as we approach the transition date.



9. Generating optimal IFRS 17 numbers

IFRS 17 is a new regulatory reporting regime and the numbers at transition and for the next few years thereafter will be carefully scrutinised by the market and the rating agencies. Thus, the calculation of the transitional balances will be critical as it will set the base foundation for the results for the following years. The CSM on transition may create some anomalies, particularly for legacy products issued decades ago when underwriting rules and market factors were very different.

All our clients already undertake extensive planning and forecasting activities, but IFRS 17 has introduced new measurements which will impact current views of future profit, loss, asset, liability, and equity positions. KPI metrics will also change as a result. There is a need to ensure that the planning processes incorporate the IFRS 17 changes. In particular, the company stakeholders have a keen interest in how the new measurements will impact the future financial results and will be looking at ways to structure their businesses to optimise financial returns.

CLIENT EXAMPLE: Requirements

A key capability requested by clients is that finance and actuarial teams have the ability to review sets of data that have been simulated before releasing the desired version to the production environment in a controlled and audited manner. So, the ability to set simulation parameters and assumptions, select optimal configurations, and review results is critical.

Another key requirement is the ability to project forward the IFRS 17 Balance Sheet and Income Statement over future time periods (typically three to five years) and to analyse the results. This in theory could be based on current data or a different simulated data set(s).

Solution

In response to client demands, we have added a Simulation and Forecasting capability to our solution.

This will enable clients to run multiple simulations and forecasts in a dedicated sandbox environment. Of interest to our clients is the forecasting capability – principally the ability to project key IFRS 17 metrics over future time periods and to understand the impact of key variables like different discount rates, different accounting choices, new amortisation schedules, loss component percentages, and different risk adjustments.

CLIENT EXAMPLE: Simulation/forecasting requirements

The main requirement from our clients is projecting out the IFRS 17 Balance Sheet to future time periods and analysing the results. This could be based on current data or a different simulated data set. A few of the other key forecasting requirements we have seen are:

- 1. Current year forecasts with rolling year-to-date actuals;
- Ability to produce Income Statement, Balance Sheet, CSM Run-Off and Liability Roll-Forward reports to view the current period impacts as well as future period impacts from the proposed assumption changes/ corrections/remediations;
- Ability to quantify BEL, RA, and CSM impacts of proposed Non-Financial and Financial Assumption changes. The assumption change might be a singular assumption change or a ladder/combination of assumption changes;
- 4. Sensitivity Shocks and the application of % changes to movement categories;
- 5. Ability to define the remeasurement duration (for example, quarterly for the first year and yearly for the remaining years) for the run.

10. Automation

An important upside of the proposed delay to IFRS 17 is that insurers can adopt a more phased approach to their project implementation. Clearly there will be an initial focus on data management, system updates and the integration of new components.

However, for the project to be successful, it is critical to automate the end-to-end process as much as possible. Automation must operate across the processing life cycle with a focus on fast-close initiatives and other major changes to reporting, planning and forecasting processes.

The automation life cycle would operate through the following steps:



CLIENT EXAMPLE: Financial reporting timetable improvements

Using the Aptitude IFRS 17 solution, our clients have made major improvements to their finance process, including:

- 70-80% reduction in manual processes which enabled skilled resources to be reallocated
- Reduction in month-end close times by 60%
- Reduced time spent on manual adjustments and reconciliations through increased automation

Solution

The Aptitude Solution includes an integral scheduling tool that is designed to integrate to an insurer's enterprise workflow engine.

This enables a high degree of automation across the IFRS 17 process and reduces costs and reporting timescales significantly. Importantly it will allow finance professionals more time to focus on more complex matters.



Aptitude IFRS 17 Solution

3 Conclusion

The primary takeaway from our market conversations is that many insurers underestimated the complexity of IFRS 17, especially around data granularity and the complex accounting processes. Equally, interpreting the Standard and understanding the impact of accounting choices has proved more problematic than insurers expected.

Implementing a fully functional IFRS 17 solution, even with the proposed one-year delay, will be challenging but industry leaders have made progress and learned a number of valuable lessons to date.

There are actuarial challenges but the delivery and complexity issues we hear are typically on the accounting and reporting side.

To learn more about our IFRS 17 solution visit or arrange a call with one of our experts visit our website:



Thank you to our authors

We would like to thank the authors for their time, commitment and expertise in creating this white paper

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Aptitude Software provides software solutions that enable finance professionals to run their global businesses, forecast decision outcomes, and comply with complex regulations. Uniquely combining deep finance expertise and IP rich technology, Aptitude gives finance leaders the tools they need to transform their business and achieve their ambitions.

Aptitude is proud to have served the offices of finance for over 20 years, delivering financial control and insight to create a world of financial confidence for our global clients.

Aptitude Software supports businesses with combined revenues approaching \$1 trillion and over 500 million end customers. Headquartered in London, Aptitude Software is an operating company of Aptitude Software Group plc.

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