INSURANCE CLOUD

North American Insurers: Making Cloud a Business Asset

FINANCIAL SERVICES TECHNOLOGY ADVISORY: PERSPECTIVE ON CLOUD

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North American insurance companies have accelerated the pace at which they have adopted cloud solutions, moving applications and data into the cloud as business conditions change. Both property and casualty (P&C) and life insurance companies have turned to cloud to increase agility, realize technology operating efficiencies, attract new talent and reduce operating costs.

Now, however, North American insurers are using the cloud to access new and disruptive technologies and to differentiate themselves from competitors, turning cloud into a true business asset.

North American insurers navigating a complex risk, regulatory and compliance landscape have found adoption of cloud comes with multiple challenges. In addition to the actual transition to cloud there are issues related to data privacy, architecture, system interfaces and IT security. Companies should resolve these issues before they can take full advantage of cloud's enormous potential as a business asset for driving their cost and growth agendas.

67% of insurance respondents to an Accenture and Oxford Economics study believe cloud-based technologies are having the biggest impact on improving the operational efficiency of their industry.[1]

THE BIG OPPORTUNITIES OF MOVING TO THE CLOUD

The debate over public, private and hybrid cloud has subsided to a large extent. In our view, it has become clear that a move to the public cloud presents important opportunities for insurers and most all financial services companies.

North American insurers on the public cloud can benefit from the advantages of an infrastructure as a service (IaaS) platform while adopting a comprehensive strategy leveraging the insurance-specific solutions available on the cloud such as analytics for underwriting and risk profiling, intelligent automation (IA) for claims processing and internet of things (IoT) for monitoring risk.

Potential benefits include:

1. IMPROVING SPEED TO MARKET

With escalating pressure from the business to reduce the time to market for new products and services, insurers can turn to insurance-based cloud computing solutions to deliver enhanced IT agility and shorter project implementation time. Cloud services can help insurers quickly deploy and test new technologies, features and capabilities, and to collaborate within their ecosystem of alliances and strategic vendors to develop new products and services. As an example, cloud-based benefit enrollment systems can fully automate the enrollment process to support real-time pricing and validation of eligibility, allowing insurers to deliver a more convenient and personalized experience to shop for benefits.

2. REDUCING CAPEX COSTS

Since cloud is typically offered "as a service", companies can move to cloud-based operations without the large capital expenditures associated with the implementation of in-house, proprietary solutions. Cloud-related costs are usually treated as operating expenditures and as such are more predictable and more manageable.

3. ACCELERATING BUSINESS GROWTH

Cloud-based insurance solutions can provide a company with better social listening and higher conversion rates from the "opportunity to sale" phase through targeted campaign management and improved opportunity and lead engagement models. This can generate higher cross-sell, upsell and retention rates. Cloud can also improve the end customer's claims experience through better communication and service.

4. EXPANDING GLOBALLY

As insurers look to expand their global presence, cloud solutions can help foster greater flexibility and standardization across geographies. Part of this expansion involves Chief Information Officers (CIOs) establishing strategic relationships with insurance software providers to help insurers build their own cloud infrastructure and facilitate standardization.

5. REDUCING OPERATING AND MAINTENANCE COSTS

Cloud-based solutions can be less expensive than those deployed on in-house, back-end server systems and can drastically reduce costs for licensing, hardware, and the maintenance of complex legacy systems. **Accenture's experience** indicates that insurers can expect noticeable total cost of ownership savings by migrating to the cloud.

For insurers, cloud-based benefit enrollment systems can fully automate the policy underwriting process delivering real-time pricing and validation of eligibility, and a more convenient and personalized approach to shopping for benefits. Cloud services can also help companies quickly test and deploy new technologies and support co-innovation with strategic alliances and vendors to build new products and services. As well, cloud adoption improves the claims experience for both insurer and end customer, with reduced claims expense leakage through superior customer service and better communication.

