

White Paper- *'Cloud Adoption in Insurance IT'*

Executive Summary

State-of-the-Play – CIO Imperatives

Dependence on old, inflexible legacy systems is often a major reason for the inability of many organizations to make the changes necessary to enhance their competitiveness.

The existence of old systems also contribute to challenges such as Increased costs of operation, low perceived business and IT alignment, and low recognized business value from IT Investments.

Forward-thinking organizations see this economy as a window of opportunity, and are looking to update both their internal processes and their technology in order to provide a foundation for growth.

Insurance Companies & Technology

The insurance industries worldwide have been facing the problems of meeting the ever-changing requirements of the product offerings.

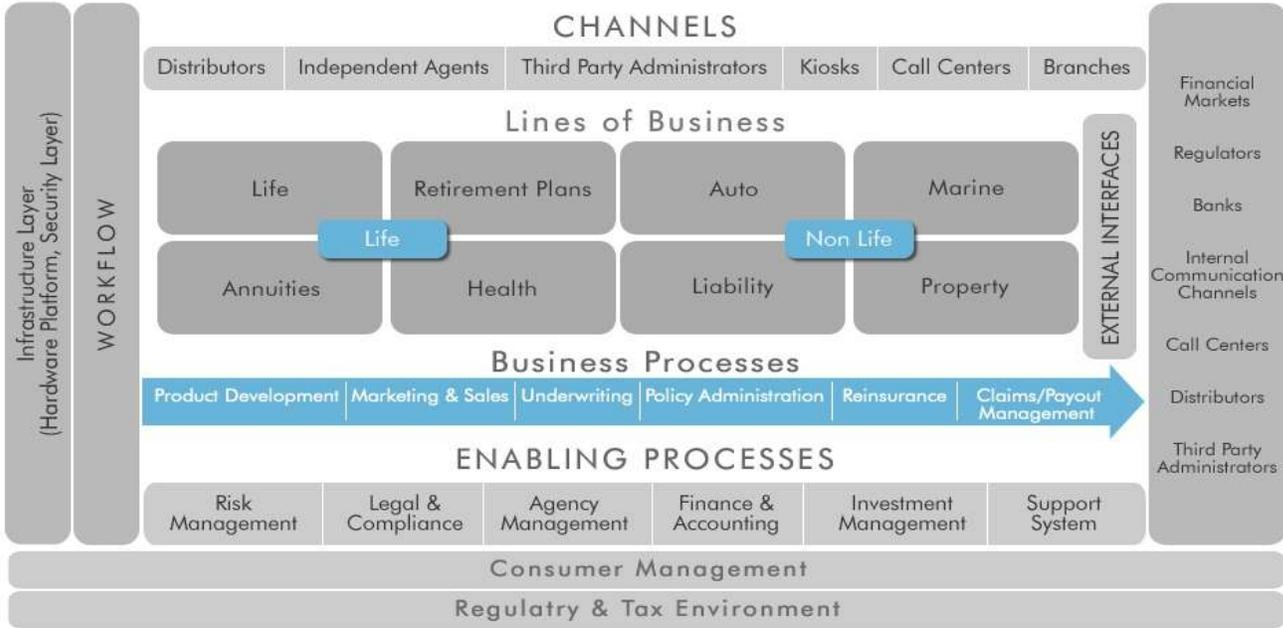


Figure Illustrates the Business Process Landscape of Insurance Industry

This dynamism is even more complicated in United States, as different states have different prerequisites to issue the similar product offerings. It is therefore obvious that the success in this competitive market scenario depends immensely on the faster responsiveness in terms of implementation of new functionalities in the existing application software.

insurance companies particularly, invests in technology for innovation in customer-facing processes, such as sales and service, to improve customer interaction, drive agent loyalty, quality and efficiency, and speed time to market.

Cloud Computing – A Systematic Investment for Insurance Companies



Enter Cloud computing. Rather than “ripping and replacing” existing and/or legacy technologies, insurers can look to augment what is already in place to speed the rate of innovation. Cloud technology that is low-cost, low-risk, and quick to deploy is needed to alleviate the complexity insurance IT

There is no shortage of skeptics who say the insurance industry will never embrace cloud computing in a big way. The industry is too conservative, has too much investment in legacy systems, or is too wary of data security issues.

