

ARTICLE

Managed actuarial services

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04 September 2024

Introduction

Financial reporting and regulatory capital standards are continuously evolving to improve transparency, comparability and reliability of financial statements. Standards such as the International Financial Reporting Standards (IFRS), the US Generally Accepted Accounting Principles (US GAAP) or risk-based capital (RBC) requirements undergo periodic updates to reflect new economic realities and business practices. These changes pose several challenges for insurance companies:

- The technical nature of new financial reporting standards requires specialised knowledge to interpret and implement correctly.
- Changes in financial reporting standards can significantly affect an insurer's financial statements.
- Ensuring compliance with updated standards is critical but challenging.

For insurance companies operating in multiple geographies or with requirements to report on multiple bases, the above challenges become manifold.

With ever-evolving financial reporting standards, globalisation and the changing regulatory environment, the demand for actuarial resources is increasing. In this article, we have explored the areas where actuaries are involved in any financial or regulatory change implementation and provide post-implementation support. Further, we introduce the idea of managed actuarial services, which is a practical solution for insurance companies to meet their reporting requirements in a cost-effective manner.

Actuaries' role in the implementation of new financial reporting standards

Actuaries play a key role in the implementation of new financial reporting standards. Their expertise in risk assessment, financial modelling and statistical analysis makes them indispensable in ensuring that changes are accurately reflected in financial statements. Actuaries help interpret the technical requirements of new standards, assess their impact on financial positions and guide the strategic decisions needed to comply with these standards. The following areas require actuarial expertise for a successful implementation:

Methodology: Actuaries design actuarial liability valuation methodologies that align with the new standards, ensuring that all calculations and projections are based on consistent, logical and transparent processes. This involves understanding the specifics of the new standards and translating them into practical steps that can be implemented within the insurer's existing framework.

Data: Actuaries are required for identifying the necessary data inputs, ensuring their quality and integrating them into the financial reporting system. This includes validating historical data, managing data flows from various sources and ensuring that data is clean, accurate and timely.

Assumptions: Actuaries employ their expert judgement to ensure that assumptions are reasonable, consistent with industry standards and reflective of the insurer's specific circumstances. Regular reviews and updates of assumptions are necessary to ensure ongoing accuracy and relevance.

Models: Actuaries build and maintain the complex liability valuation models required for accurate reporting. These models must be robust, flexible and capable of handling large volumes of data. Post-implementation, actuaries perform ongoing model reviews and validations to keep models in check for their intended reporting purposes.

Process: The implementation of new standards involves numerous processes that must be carefully managed and coordinated. Actuaries play a key role in designing and overseeing these processes, ensuring they are efficient, repeatable and aligned with regulatory requirements. This includes developing workflows, setting timelines and coordinating with other departments to ensure a smooth transition to the new standards.

Controls: Actuaries establish and monitor controls throughout the reporting process, from data collection to final output.

Analysis: Actuaries provide detailed analysis to interpret the impact of new standards on financial statements. This includes assessing the implications for the insurer's financial position, identifying potential risks and recommending strategic actions to mitigate these risks.

Audit: Actuaries support the audit process by providing necessary documentation, explaining methodologies and assumptions and addressing any questions or concerns raised by auditors. They also use audit findings to improve processes and controls, ensuring continuous improvement and adherence to best practices.

Challenges of new implementations

The need for expert actuarial skills in implementing new financial reporting standards arises from:

Complexity: The technical nature of new reporting standards requires deep expertise. Each standard comes with intricate rules and guidelines that must be thoroughly understood and accurately applied. Actuaries need to interpret the requirements and transform requirements into methodology, which requires significant expertise.

Compliance: Maintaining compliance with multiple reporting standards adds complexity. Insurers operating globally must navigate a diverse array of financial reporting standards and regulations. Each jurisdiction may have unique requirements, timelines and interpretations, creating a complex compliance landscape. This necessitates a robust understanding of international regulations and the ability to adapt to different reporting frameworks, all while ensuring consistency and accuracy across all reporting standards.

Change management: Effectively managing organisational change and training staff is critical. Implementing new financial reporting standards often demands significant changes to internal processes, systems and controls.

Implementation and results analysis: Expert actuarial modelling skills are required for implementation, restating historical actuarial balances and interpreting the changes in these balances. Significant time and resources are needed to implement changes. The process of adopting new standards involves extensive planning, analysis and execution phases. Insurers must allocate dedicated teams to manage these tasks, often diverting actuarial resources from other critical areas of the business.

