Insurers are traditionally conservative in their approach to the public cloud, yet they are more optimistic about taking a hybrid cloud path.

Hybrid Cloud Opportunities for Insurance Companies: Combining Tradition and Technology

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Questions posed by: Nutanix
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Q. What is the overall view of insurance carriers with respect to the cloud and its various models?

A. Insurance companies are traditionally rather conservative and risk averse in their approach to the cloud. This is reflected in the overall lower preference for any type of cloud environment when compared with an on-premises deployment.

Insurers lag behind other financial services industries in adopting cloud technology. This disparity is evident within the insurance industry itself, with property and casualty insurers more favorable toward cloud adoption compared with life insurers. This conservative trend persists across these lines of business, but especially in the domain of public cloud deployments even though they offer notable advantages in terms of flexibility and scalability. Only a small proportion of insurers have reached the highest stage of maturity, where all applications run on a consistent cloud architecture.

Nonetheless, insurers have made strides in the area of cloud, and they fully understand the advantages of moving into the cloud at least in line with their changing appetite for shifting compute-heavy workloads. This trend is evidenced by a significant growth in IT cloud spending. Cloud adoption is no longer solely driven by the goal of reducing IT costs; it is increasingly acknowledged as a crucial strategic enabler for businesses.

Q. What are the key benefits and challenges associated with each cloud deployment model (private, public, and hybrid) in the insurance industry?

A. Higher business and IT productivity are benefits of cloud deployment, irrespective of deployment type. The innovation cycle is shorter, allowing the insurer to go to market with new products at a quicker pace as the cloud enables faster development of applications and digital services.

However, the cloud strategy for insurers is not a one-size-fits-all approach but rather a strategy that depends on specific, granular workload requirements. Insurers have adopted a mixed-bag approach, with certain workloads strategically moving to the cloud, while others remain hosted in traditional on-premises environments. IDC research shows that a hybrid cloud is the most favored target cloud deployment type in the coming years.

Most horizontal or noncore business capabilities are delivered via traditional on-premises IT and by private cloud. However, major insurers are reconsidering this approach. There are compelling reasons for migrating horizontal business capabilities to the cloud, such as access to emerging technologies (specifically artificial intelligence/machine learning [AI/ML]). Business analytics is a compute-heavy workload and thus suited for cloud. Carriers also favor speed of application innovation, which is a strong differentiator. The hybrid cloud is also preferred when it comes to data warehouses (transactional databases).

Evolving regulatory requirements mean compliance is a top priority, so the move to a cloud environment is almost a prerequisite to achieve efficient risk management and compliance. DevOps and big data capabilities are capabilities that are also highly needed to stay on top of competition.

Insurers are less keen on using public cloud for their core solutions, such as policy maintenance and claims management.

The interesting twist comes when shifting the focus to the deployment of core solutions where hybrid cloud is the prevailing option. Migrating core business capabilities to the cloud can cut down the time to market for new applications, helping insurers accommodate new market demands and scale data and transactional capacity.

The capability to improve time to market and/or expand into new markets is key. This is usually the most important component in favor of the public cloud.

Moving from capex to opex represents another difference in experience between insurance companies that favors the private cloud over the public cloud. However, this varies tremendously between carriers, and some insurance companies that doubled down on the private cloud also underestimated the associated costs.

Simplification and standardization of the IT infrastructure can be another private cloud advantage. However, this benefit may not pan out, as the flexibility of the hybrid environment requires a more demanding governance framework.

A hybrid cloud approach is also a valid option for conservative insurers that need time to better analyze and gain experience shifting selected workloads to the cloud before fully committing to it. This allows them to keep their applications within their private structure with the (perceived) security of this option. Simultaneously, they are given the ability to securely access their new core system/platform deployed in the cloud within a fault-tolerant, resilient architecture.

When it comes to a hybrid cloud deployment model, the major challenge is the inability to properly integrate this deployment model with on-premises applications, other public cloud services, and edge computing. To address these integration difficulties, insurers need to start an application and service modernization journey. The insurers need to envision an integrated hybrid cloud platform and application architecture in line with business questions about whether the app needs to stay in the datacenter, whether the app can be retired, and the level of interconnectedness between applications and data across business domains and ecosystems.

Q. How is hybrid multicloud used and managed in the insurance industry today?

A. Given their open platform, hybrid environments ensure that insurance organizations are able to use multiple vendors, which prevents vendor lock-in. However, insurers try to have fewer vendors in a well-designed vendor ecosystem to reduce organizational and infrastructure complexity, while maintaining pressure for competitive pricing. This hybrid multicloud environment requires management to ensure that organizations are optimizing their cloud usage.

The hybrid cloud environment is specifically popular among insurance organizations for workloads like IT infrastructure management, data lakes, and artificial intelligence/machine learning solutions.

