Actuarial managed services: business case and leading practices

By: Dave Czernicki, Kush Kotecha and Dave Cosentino – Ernst & Young LLP

Executive summary

Over the last few decades, insurers – like companies in other industries – have fundamentally changed their sourcing approach for many important operations and turned to managed services. Managed services, such as outsourcing and software-as-a-service (SaaS) initiatives, have reshaped the information technology (IT) function at many companies.

Third-party administrators (TPAs) took on many billing, accounting and claims management tasks for insurers. These companies also took on broader roles within the life insurance and annuity sectors, such as assuming greater responsibility for the administration of closed blocks, thereby creating a new sourcing model in the process. There are also insurers that have outsourced functions that require a heavy, up-front infrastructure and people investment, such as variable annuity hedging programs.

Traditionally, insurers have viewed the actuarial function as a core competency and, for the most part, it has not been sourced to third-party providers. Today, however, market complexity, cost pressures and a shortage of talent are causing many insurers to rethink the best approach for all kinds of work and functions, including actuarial.

This article examines the emergence of actuarial managed services as a viable component of an insurer’s operating model in a broader context. Specifically, it will outline the foundational business case, highlight processes that are good candidates for migration to managed services and suggest a few effective first steps for insurers considering moving forward with a new sourcing approach to actuarial processes.
Why actuarial managed services? Why now?

In a time of considerable industry change, there are multiple catalysts driving insurers to consider new sourcing models as a means to drive efficiency gains and boost performance. At a macro level, the entry of nontraditional market participants, such as private equity firms and start-up reinsurers that lack infrastructure and operational expertise, has necessitated new sourcing models. Then there are the perennial internal cost pressures on finance, risk and related functions for more established providers.

Executives must always find ways to do more with the less. And doing more is very much an issue for actuarial leaders, as new market pressures, operational demands and changing regulatory requirements are increasing the actuarial workload. At most insurers, there is simply not enough actuarial bandwidth and expertise to handle all of the required work. Outdated legacy systems are prevalent and driving the need for actuarial transformation; the resulting transition to a transformed operating model also places near-term constraints on in-house actuarial resources. Even if there were enough actuaries to go around, hiring them full-time might not make economic sense, given the need for flexibility to meet seasonal demand spikes.

The talent gap pinches insurers in other ways, too: senior actuaries are spending a significant amount of time on administrative processes and relatively low-value tasks, while the high training costs for new recruits have long payback periods. There is also the issue of retaining and recruiting staff in select geographies.

At the same time, increasing product and business complexity have raised the bar for sophisticated actuarial analysis, robust decision support and quality outputs. Constant adaptation to emerging change competes with resources’ attention to provide this value-added analysis and enhancement of the actuarial paradigm. The challenge is even greater for global organizations, which expect consistency and are looking for market insights and trusted business advisors with front-office accountability.

Organizational applicability

Companies of all sizes and vintages face diverse issues and market challenges, making the applicability of managed services and related considerations different for each organization. Large, established providers typically have a wider internal resource pool to handle fundamental actuarial requirements, but, at the same time, may have a wider array of demands to deal with, such as Federal Reserve oversight or a broader product base to service. Relative to a smaller insurer or new market entrant, the prospect of managed services for established large insurers may present an avenue to carve out repeatable, non-core tasks, freeing up resources to focus on other value-added activities. The new market entrant, on the other hand, could see managed services as an avenue to provide core actuarial back-office support while their organization grows and becomes more established over time. The table below provides our view of the applicability and deployment of a managed services model for insurers of varying sizes.

<table>
<thead>
<tr>
<th>Organization type</th>
<th>General applicability of managed services</th>
<th>Functional candidates for managed services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large, established insurers</td>
<td>Managed services to be used selectively to address non-core activities or free up skilled resources to increase internal bandwidth of core activities</td>
<td>• Model validation and model risk management program support</td>
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<tr>
<td></td>
<td></td>
<td>• Valuation support of closed blocks</td>
</tr>
<tr>
<td>Medium-sized insurers</td>
<td>Managed services to be used to provide necessary bandwidth on core and non-core activities as needed, help meet increasing demands on actuarial function.</td>
<td>• Financial model maintenance</td>
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<tr>
<td></td>
<td></td>
<td>• Valuation support for select open blocks</td>
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<tr>
<td></td>
<td></td>
<td>• Process and control efforts</td>
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<tr>
<td>Small-sized insurers or new market entrants</td>
<td>Managed services to be used to administer core actuarial functions in near term, with an eye toward “recapture” once scale achieved</td>
<td>• Full valuation support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Experience study analysis</td>
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We see that the appropriateness of managed services to an individual organization should take into consideration company size, current actuarial function staff levels and capabilities, current and anticipated future demands on the actuarial function and considerations for the growth of the underlying organization.

