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The technology implications of IFRS 17

The IFRS 17 standard, which was published in May 2017 after more than a decade of discussion and debate, will dramatically change the financial reporting processes of insurers. Yet many insurers are still wrestling with the challenges of its implementation.

While the accounting principles described in the standard are understood, there is still uncertainty about the best path to implement the optimal solution, since the circumstances of each insurer are very different. The uncertainty arises in part because the standard sets out principles, leaving some choices about specific methodology. However, the essential challenge of IFRS 17 is that it requires a totally new approach to the derivation of the core elements of financial statements and supporting disclosures. Insurers everywhere must develop new processes and systems solutions to manage the demands of preparing the numbers for new financial statements and disclosures. In addition, insurers must understand the potential impact on IFRS 17 financial results under various product types and experience scenarios.

Two new elements in IFRS 17 financials are the Insurance Contract Liabilities in the balance sheet, and the Insurance Service Revenue within the new statement of profit and loss. The calculation and data assembly processes that must be created to support these key lines, requiring a novel and complex combination of actuarial system calculations integrated with accounting data accumulated over the reporting period. These new processes must be performed by contract group, a new level of data granularity that sits midway between the policy contracts and the business portfolio in which the contracts are managed. Many companies require thousands of these groups due to the criteria for definition within the standard.

The result is not only a systems development challenge, but an operational challenge. New actuarial processes will generate large amounts of data, which must then be combined with accounting results and inspected, analyzed, validated and approved within narrow reporting windows.

It's without question a mammoth challenge, but one that can be met through new technology such as Moody's Analytics solution for IFRS 17, combined with the benefits of public cloud services from Microsoft.

There are two fundamental characteristics of cloud-based solutions which present significant advantages under the challenges of IFRS 17. Perhaps the most obvious advantage is the scalability of a cloud-based infrastructure such as Microsoft Azure. With conventional fixed infrastructures, insurers need the ability to estimate computational and data storage loads accurately, considering the concentration of this computational load at quarterly financial reporting windows becomes essential. A cloud solution that can quickly and efficiently scale to meet actual demand, with little or no residual infrastructure costs after the reporting load is over, presents tremendous advantages.

This scalability has tremendous potential advantage to actuarial modeling systems such as the AXIS™ actuarial system from Moody's Analytics, which makes up the first component of its total IFRS 17 solution. Actuarial systems' workloads are expected to increase by an order of magnitude based on the new calculations required to support current period reporting challenges. The cloud infrastructure required to manage these computations can be scaled up quickly on demand in Azure and then released upon completion.

What's more, the costs of the infrastructure and the total actuarial processing time are greatly reduced in an efficient cloud-based solution compared to the costs implied by a fixed-size on-premises or leased grid that could manage the calculations within the available window.

The cloud also presents distinct advantages within the second major solution component under IFRS 17. This processing step combines the massive output of the actuarial models with accounting data at the group level, and in the end delivers the detailed journal postings which feed the companies' general ledger systems.

The scalability of cloud infrastructure is an advantage in this step with the large amounts of data being imported, processed, and stored when IFRS 17 is fully implemented. Delivering this solution using a software-as-a-service (SaaS) model offers more convenience to end users, considering that the new solution software is still being developed and tested.

The uncertainty about the standard, teamed with the immaturity of the solutions, means there will be a maturation process leading up to the effective date and for some years after. The maturation, and the need to support simultaneous updates of solution software for all clients, can be managed more smoothly by vendors adopting a SaaS approach. Using a SaaS approach, they have total control of the IT infrastructure and their solutions are effectively insulated by a consistent, customized environment that vendors manage. This allows them to inject new versions of their software into these cloud environments simultaneously for many clients when the software is ready and removes the complications of simultaneously supporting current systems and other enterprise applications sharing fixed resources.

Actuarial and accounting software embedded in production financial reporting processes has not been commonly based in the cloud to this date. However, it seems likely the rapid development of massive cloud resources can be put to good use for the new IFRS 17 reporting solutions.

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