Managed actuarial services

One viable solution, to manage the challenges mentioned above, is to pass on the responsibility of methodology design, implementation and end-to-end results production under new requirements to an expert third party. While the insurer retains the ownership of overall methodology and results, the third party has the onus of identifying the appropriate technology to use, developing the process, producing the results and reporting it to the insurer, while maintaining accuracy and quality of work. The third party assumes responsibility for maintaining all the required documentation and appropriate controls and providing audit and ad hoc support as and when needed, whilst liaising with the insurer for critical inputs along the way.

Such an arrangement is favorable to insurers as they get the desired results without worrying about the associated operational activities and challenges. It also allows the insurers to ensure the delivery of work without having the need to invest in building an in-house team. This is particularly important in situations where the requirement is sudden, temporary or infrequent in nature. In such scenarios, managed actuarial service allows rapid scalability of resources at all levels, access to best industry practices and access to desired expertise in a cost-efficient manner. For this arrangement to work, the third party should have proven capabilities to deliver on complex reporting requirements and insurers should maintain enough oversight to keep the overall process in check. Managed actuarial services could also cover knowledge and process transition back to the insurer on pre-agreed terms.

Even in situations where the requirements are well-defined, a managed actuarial service allows an insurance company to benefit from the experience of a specialised third party. A specialised third party, with experience in providing managed actuarial services to many insurers, can bring in cost efficiencies, improved model management and better compliance with the standards. It can also provide consulting advice on future changes in the reporting standards or business environment.

Case study

In this section, we have illustrated a client case study on how we helped a large life insurance company implement US GAAP reporting, in a short timeframe, using a managed services model.

Developing methodology

Milliman developed an approach which used cash flows derived from the client's existing models (with some modifications) and produced cohort-wise net US GAAP actuarial liability balances, along with roll-forward analysis, using Milliman's tools and technologies. The development of the approach involved the following steps:

- Interpretation of the US GAAP reporting standard, in particular Accounting Standards Codification (ASC) 944, and adapting it for the products in the company's portfolio.
- Supporting the company with product classification and grouping, which included
 - Understanding the characteristics of products sold by the insurance company
 - Classifying the products by valuation methodology as per the ASC 944 framework
 - Grouping products with similar characteristics
 - Determining the annual cohorts
- Defining the methodology for deriving US GAAP discount rates.

- Defining the approach for each actuarial balance as required by ASC 944 and the roll-forward of these balances.

While the ownership of the methodology was with the company, Milliman's global expertise helped the company define its methodology as per company's business and reporting requirements.

Building the tools and process

After defining the methodology, the next key task was to implement it to produce the required numbers. This can be a daunting activity, especially considering the constraints that the new process should integrate well with the client's existing actuarial systems while also being efficient to produce results in time.

Under the managed services model, the insurance company was indifferent about the technology or tools that Milliman would use for the implementation, as long as the overall process met all audit requirements. The managed services model eliminates the need for the client to invest in finding and acquiring appropriate manpower or identifying the technology solution that should be adopted. By leveraging the lessons learned from several similar projects, the consultants were able to develop the best possible solution, while ensuring that industry best practices are followed and maintaining appropriate controls. By not having to be involved in the solution being developed, the client had the bandwidth to focus on its other important strategic areas.

Results production and reporting

Under the managed services model, the client also passed the responsibility of results production to Milliman. The client could plan knowledge and process transition at its own pace. With time, the client can develop expertise in-house while not worrying about delays in results production or incurring costs to hire additional resources.

Conclusion

The landscape of financial reporting is constantly evolving, presenting insurance companies with significant challenges in maintaining compliance, accuracy and transparency. The complexity and resource intensity of implementing new financial standards can strain an insurer's capabilities.

Under the managed services model, working with specialised third parties, insurance companies can ensure high-quality results while mitigating the operational burden. This approach provides flexibility, allowing insurers to scale resources as needed, to access best industry practices and to leverage expert knowledge without the need for substantial in-house investment.

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Milliman leverages deep expertise, actuarial rigor, and advanced technology to develop solutions for a world at risk. We help clients in the public and private sectors navigate urgent, complex challenges—from extreme weather and market volatility to financial insecurity and rising health costs—so they can meet their business, financial, and social objectives. Our solutions encompass insurance, financial services, healthcare, life sciences, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.