Risk modeling solutions provide faster real-time insight into risk exposure.

Regulation is putting enormous pressure on insurance carriers to manage capital and institute strong policies and procedures for supervisory review and market disclosure. Compliance and risk management remain top priorities for insurers as they look to navigate this increasingly complex business environment. A more comprehensive approach to risk management and analytics improves the accuracy and integrity of the insight carriers can have with their actuarial, financial, and operational risk. Insurance carriers, brokers, and reinsurers are therefore seeking risk insight systems, including actuarial solutions, predictive analytics and enterprise risk management platforms.
Enable quicker decision making through faster modeling

Actuaries gain access to elastic compute capacity, which enables them to run their models more quickly, more often, and to run more “what if” analyses. One benefit for insurance carriers is to provide the modeling compute power needed to more quickly and accurately complete the required financial reporting processes at the quarter and year.

Improve actuarial productivity and risk insight

Actuaries often are some of the highest paid employees within an insurance company. Having actuaries wait hours for results from their models is not a cost-effective use of their time. With more modeling comes more accurate models, leading to a more accurate view of the insurance company’s risks, liabilities, and reserving requirements. Optimizing reserving levels means insurance companies can keep more of their money in the business.

Risk modeling solutions enable customers to take advantage of unlimited, elastic cloud resources. The cloud provides capacity on-demand, helping insurers to optimize their use and achieve significant efficiencies as well as enabling them to be more ambitious in the way they model risk, and potentially respond to change (such as accommodating new regulatory demands) more quickly.

Reduce and shift infrastructure costs

The cost of grid infrastructure in the cloud is often 25 percent the cost of on-premises grids. Similarly, the cost of cloud storage for the increased number of models and output files also is 25 percent the cost of on-premises storage providers. Often even the best managed grids only enjoy 60 percent utilization over the course of a fiscal year. By shifting the high performance computing grid to the cloud, insurance companies benefit from elastic compute capability to meet those spikes in demand, and benefit from retiring their often constrained and aging infrastructure.

Respond quickly to regulatory changes

Increasingly, financial services regulators are putting in place more stringent and demanding reserving requirements (e.g. Solvency II). Insurance carriers using risk/actuarial bursting can respond more quickly to these regulatory changes. These regulations change frequently and create a huge overload for the business. A risk modeling solution enables readiness to handle dynamic regulatory demands.
Solution overview
Risk Modeling

Risk modeling solutions provide faster real-time insight into risk exposure

- Reduce calculation times and increase actuarial efficiency
- Reduce infrastructure costs and use capacity on-demand
- Respond more quickly to regulatory pressures
- Improve risk insight

Microsoft Azure

Fixed cost (on-premises)

Variable cost (cloud)

Data processing demand
Why Microsoft

Microsoft is empowering insurance customers to deliver improved risk management experiences to their business. Complex risk or financial models can now be run faster and more often with an ability to “burst” the models against compute power provided by high performance computing grids in Microsoft Azure. Through a combination of Microsoft and partner solutions, insurance carriers can better respond to overall industry and market demands.

Comprehensive Solution. The Microsoft advantage is a complete platform and experience to support risk modeling. With our solution you can run models more often, improve risk insight accuracy, respond to regulatory changes related to liquidity/capital requirements, offload HPC grid costs from CAPEX to OPEX, reduce IT infrastructure costs, and gain access to elastic compute capacity for their actuaries and other data scientists.

Highly secure. Microsoft takes a holistic approach encompassing four categories that affect trust in the cloud: cybersecurity, data privacy, compliance, and transparency. Microsoft is unique among major cloud services providers in offering cloud service-specific privacy statements and making strong contractual commitments to safeguard customer data and protect privacy.

“We chose FIS’ Prophet Managed Cloud Service because we want to optimize the performance of our actuarial modeling processes while controlling costs, Increasing modeling agility is vital, and we look forward to the flexibility of creating virtualized model environments in the cloud when we need them, and turning them off when we do not.”

— Garth Jones, Group Chief Financial Officer at AIA

AIA used our solution to standardize on actuarial systems used across the company, achieved greater levels of efficiency, pay for processing power as it is needed and improved their modeling capabilities overall.

The environment which we’ve jointly built now is a streamlined, simple, well-documented, flexible environment ... it also is able to tap the vast amount of computing power within the Microsoft Azure cloud.”

— Tony Kassimiotis, Managing Director, Operations, Phoenix Life

Learn more
insurance.azure.com