However many insurance CIOs have started seeing cloud as a very effective delivery mechanism for their new capabilities

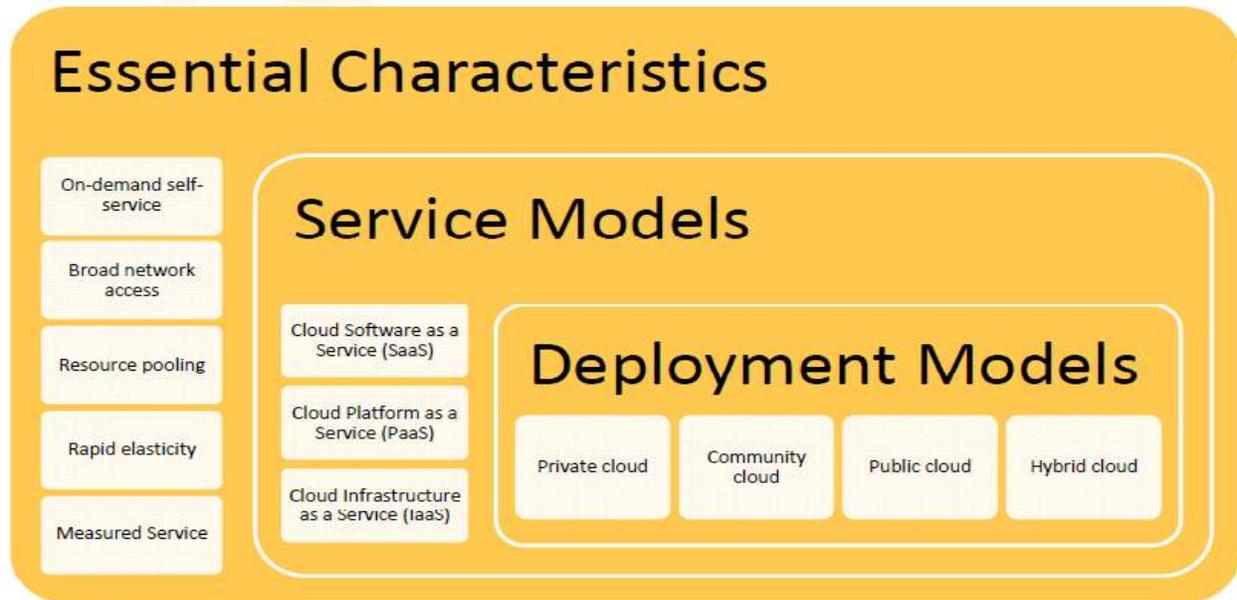
The challenges of adopting cloud are yet to be fully addressed and many are unknown. Deciding on an appropriate path for on boarding their applications portfolio to the cloud poses a big challenge for insurance CIOs. Insurers will have to closely review the questions of ‘What?’, ‘When?’ and ‘Why?’ while defining their cloud adoption strategy. This white paper examines the trends in insurance sector for cloud adoption, challenges and Gss value proposition for Cloud Solutions.

Fundamentals of Cloud Computing

Definition by NIST

"...a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction"

Attributes of Cloud



The level of standardization that the consumer of a cloud service has to deal with is much lower with the Infrastructure as a Service (IaaS) model than with the higher models. For example, the consumer of Software as a Service (SaaS) has very little control over the business processes and functionality offered, the enabling platform, or the infrastructure on which the service is hosted. But at the same time, the cost advantage of services goes up with the increasing level of the models to the point where the advantage is highest for the cloud services model. The cloud services model provides the unique services needed to truly disrupt business models and bring out the true value of cloud computing to enterprises. In other words, cloud is a true enabler of innovation.

Any or all of these models can be enabled using either public (third party) or private (internal to the organization and/or its IT partner) clouds. However, the practical path that most organizations will end-up adopting over time is a combination of multiple cloud provider services (private and public) – in other words a 'federated cloud' providing optimal cost savings and business value.

Cloud Adoption Trends in Insurance Sector



(Above figure illustrates the Portfolio of Line of Business Applications in Insurance IT)

At a very high level, the insurance value chain can be broadly classified into two groups – core and support functions. It is understood from research firms that most of the Support functions will experiment, evaluate and adopt cloud environments over the next 2-3 years.

The shift to customer-facing applications In addition to providing direct access to tools to in-house decision makers, sales teams and call center staff, many organizations are finding ways to cut costs and improve service delivery by deploying self-serve tools that customers can navigate on their own. Cloud comes in handy in accomplishing the same.