Given the complexity inherent in a multicloud environment, insurers should also adopt good practices to manage cloud operations efficiently. Following are several of these principles:

» Optimize cloud operations with a hybrid cloud management solution:

- Establish a new set of cloud operations management services and capabilities. Monitoring, metering, capacity planning, and container management are some of the capabilities needed.

- Continuously move toward public cloud when faced with a choice between private cloud and public cloud integration.

- Think of "SaaS first" as a cloud platform strategy.

» Enable workload agility with policies and standards:

- Carefully consider moving workloads.

- Practice careful valuation of moving and refactoring workloads.

- Constantly monitor shifting workload demand.

» Develop an enterprise cloud strategy with digital infrastructure management:

- Establish a strategy to deploy cloud services enterprisewide to continue to grow and manage an expanding digital infrastructure in a hybrid environment. As a basis for this plan, insurance leaders need to evaluate how they can better automate their workflows using cloud services and modernize their application and claims processes through innovative digital engagement by taking advantage of the latest technologies such as AI, ML, robotic process automation (RPA), and edge computing.

- Create a set of key metrics to evaluate how closely cloud implementation meets business objectives, and analyze the benefits of alternative migration paths to manage the value and risks, as well as return on investment.

» Develop skills to manage CloudOps and FinOps:

- Develop CloudOps skills to run hybrid or multicloud environments with capabilities such as artificial intelligence and automation-enabled operations, self-service (ServiceOps), and cost optimization

(FinOps), as well as full-stack observability, policy-driven management, and orchestration to overcome the complexities of hybrid cloud operations.

- Set a specific task force to eliminate cloud operational efficiency limitations caused by a lack of visibility of costs.

- Create insights that eliminate or decrease the complexity and dynamism of cloud resource usage.

- Establish a shared responsibility model between the insurer and cloud services providers.

- Develop monitoring capabilities, as cloud operations is focused on managing variable demand and introduces a multitude of dynamic platform decisions, tuning levers, and management policy directions that can be applied to optimize hybrid cloud performance.

» Design an API management strategy:

- Develop an API management strategy that allows to call any piece anywhere on the same security and identity.

- Containerize services to create future IT agility, as this will enable containers to talk to each other via an API set. This allows for the replacement of a specific component with a new component to create future IT agility.

Q. What challenges do insurance companies face during the migration to a hybrid multicloud environment?

A. Insurance carriers need to plan for maximum cloud flexibility and a variety of different considerations before the actual migration. Initially, there must be a clear and compelling cloud vision. Further, the challenge is to develop a suitable architecture before the move to the new environment.

The insurer needs to determine what requirements are fulfilled by the multicloud environment, which functions and services should be relocated, and which ones should remain in the existing environment.

A major challenge is to migrate to a moving target. The insurance carrier must also have in place a target hybrid cloud architecture that defines the integrated cobweb of cloud services across multiple environments.

The carrier should realize that discrete components are suboptimal on their own and that it is the whole system that enables the journey to the target. A solid and well-tested proof of concept is key to the live migration.

Q. **With the increasing complexity of managing multiple cloud environments, how are insurance companies ensuring consistent governance, compliance, and risk management across environments?**

A. Insurers face a number of challenges to remain compliant. Technology is not the major problem. The larger concern is the need to build up cloud security skills within the organization. Given that hybrid cloud is a preferred option, insurers must pay attention to cloud governance by establishing a clear view of the roles and their responsibilities in accessing the various cloud environments. This includes properly managing security-by-design enforcement and managing encryption keys across multiple cloud environments.

Cybersecurity is another key engine. With information security and regulatory governance concerns still perceived as the top barriers to cloud adoption, insurers need to deal with data management initiatives around this issue. Practical plans to ensure visibility, security, and recovery of data are key. Domains like data governance and data interoperability are high on the agenda.

About the Analyst

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George is part of the Financial Services Insights team. His core research covers risk and fraud management and compliance, cloud operating models, and customer channel effectiveness.

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Leverage hybrid multicloud to drive significant run-rate savings with strategic digital initiatives and build the capabilities needed for transformative growth. P&C and life and annuity companies are leveraging the cloud to deliver advisors, agents, and lines of business end-to-end solutions that are higher quality, better integrated, easier to use, and more cost-efficient that result in streamlined operations to offer customers better advice and a way to differentiate.

These changes can be complex. Nutanix provides insurance companies with a secure, resilient, and performant unified solution to manage the public cloud's simplicity and agility with the private cloud's performance and security. Whether data, applications, or infrastructure deployed on-premises or in a hybrid multicloud environment, experience cost-effective business continuity through streamlined management, simplified operations with one-click functionality, and the power of AI-driven automation.

Link: https://www.nutanix.com/solutions/hybrid-multicloud

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