Though potential cost savings offer a strong incentive for moving to cloud, cloud adoption is fast becoming one of the core IT initiatives for the insurance industry. A study of 400 senior CIOs revealed that 67% believe that Software as a Service (SaaS) will completely transform the insurance industry in five years or less —with 20% of the entire sample falling into the "two years or less" category.[2]

Given these benefits, it is not surprising that cloud is a top priority among insurers, evolving from an IT overhead reduction play to a core IT initiative. The industry analyst firm Novarica, Inc., in fact, estimates from its own research that more than 70% of insurers are now using cloud computing.[3] Among industry start-ups, cloud-based innovation opens doors to their growth aspirations, while for large companies, it is a platform for expanding into new markets more quickly and with less risk.

FINDING BUSINESS VALUE IN THE CLOUD

Our work in this space indicates that insurers are more likely to use the public cloud for non-core and support functions, including payroll, expense management, human resources, enterprise resource planning (ERP), backup and service desks. However, this is rapidly changing.

Insurers are bringing to bear cloud-hosted applications and pure SaaS offerings on vertical use cases such as policy administration, claims management or billing management. Accenture research also shows that a third of insurance respondents are investing or plan to invest in cloud to generate business value.[4]

As identified in Figure 1, insurance disruptors—in the form of insurance technology start-ups or "insurtechs"— are taking full advantage of insurance solutions available in the cloud, exploiting the asset's agility to cost-effectively enter markets with differentiated offerings.

However, among larger insurers, especially those operating in numerous markets, they typically are more likely to build their own cloud platform, using their IT departments to act as cloud brokers or setting up hybrids combining public and private clouds. Some insurers have formed subsidiaries to develop their own cloud-based core insurance applications. The overall trend, however, has been for insurers, banks and other data-heavy enterprises to move more and more of their business to the public cloud.[5]

North American insurers are exploring the full range of cloud options, not only to streamline back office functions but to transform the customer experience.

Accenture research indicates that a third (33%) of insurance respondents are already investing in, or plan to invest heavily in cloud-based technologies to improve their operational efficiencies. This goes up to nearly half (47%) planning to do so over the next 3 years.[6]

Figure 1. Insurtechs driving cloud-based solutions

	CLOUD INNOVATION
Trov, Inc.	Offers household insurance with a smart repository of customer's possessions through a cloud-hosted online digital locker.
CoverWallet, Inc.	Provides a concierge-like service for small businesses, giving them access to quotes, advice and policy management tools online or over the phone.
Roost, Inc.	Offers a connected platform to detect water, temperature, humidity, freeze and leak detection and working with insurers to deliver telematics for insurance.
Truemotion Inc.	Their technology platform allows insurers to distinguish between safe and risky drivers and thus reward safe drivers with discounts on their insurance.
BigML, Inc.	Their machine learning solutions allow insurers to build their analytics capabilities and benefit from actionable predictive insights.
Besure Corporation	Offers a risk sharing platform to facilitate the process of self assurance.
Oscar Insurance Corporation	Offers members personalized technology-enabled services through its clinically-focused and integrated (with doctors and hospitals) insurance platform.
Lemonade Insurance Company	This peer-to-peer insurer focused on renters and homeowners insurance is pursuing a broader regulatory approval strategy after starting small.
StrongArm Technologies, Inc.	Their Fuse Risk Management Platform dashboard uses a cloud-based IoT enabled software informed by a group of motion-interpreting sensors and provides proactive insights real-time into workers' safety.
Open Data Nation™	Their "Hopper" technology is a cloud-based, machine learning engine that can help predict in real-time dangers and problems in the public health and safety space.

Source: Accenture, September 2018

IMAGINING THE POSSIBILITIES

Cloud computing's revolutionary nature is capturing the imaginations of insurers, with its potential to reinvent how the industry does business. Consider the possibilities:

- Providing a concierge-like service for small businesses with access to quotes, advice and policy management tools online or over the phone

- Developing a cloud-based path to market for insurance product creation and lifecycle product management for any class of general insurance business

- Allowing investors, reinsurers and customers to enter the system as needed

- Pricing the risk for insurance across various age groups and gender, leveraging fitness tracking wearables and mobile apps to gather and collate users' activity data