Factors that drive the cloud adoption across the different Line of business applications are as follows –

- 1) Need for innovative applications which increases customer intimacy & friendliness
- 2) Need to move away from highly paper driven processes & eliminate errors
- 3) Growing number of users per application
- 4) Automating and optimizing business processes
- 5) Integration imperatives due to mergers & Acquisitions and the technology costs associated with the integration process
- 6) Increasing transaction volumes / Sheer volume of data
- 7) Growing demand for real-time access to information
- 8) Need & ability to do business with a larger set of partners

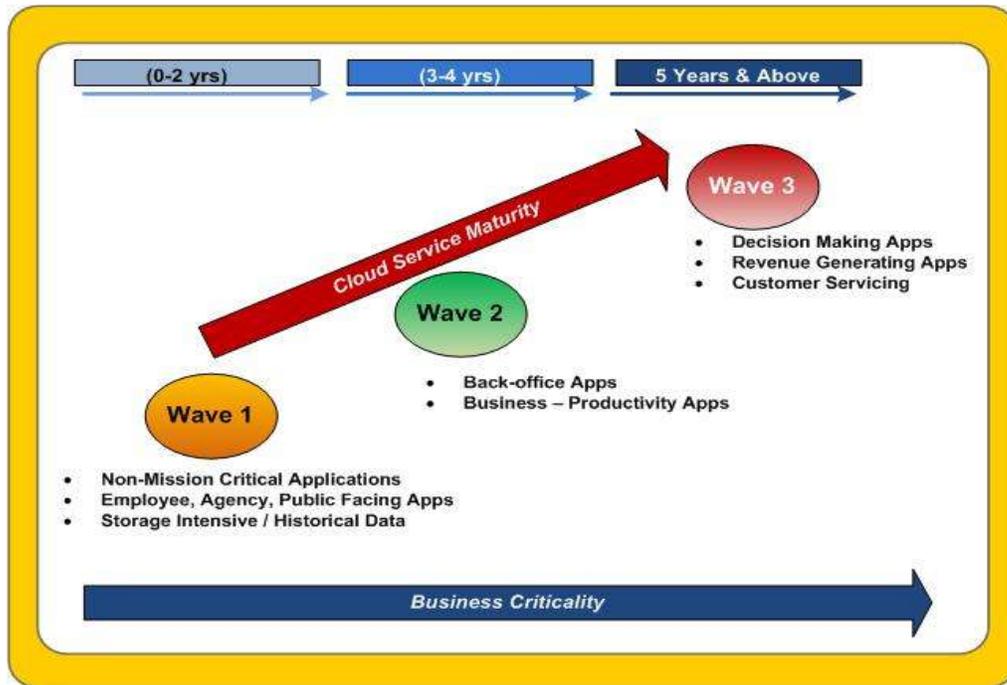
The parameters that will decide what applications may be moved to the cloud and when can be broadly classified into three groups:

Maturity of Cloud Computing: This is a function of robustness, reliability, and cost effectiveness of the services available.

Business Criticality: The business criticality of an application is a function of various factors, such as what business functions are enabled, impact of standardization of the business processes involved on competitive advantage, revenue impact, influence on customer experience, and competitive advantage.

Insurers' Willingness: The third and most critical piece of the puzzle is the risk that insurers are willing to take to put their systems onto a cloud environment. Based on the combination of the first

two factors, insurers are likely to calculate the risk of migration and adopt cloud computing in an incremental manner as shown in Figure



The following table provides a high level distribution of application categories across cloud computing waves based on business criticality and risks that insurers are likely to take as cloud computing matures over time.

Application Category	Current maturity Level	Potential Wave Level	Adoption Timeframe
<ul style="list-style-type: none"> Non-mission critical apps Internal-focused (Apps servicing internal IT or employees) Storage intensive/historical data 	High	Wave 1	Can begin now and in the next two years
<ul style="list-style-type: none"> Core business apps Non-revenue -generating apps 	Maturing	Wave 2	Can begin 3 to 4 years from now depending on the results of Wave 1 and maturity of cloud computing
<ul style="list-style-type: none"> Decision-making apps Revenue-generating apps Customer servicing 	Maturing to Not Available	Wave 3	At least five years out

Cloud Platform Companies address security concerns

Concerns about security, privacy, reliability, and operational control top the list of potential barriers for cloud adoption.

Utilizing a risk-based information security program that assesses and prioritizes security and operational threats to the business helps remediate the fears on Security

Heavy Weight Cloud Companies *like Microsoft, Google & Salesforce* have obtained key certifications such as International Organization for Standardization / International Society of Electrochemistry 27001:2005 (ISO/IEC 27001:2005) and Statement of Auditing Standard (SAS) 70 Type I and Type II attestations, and to more efficiently pass regular audits from independent third parties.

These companies diligently designs and tests applications and infrastructure to internationally recognized standards in order to demonstrate these capabilities and compliance with laws and with internal security and privacy policies. The program has been independently certified by British Standards Institute (BSI) Management Systems America as being compliant with ISO/IEC 27001:2005.