**The business case**

Managed services, or “actuarial-as-a-service,” offer a clear and compelling value proposition amid the challenges of select organizations and associated functions.

The key components of the business case include:

- **Resource flexibility and cost savings**: An efficient and flexible cost structure may look especially attractive given the impact of the talent shortage on costs and the likelihood that regulatory change will increase demand on actuarial teams. Indeed, gaining certain access to critical resources through peak demand cycles and as business needs change is another important variable in the value equation. In some cases, co-sourcing actuarial processes can reduce actuarial costs on a net basis as well.

- **Access to leading practices, market insights and advanced technology**: As with the most effective sourcing partnerships, companies can also benefit from improved access to leading practices, market insights and advanced technology. In this way, actuarial managed services can be designed to enhance the quality, consistency and timeliness of information. This can even increase the value actuarial services contribute to the business, through strengthening analytical and decision support capabilities.

- **Management focus**: Robust operational support allows senior management to focus on new transactions and changing business priorities, in lieu of more commoditized work, such as reserve calculations or model maintenance.

**What works in a managed service model?**

As with IT and finance, the processes or functions best suited to a managed service model are repeatable or periodic in nature, and have clearly defined work requirements. For instance, within financial reporting and enterprise risk management requirements, reserve recalculations, cash flow testing and periodic validation of financial models make sense for managed services. Other processes, such as product repricing, experience studies, and periodic profitability and risk analysis, may also fit well within a managed services model.

**Which actuarial processes are the leading candidates for managed services?**

<table>
<thead>
<tr>
<th>Good candidate?</th>
<th>Product function</th>
<th>Financial reporting function</th>
<th>Modeling function</th>
<th>Risk management function</th>
</tr>
</thead>
</table>
| No              | - Product strategy and design  
|                 | - Product management  
|                 | - Financial reporting basis changes  
|                 | - Assumptions  
|                 | - Risk and capital framework  
|                 | - Risk appetite |
| Maybe           | - Pricing  
|                 | - Illustration and compliance  
|                 | - Analysis of results  
|                 | - Current topics  
|                 | - Adhoc projections  
|                 | - Decision support and analytics  
|                 | - Reinsurance program reviews  
|                 | - Profitability and risk analysis |
| Likely          | - Rate filings  
|                 | - Experience studies  
|                 | - In-force valuations  
|                 | - Reconciliation and controls  
|                 | - Model maintenance  
|                 | - Production runs  
|                 | - Model validation  
|                 | - Customer analytics |

Clearly, the processes that speak to the core of the business model and are more bespoken in nature, including product strategy and design and the definition of risk appetite, are not good candidates for managed services or co-sourcing. Still, by using managed services for other tasks, companies benefit by freeing up senior actuarial staff to focus on these steps, rather than dealing with non-strategic matters like product tax or cash-flow testing.
Taking the right first steps

Once it is determined that a managed services model is the right path to take, for many insurers, the first step involves evaluating and identifying the right processes and functions for inclusion in a managed services model. Ideal characteristics of functional candidates for managed services are:

- **Repeatability**: where the work is periodic in nature
- **Leverageable**: where the majority of the work can be handled by junior staff
- **Non-subjective**: the work requirements can be defined clearly and mapped at the onset

Experienced managed services providers can and should help in identifying the applicable functions and assessing each function’s feasibility under a managed services solution. Such partner also should have a clear and proven approach to transitioning processes and ongoing oversight.

A leading practices approach features clear and complete specifications for all targeted processes, implementation models, and regular planning and review meetings, as well as frequent touch points to triage issues and stay ahead of requirements. Clear protocols for knowledge transfer are another enabler of success.

It’s also worth asking managed services providers if they have sufficient technology and data management capabilities to provide stable support during the transition and initial phases, as well as over the long term. Lastly, there is a benefit in having a clearly defined “ramp-down” process if and when insurers wish to reassume control of certain tasks and functions.

The bottom line

As profound changes reshape the insurance industry landscape, companies are more reliant on the efficiency and effectiveness of their sourcing relationships. Even with traditionally critical competencies within the actuarial function, there is a real opportunity to gain a competitive advantage by optimizing subprocesses and key capabilities. Indeed, it has become a strategic imperative given the high-complexity market and ever-changing regulatory environment. Those are the forces pushing many insurers to embrace managed services for their actuarial functions – a strategic evolution that is likely to continue and gather steam given the clear business justification. The value proposition is there for insurers ready to move forward.