- Organizing and analyzing the vast quantities of data obtained from automobile telematics, safety sensors and the IoT to personalize automobile policies

KEY CLOUD TRENDS

Cloud is a catalyst for major changes in the insurance industry, from analytics and the IoT to cloud-based infrastructure. Major areas of focus include:

ANALYTICS

Technology industry observers keep pointing to the growing number of high-tech devices connected to the cloud, including wearables and automobiles. With such connectivity, insurers can access vast quantities of new information. For example, auto insurers are using cloud analytics with mobile apps and devices to track drivers' usage habits, providing insights into drivers' risk profiles and their willingness to engage in safe driving habits. Cloud analytics tools can also help insurers measure which marketing, advertising and communications campaigns are most effective in reaching customers, helping them redesign and update outreach programs on an ongoing basis to improve their return on investment.

INFRASTRUCTURE

Cloud-based infrastructure services are driving important levels of investment in developing cloud services that can deliver greater flexibility and be managed through on-premise and/or hybrid cloud infrastructure. We see cloud-based infrastructure changing the way insurers consume and source IT and how they adapt and adjust to ever-changing rules and regulations.

HYBRID

More insurers are creating their own cloud-based strategies, combining the advantages of private cloud with the versatility of the public cloud, and thus forming their own hybrid cloud environment. This helps insurers integrate their existing technology and accelerate innovation, with work performed in the cloud to take advantage of mobility, social, big data and analytics. And among property and casualty (P&C) insurers, they are more likely to prefer a hybrid cloud delivery model for core functions like product design and front office applications, including agent and broker portals.

THE CLOUD AT WORK: GAINING A VIEW OF ALL OPERATIONS

The long-heralded potential opportunities for insurers to take advantage of cloud capabilities are now real, with companies saving costs and driving innovation every day.

A large insurer operating in North America and parts of Europe, and serving 60 million members sought to develop a global view across all lines of business for its customers while cultivating rapid organizational change. It aimed to encourage best practices to streamline sales, services and operations processes and foster greater collaboration across lines of business.

Working with Accenture, the insurer deployed a multi-phase Salesforce.com, Inc. customer relationship management (CRM) solution with aggressive work schedules and capability-focused teams. The company defined 13 global processes supporting account, contact, campaign, lead, opportunity and activity management capabilities for more than 70 users.

With Accenture's help, the insurer launched the first of several releases of Salesforce.com across the organization, leading to improvements in its sales, services and operations processes. Accenture's SaaS methodology and experience operationalizing Salesforce.com from an organizational and enterprise-wide perspective proved particularly valuable to the insurer, which had historically operated in a very business-unit focused manner.