Additionally the following Operational Compliances are addressed by Microsoft, google and Salesforce

Payment Card Industry Data Security Standard – Requires annual review and validation of security controls related to credit card transactions.

☒ **Media Ratings Council** – Relates to the integrity of advertising system data generation and processing.

☒ **Sarbanes-Oxley** – Selected systems are audited annually to validate compliance with key processes related to financial reporting integrity.

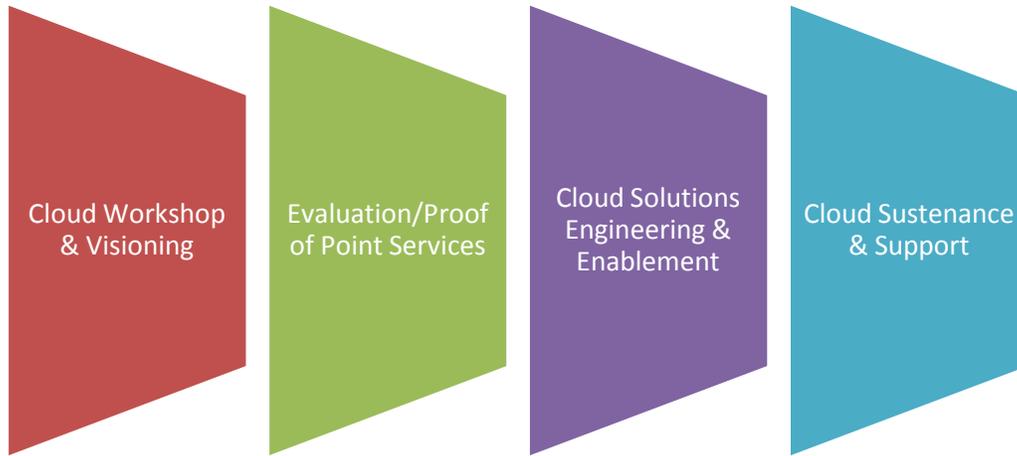
☒ **Health Insurance Portability and Accountability Act** – Specifies privacy, security, and disaster recovery guidelines for electronic storage of health records.

☒ **Internal audit and privacy assessments** – Assessments occur throughout a given year.

Join the GSS 'CLOUD-IT' momentum

Selecting the right partner will be a critical decision for insurers to ride the cloud waves successfully. Delivering a credible set of cloud computing offerings to enterprises requires collaborative innovation across multiple players such as public cloud providers, software and

GSS Cloud Offering for Insurance IT



GSS 'Cloud-IT' Methodology



GSS Advantage

Not another Cloud SI Company, find out why -

- **Vendor Neutral** — our first commitment is in offering un-biased vendor neutral Advisory, Solution Engineering and Life-long support services.
- **Focal Point on Cloud** — we focus on growing cloud eco-system and align our structure & methods to the industry trends. GSS's talented cloud solution specialists will suggest customers to adopt Cloud with low-risk step approach.
- **Infrastructure + Application Services** —we have a unique blend of strong infrastructural capabilities and Application Development & Engineering services, in addition to the Global Development center which helps us 'walk the talk'.
- **Catch us by SLAs**—Our Support infrastructure is proof enough for the consultancy and implementations we provide.
- **Pragmatic value**— GSS Cloud solution team views a hands-on value of Cloud and work together with our technology partners for solving customer issues.
- **ISV Friendly**—the key challenge for ISVs today is to become an 'Independent Service Vendor' from an Independent Software Vendor. We help ISVs address the challenges of SaaS Engineering and welcome them to the world of SLAs.
- **Enterprise/SMB World**—It is a sea change for Enterprise/SMBs adopting cloud. We have distinct Cloud offerings for them and hence we enjoy a breadth of knowledge across the board from the creation to consumption cycle of software services.
- **Continued Focus & Investment** Dedicated investments for Cloud Solutions COE & labs. Microsoft Azure COE & Force.com COE
- Large pool of talented Cloud experts - Advisors, Solution Architects, Testers & Dev Team.

GSS Infotech is a pioneer in providing Managed IT Services, head quartered at Hyderabad, India. GSS operates worldwide through its offices in India, Singapore, Middle East, and the USA. The company has established itself as a preferred partner for IT services to over 200 Fortune customers, and offers world class services propelled by industry experts and a vast pool of professionally qualified work force operating across the globe.

GSS's motto of "delivering a value through a service" aims at providing innovative and high quality solutions at an optimal cost. GSS Infotech's core competencies are driven to attain customer satisfaction with underlying delivery expertise in Enterprise Technology, Methodologies, and Implementation.

