



Don't Rip and Replace:

How Insurance Providers Can
Do More with Data in the Cloud

Chapter 1:

The Benefits of Cloud for the Insurance Industry

In an era marked by rapid technological advancements and evolving customer expectations, the insurance industry is at a pivotal point. The adoption of cloud computing is no longer a question of “if” but “when.” Yet, the industry has been slow to adopt the cloud, often relying on on-premises legacy systems. Yet in order to remain competitive, insurance providers need to identify more modern channels and develop new products and services. And to do all that, they simply must adopt cloud. Here, we explore the many benefits the cloud brings to insurance providers, highlighting why this transition is imperative for staying competitive and innovative. We'll also talk about how to get more from your existing technology investments and appealing to your customers without having to buy or build new systems.

Improved Customer Experience

According to Gartner, one of the top reasons insurance providers are adopting digitalization initiatives is to improve customer experience and achieve operational excellence. The cloud enables insurers to provide a seamless and personalized customer experience. For example, cloud-based platforms make it possible for insurers to provide self-service capabilities through online portals and mobile apps. Customers can easily access and manage their policies, initiate claims, and review documents with a click of a few buttons. With cloud-based platforms, insurers can also leverage big data analytics and AI to gain insights into customer behavior, preferences, and risk profiles. AI can provide customer insights to insurers so they can recommend products at the right time. In addition, AI allows insurers to adopt a predict and prevent strategy that helps to minimize damage, injury, loss of life, and big payouts. All while ultimately enhancing customer satisfaction and loyalty. And if a full rip-and-replace isn't an option, having a modern front end for the end-users while maintaining a legacy system on the backend is an option.

Enhanced Data Security

Cloud platforms typically offer robust security measures. Leading cloud providers implement significant security protocols, including encryption, multi-factor authentication, and regular security audits. For insurance companies handling sensitive customer information, these measures are required for data integrity and compliance with regulatory standards.

Cost Efficiency

Traditional IT infrastructures are costly to maintain, requiring significant investment in hardware, software, and skilled personnel. Cloud solutions, on the other hand, if approached the right way and managed carefully, can be more cost-efficient. Cloud solutions offer a pay-as-you-go model, allowing insurance companies to scale resources up or down based on demand. This flexibility reduces capital expenditure and optimizes operational costs, allowing you to save more over a long-term investment.

Agility and Innovation

The insurance landscape is continuously evolving, with new products and services being introduced regularly. Cloud computing fosters agility, enabling insurers to rapidly develop, test, and deploy new applications and services. This includes Risk Modeling where environments can quickly be spun up to run a new set of models and then shut down when the model is no longer needed. This ability to innovate swiftly ensures that insurance providers can meet market demands and capitalize on new opportunities.

Disaster Recovery and Business Continuity

Natural disasters, cyber-attacks, and other unforeseen events can disrupt business operations. Cloud solutions enable companies to implement robust disaster recovery and business continuity plans, ensuring that data is backed up and recoverable in case of emergencies. This resilience is crucial for maintaining trust and reliability in the eyes of policyholders.

Adopting a Predict and Prevent Strategy

Insurance providers are increasingly adopting predict and prevent strategies to improve customer service, reduce costs, and enhance risk management. By leveraging data and technology, these strategies not only help predict and mitigate risks but also enhance overall customer satisfaction and loyalty by offering proactive and personalized services.

The following are general examples from the industry on how insurers are adopting a Predict and Prevent strategy:

Telematics and Usage-Based Insurance (UBI): **Progressive's** Snapshot program uses telematics to monitor driving behavior, including speed, braking, and mileage. This data helps predict the likelihood of accidents and offers preventive measures such as feedback to drivers to improve their driving habits, reducing the risk of claims.

Health and Wellness Programs: **John Hancock's** Vitality program integrates wearable technology and health data to offer personalized wellness recommendations. By encouraging healthier lifestyles through incentives like lower premiums for active policyholders, they predict and prevent health issues that could lead to costly claims. They also increased from 2 customer touchpoints a year to over 20 a month, improving their relationship with customers. Meanwhile, Oscar Health uses data analytics to predict chronic disease trends among its members. They offer preventive care programs such as regular health screenings, personalized treatment plans, and lifestyle coaching to manage conditions like diabetes and hypertension more effectively.

Catastrophe Modeling and Risk Assessment: **Munich Re** employs advanced catastrophe modeling to predict the impact of natural disasters such as hurricanes and earthquakes and analyze the future impact of climate change on the planet. By understanding potential risks, they can advise policyholders on preventive measures like building reinforcements or relocating to less risky areas.