Major vendors in the cloud space, such as SAP SA and Oracle Corporation, are migrating their existing portfolios to the public cloud and building new cloud-ready applications to address industry problems. These models should eventually allow small to mid-size insurers to select solutions offered by mega vendors, many of which were previously too expensive for them to consider. This provides insurers with on- and off-premise deployment options to better support emerging business needs, lower the cost of application portfolios and drive down operating costs.
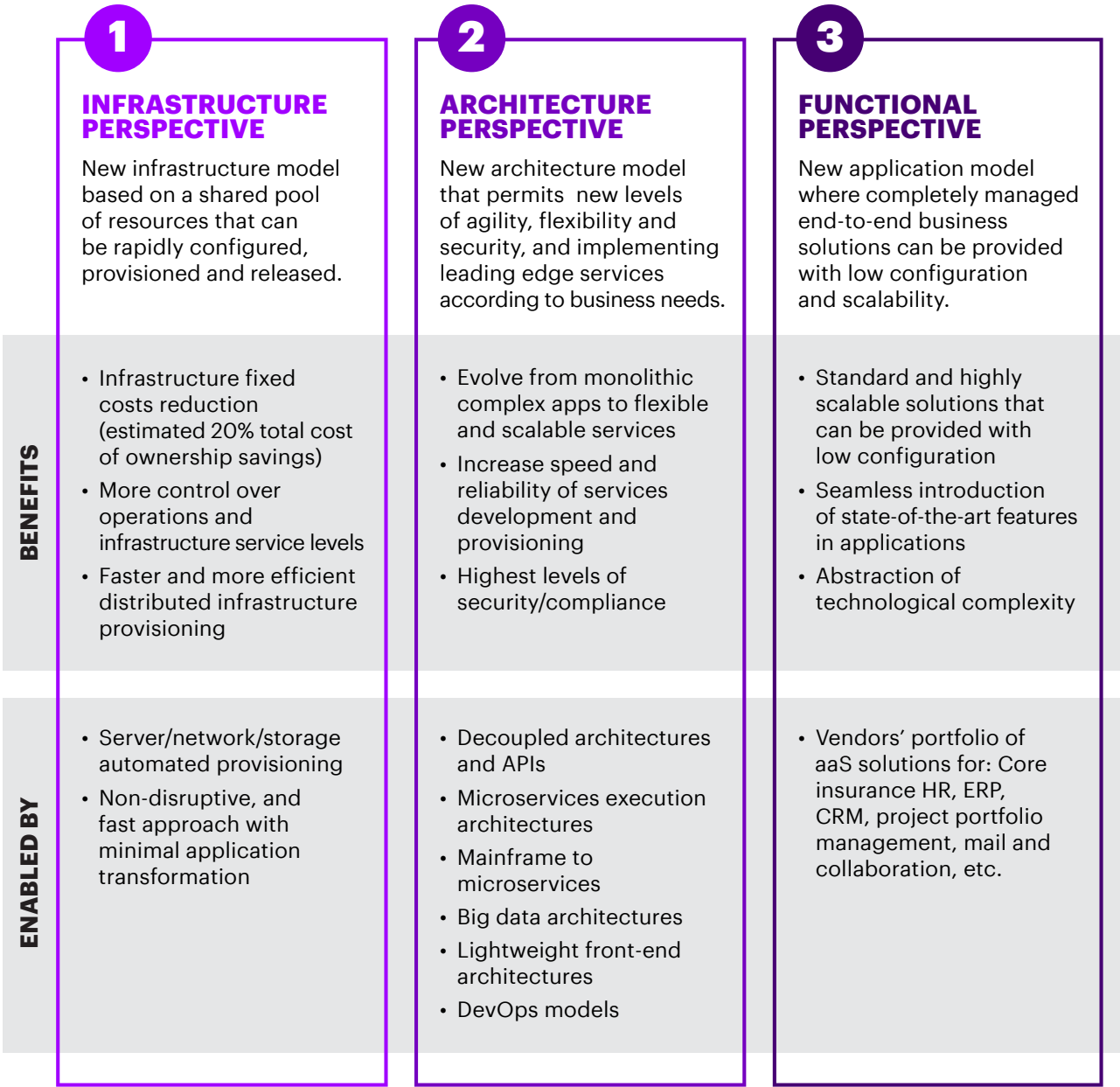
HOW THE JOURNEY BEGINS: BLUEPRINT AND ROADMAP

For most insurers, the journey to cloud begins with the development of a blueprint for their business model.

The model may include a combination of:

1 A new infrastructure model, based on a shared pool of resources that can be rapidly configured, provisioned and released.

2 A new architecture model, for new levels of agility, flexibility and security.

3 A new application model through which completely managed "end-to-end" business solutions can be provided with low configuration and scalability (see Figure 2).

Figure 2. Putting technology at the core to create a new business model

	1 INFRASTRUCTURE PERSPECTIVE	**2 ARCHITECTURE PERSPECTIVE**	**3 FUNCTIONAL PERSPECTIVE**
	New infrastructure model based on a shared pool of resources that can be rapidly configured, provisioned and released.	New architecture model that permits new levels of agility, flexibility and security, and implementing leading edge services according to business needs.	New application model where completely managed end-to-end business solutions can be provided with low configuration and scalability.
BENEFITS	• Infrastructure fixed costs reduction (estimated 20% total cost of ownership savings) • More control over operations and infrastructure service levels • Faster and more efficient distributed infrastructure provisioning	• Evolve from monolithic complex apps to flexible and scalable services • Increase speed and reliability of services development and provisioning • Highest levels of security/compliance	• Standard and highly scalable solutions that can be provided with low configuration • Seamless introduction of state-of-the-art features in applications • Abstraction of technological complexity
ENABLED BY	• Server/network/storage automated provisioning • Non-disruptive, and fast approach with minimal application transformation	• Decoupled architectures and APIs • Microservices execution architectures • Mainframe to microservices • Big data architectures • Lightweight front-end architectures • DevOps models	• Vendors' portfolio of aaS solutions for: Core insurance HR, ERP, CRM, project portfolio management, mail and collaboration, etc.

Source: Accenture, February 2018

Each insurer should expect its journey to differ. Over the years of implementing cloud transformation engagements, we have observed that five core guiding principles are almost always applicable:

1. MIGRATE NON-CORE SERVICES TO CLOUD

Opting for a Business Platform as a Service (BPaaS), insurers can move to a service provider work that does not yield a competitive advantage—such as human resources, procurement, trade settlement and accounting—at a lower cost with higher quality.

2. INCREASE SAAS COVERAGE

Wherever possible, insurers should reduce software development and maintenance costs by increasing the use of SaaS.

3. ASSESS AND TRANSITION OTHER APPLICATIONS TO IAAS/PAAS

Insurers can use standardized IaaS and PaaS (Infrastructure as a Service and Platform as a Service) platforms to help reduce support costs for custom codes that provide a real competitive advantage.

4. REDUCE USE OF CUSTOM CODE

Insurers should actively quantify and measure their progress in reducing the use of custom code within the enterprise, moving to alternative platforms for better quality and a lower cost to maintain.

5. REDUCE ROSTER OF VENDORS BUT MAINTAIN COMPETITION.

A well-structured provider ecosystem can help reduce operational complexity while maintaining pressure on pricing through competition.

Accenture helps drive insight into cloud savings and benefits by leveraging a robust financial model that considers key elements such as budget, P&L, cash views and costs associated with reducing the number of legacy apps. Though the potential cost savings alone build a strong case for cloud, each insurer's cloud adoption is part of a broader strategy toward effective digital innovation. As for realized savings, these are dependent upon the cloud deployment model chosen, and should be expected across different areas such as labor, software, server, storage, network, data center and security.

JOURNEY TO CLOUD: TAKING THE RIGHT PATH

For many insurers, the journey to cloud typically begins by moving non-core business functions to the cloud. To become truly cloud-enabled, organizations should undertake a strategic assessment to help set the direction of their IT and business processes.

With a clear understanding of how this business asset can increase shareholder and enterprise value, companies can plan and implement a cloud platform and infrastructure deployment program including elements of private, public and hybrid cloud.

The move to cloud also requires a clear tactical vision, strong governance, durable processes and intelligent delivery technology. With these elements in place, insurance companies are positioned to accelerate operations and strengthen a range of functions, from how to conduct modeling, analysis and integration to the detection of anomalies and potential patterns of fraudulent activity.

Capturing these benefits requires insurers to materially modernize and re-engineer their applications—most of which were built for traditional, on-premise platforms. The application modernization process

prepares insurers for a state of cloud resilience known as "cloud native." In addition, the modernization process facilitates the transition to microservices, as well as technology and design pattern re-use—which can increase agility and reduce technical debt.

And with the transformation of their platform and infrastructure under way, insurers can mobilize for an application migration program, with applications inventoried and the migration type and effort determined. Importantly, cloud also provides support for insurers' moves into important new technologies such as robotic process automation (RPA) and artificial intelligence (AI), facilitating the implementation of these technologies while offering the needed structure to organize and access the huge volumes of data generated by such innovations.

According to a CompTIA, Inc. survey of U.S. businesses, 81% of respondents claim that the cloud enhances their efforts around automation.[7]

> **Accenture's certified specialists and cloud factories do the heavy lifting so clients need not worry about the challenges of migrating or building new applications.**

A leader in cloud transformation services, Accenture has developed strong relationships with all the major cloud and cloud solutions providers. Clients also have access to a large catalog of tools and accelerators to help them conduct efficient cloud transformations.