Predictive Maintenance in Property Insurance: **State Farm** uses IoT devices in homes to monitor conditions such as water leaks or electrical issues. These devices send alerts to homeowners and the insurance company when potential problems are detected, allowing for timely repairs before significant damage occurs.

Behavioral Insurance in Life Insurance: **Prudential's** LINK program uses machine learning algorithms to predict life insurance needs based on an individual's life events and behavior. This allows for personalized policy adjustments and preventive measures like financial planning advice to ensure adequate coverage.

Cyber Risk Assessment and Prevention: **AIG** offers cyber insurance that includes risk assessment tools to predict potential cyber threats. They provide preventive services like employee training and system vulnerability scans to reduce the likelihood of cyber-attacks.

Chapter 2:

Roadblocks and Challenges in Cloud Adoption for Insurance Providers

While the benefits of cloud adoption are substantial, the journey to the cloud is fraught with challenges. Insurance providers must navigate these obstacles to successfully transition their core systems and fully realize the advantages of cloud computing.

Regulatory Compliance

Insurance companies operate in a highly regulated environment. Ensuring compliance with data protection laws, such as GDPR and HIPAA, is a significant challenge, especially with regulations constantly evolving. Migrating to the cloud requires meticulous planning to ensure that data handling, storage, and processing meet regulatory standards, which can vary by region and type of insurance.

Data Migration

Migrating legacy systems and vast amounts of data to the cloud is a complex process. It involves ensuring data integrity, minimal downtime, and maintaining operational continuity. Data migration can also expose companies to risks of data loss or corruption if not managed properly.

Security Concerns

Security is always top of mind for those in the industry. Despite the enhanced security features offered by cloud providers, concerns about data breaches and cyber-attacks persist. Insurance providers must address these concerns by implementing stringent security measures and educating their workforce about best practices in cloud security.

Integration with Existing Systems

Insurance companies often rely on a mix of legacy systems and modern applications. This can include data from different divisions within the organization, along with third party sources such as weather data, social media, etc. Integrating these disparate systems with cloud platforms can be challenging. Ensuring seamless communication and data flow while migrating these monolithic systems to the cloud is critical for maintaining operational efficiency.

Cultural and Organizational Change

Adopting the cloud requires a shift in organizational culture and mindset. Employees need to be trained in new technologies and processes, which can be met with resistance. Additionally, aligning IT and business goals to support cloud initiatives requires strong leadership and change management strategies.

Once core systems are in the cloud, insurers can combine this data with third-party sources to provide better services for their customers. This can include weather data for home insurance providers looking to have homeowners get ahead of storms, individual data from social media for health insurance purposes, or geospatial tools and analytics like ESRI and Disaster Tech for risk management.

However, there are still a few ways that the cloud can leave them wanting once their migration journey is complete. Especially for more robust database workloads that might require more power and have complicated licensing costs that can eat into budgets. Overcoming these additional challenges can enable the adoption of cutting-edge technologies and allow you to get the most value out of your systems on the cloud.

Cloud Adoption Strategies for Insurance Providers

In order to successfully transform the business and take advantage of the cloud, insurers need to significantly alter their core system strategy. There are three primary strategies for adopting the cloud:

- 1. Purchase a Commercially Available Core System:** This could involve replacing or updating an existing core system to make it more adaptable and responsive to the carrier's needs. Commercially available systems are typically well-tested and supported by vendors, reducing the risk of implementation issues and enabling faster time to market, especially if the vendor provides comprehensive support and training. Yet the initial purchase and ongoing licensing fees can be expensive, particularly if extensive customization is required.
- 2. Develop a New Proprietary Platform:** Some companies may opt to construct an entirely new platform tailored to the carrier's specific needs. While this option gives full control over the platform without relying on third-party vendors, a custom-built platform can offer unique capabilities that set the carrier apart from competitors while futureproofing for long-term scalability and adaptability needs. Yet developing a new platform from scratch is typically very expensive, requiring significant investment in both time and resources and delaying the benefits of cloud migration for years.
- 3. Migrate a Legacy Platform to the Cloud:** This involves adjusting the existing environment to optimize processes and make more efficient use of technology. Migrating an existing platform to the cloud is generally less expensive than the other options and can often be completed more quickly. In fact, gradual migration and incremental improvements allow for continuous optimizations, making it easier to adapt to changing business needs over time. However, legacy systems might require significant reengineering to achieve optimal performance on the cloud and they may struggle to scale effectively, limiting their ability to support future growth.