Through our client work across regions, we typically see larger companies moving to a multi-cloud environment, while smaller organizations take a single cloud provider approach. Each insurer is encouraged to consider which operating model and cloud management platform is most appropriate for delivering its business goals.

And though most cloud discussions involve technology, the operating model is the cornerstone and key—as it involves people, processes, tools and governance. By their nature, cloud solutions are non-uniform. So, in the case of multispeed operating models, insurers should be aware that these co-exist for years to come, while people, process and tools remain interoperable. Finding the right operating model is critical to increased agility, technology operating efficiencies, and reducing infrastructure costs. As seen in Figure 3 below, Accenture has developed a proprietary and holistic Cloud Operating Model specifically for insurers and to guide them during their journey to cloud.

Figure 3. Cloud operating model – key components

- **Functions:** How we organize ourselves to deliver services
- **Processes:** How we execute the work
- **Interfaces:** How we interact to deliver consistent services
- **Governance:** How we make, sponsor and enforce the right decisions
- **Roles & Organization Structure:** Who is accountable for doing the work
- **Performance Metrics:** How we measure effectiveness
- **Tools:** What enabling technology we use to deliver productivity and agility to service execution
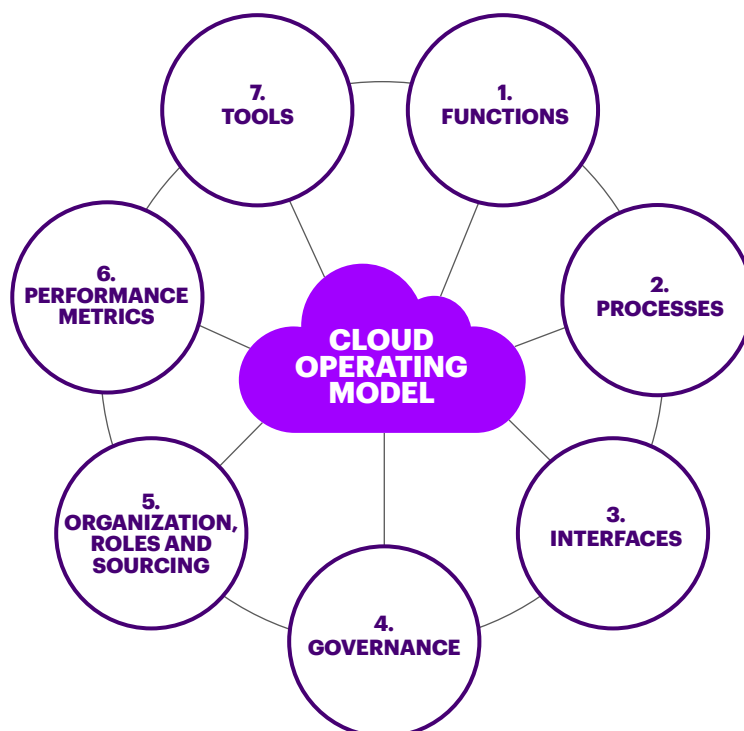
Source: Accenture, December 2017

EFFECTIVE CLOUD MANAGEMENT

A growing concern among insurers is how cloud costs can grow rapidly if not properly managed. An effective cloud management capability can make the difference between achieving the business case and missing the mark.

Ideally, an insurer adopts automated management tools to gain greater control over costs, improve governance and increase accountability in its cloud consumption. To achieve effective cloud management, insurers should focus on these five key elements:

1. Cloud operations: Including support, cost management and billing, cloud engineering, cloud service management, service desk and monitoring.

2. Security operations: Defined as flexible cyber and data protection services that can secure cloud environments and infrastructure.

3. Cloud enhancement services: Managing cloud costs through analytics, actionable recommendations and operational improvement, as well as application remediation and re-architecture.

4. Application management: Including support, ongoing maintenance, enhancements and upgrades.

5. Business process operations: The business layer on top of cloud technology assets and services that is focused on delivering improved business outcomes.

Application management is an important component of any enterprise cloud plan. Leveraging proper architecture, design, development, testing, maintenance, modernization and renewal can help insurers achieve cost efficiencies, continuous enhancement and ongoing innovations within their application portfolio.

With automated management tools, insurers can benefit from better cost controls, governance and accountability in cloud consumption. Using DevOps practices, we continue to deliver business value past the "go-live" date and allow the insurer's technology, skills and culture to evolve with its business needs.

RAISING THE BAR ON SECURITY

Tapping Accenture's experience with global financial services and insurance deployments, data privacy, security, and risk management, we have developed a comprehensive approach to address insurers' complete spectrum of data privacy and security challenges.

Supporting this approach is Accenture's Cloud Security Reference Architecture, to help insurers navigate these complex and demanding challenges.

Before moving cloud from the periphery to a mainstream IT strategy, insurers are encouraged to:

• Address the security and risk associated with cloud computing to protect clients' information and assets

• Map regulatory requirements and approach

• Build internal trust in cloud-based operations, management and control in terms of maintaining resiliency, high availability and disaster recovery capabilities

And, since insurers operate in a complex regulatory and legislative environment, concerns with security and risk are particularly high. The ability to identify data privacy, security and regulatory compliance risks for an effective cloud transition is critical. Insurers should consider a careful assessment of their regulatory and legislative environment, coupled with a reliable security operating model. In addition, a robust security reference architecture, in combination with understanding and leveraging the precedent points, can ease the journey to cloud.

The cloud landscape is complex and continues to evolve at a rapid pace. Through a strategic, comprehensive approach and the right ecosystem, North American insurers can use this powerful business asset to take giant steps toward creating the business models, operating efficiencies and customer experiences for success in a digital era.

ABOUT THE AUTHORS

Chad Duncan

Chad Duncan, Managing Director, Accenture Financial Services Technology Advisory. He leads the practice's cloud offering for North America. With over 20 years of experience, Chad brings extensive knowledge in management and technology consulting as well as IT outsourcing. He uses this experience to help clients across banking, capital markets, payments and insurance realize the potential of cloud and how it can transform their businesses. Chad enjoys spending time with his three kids and has helped his boys' Boy Scout troop power their programs in the cloud, manage rank advancement, become more efficient and communicate with members more effectively.

James Struntz

James (Jim) Struntz, Managing Director, Accenture Financial Services. Leading Accenture's North American Insurance Technology Consulting group, Jim has over 30 years of experience helping organizations, including many of the world's leading insurance carriers, gain value from their most complex transformation initiatives. He currently focuses much of his time on clients' journey-to-the-cloud agenda as well as helping them capture greater value from their ecosystem partnerships. Based out of Columbus, Ohio, Jim enjoys spending time coaching and cheering on his three kids during their extra-curricular activities.

REFERENCES

1. Accenture – Oxford Economics study – in development and report to be published in October 2018

2. "Driving The Next Generation Of Insurance Through The Cloud," Digitalist Magazine, November 7, 2016. Access at: https://www.digitalistmag.com/customer-experience/2016/11/07/driving-next-generation-of-insurance-through-cloud-04644090

3. "More Than 70% of Insurers Use Cloud Computing," Novarica, April 2, 2018. Access at: https://novarica.com/2018/04/70-insurers-use-cloud-computing

4. Accenture – Oxford Economics study – in development and report to be published in October 2018

5. "Nobody Knew How Big a Deal the Cloud Would be – They do Now," Wired, December 22, 2015. Access at: https://www.wired.com/2015/12/2015-was-the-year-the-cloud-defeated-techs-walking-dead/

6. Accenture – Oxford Economics study – in development and report to be published in October 2018

7. "New CompTIA Report Examines Cloud Computing's Role as Backbone of Today's IT Operations, Key Enabler of Tomorrow's Innovations," Cision PR Newswire, May 22, 2018. Access at: https://www.prnewswire.com/news-releases/new-comptia-report-examines-cloud-computings-role-as-backbone-of-todays-it-operations-key-enabler-of-tomorrows-innovations-300652153.html

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