Each option has its pros and cons, but the reality is that there is much value in current applications and data that the business is leveraging. Modernization does not require a rip-and-replace or a risky rebuild to get additional insights and capabilities to improve outcomes. Insurers need to assess the cost, time to market, and overall risk.

Beyond choosing a core system strategy, insurers must also consider the broader landscape of cloud adoption decisions. This includes whether to build or buy solutions, selecting the right platform (on-premises, cloud, or hybrid), and making strategic choices about legacy systems – whether to upgrade, replace, or maintain them in-house or leverage low-code/no-code platforms for quick enhancements. Decisions on database management, such as whether to manage it internally or outsource to a third party, and how to implement functional modifications, will also impact the overall success of cloud adoption efforts. Experienced execution and delivery capabilities are essential to navigate these complexities, ensuring that the chosen path aligns with the insurer's long-term goals and delivers the expected business outcomes.

Chapter 3:



Getting the Most Value on the Cloud with Silk

Silk can help you get maximum value on the cloud. With Silk's software-defined cloud storage, you get faster database performance that matches or exceeds your on-prem performance. This faster performance allows you to achieve greater insights and accelerate decision-making. Run core systems in the cloud without any disruption or degradation of performance. In addition, Silk makes it easy to bring your data to analytics and AI services. The platform's zero-footprint snapshots bring production data to analytic services quickly, securely, and with minimal impact on cloud footprint to save on costs.



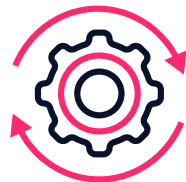
Performance

Silk offers up to 10x more throughput and IOPS and reduced latency compared to native cloud alone. It achieves this through optimized performance pools of shared cloud resources. With faster performance, insurance providers can improve customer experience by speeding up the onboarding process and claims processing, as well as improve modeling.



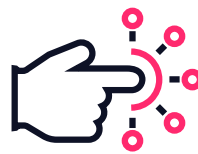
Costs

Eliminate overprovisioning and reduce your data footprint with Silk. Those same optimized pools of shared cloud resources help remove I/O bottlenecks, enabling Silk to reduce cloud overprovisioning. In fact, users have seen up to a 50% reduction in cloud compute and database license costs. In addition, Silk runs all data through real-time data reduction that reduces data between 2-6x. By optimizing the data, Silk makes it possible to run better algorithms which, in turn, can increase efficiency and lower the costs of acquisition, claims, fraud, and underwriting.



Availability

Downtime is unacceptable in the insurance industry. Which is why it is important that providers maintain a high level of availability. Silk helps with just that by adding multiple levels of protection on top of your cloud infrastructure. With proactive monitoring of cloud events, Silk can anticipate and address cloud maintenance disruptions before they impact the customer, while leveraging a self-healing architecture to minimize the impact of unexpected cloud instability. Additionally, Silk's comprehensive data snapshots and replication features act as insurance during potential downtime. With greater availability, providers can rest easy knowing that they are able to fully leverage Predict and Prevent modeling services and ensure there is never any delay in underwriting.



Data Services

Imagine what better access to data could do for your organization: your teams would be able to accelerate development and testing of new products, you'd have an improved understanding of your customers and be in a stronger position to upsell or cross-sell to them. Silk gives your entire team better access to data through its Instant Extract feature that allows you to take hundreds of immediate, full-performance copies of your database with zero footprint and no extra costs. With these copies, you can automate workflows of production data for analytics, Dev/Test, and GenAI purposes making instant data access across teams a reality. Accelerate development timelines, improve quality, and expand data access throughout your organization with Silk's Data Services.



Sentara Health Plan's Story

Sentara Health Plan is the health insurance division of Sentara Healthcare, a not-for-profit integrated healthcare organization in the Virginia and North Carolina area. Its team had decided that it was time to move its TriZetto QNXT workloads to Microsoft Azure. But it needed a way to optimize claim processing times, accelerate development and testing workflows, and optimize cloud costs.

With Silk, Sentara was able to achieve 6x faster data warehouse refreshes and cut UAT environment refresh times from days to mere minutes. Through 2:1 data compression, the team was able to reduce its cloud resources, dramatically increasing cost efficiency even while scaling up the environment. Silk's Instant Extract snapshots made it possible for Sentara to take as many copies of data as needed, without going over budget. These snapshots enabled Sentara to increase the efficiency of their data masking workflows by getting the right data to the stakeholders who need it quickly while ensuring proper handling of sensitive information. Coupled with the ability to simply lift and shift data into DR, Sentara was able to increase its savings even further.

Ready to see what Silk can do for you?

Visit <https://silk.us/solutions/insurance/> to learn more.

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