IBM Z Insurance Industry Point of View

The global P&C insurance industry has reached an inflection point. Insurers are challenged to drive down costs in the face of stagnant premiums and revenue from traditional streams. They must compete to stay relevant in the wake of new market entrants and deliver more personalized, data-driven engagement to new classes of consumers who demand niche products grounded in new business models. Innovation teams are exploring how to adopt transformative technologies to drive competitive differentiation. Expanded use of Internet of Things (IoT) sensors and telematics is driving consumer demand for new usage based coverage models and systems to process the growing volumes of data for real-time analysis and decisions. This raises new questions about data ownership and shifts in risk profile and liability.

Customers face risks every day, and in today's digital economy, they demand personalized service from insurers to best manage those risks. In response, insurers seek opportunities for targeted customer engagements to provide insurance value – at the moment of risk – through interactive experience, when, where, and how customers need it. Additionally, fraudulent claims remain a threat with payouts increasing annually driving up costs to insurers and indirectly to consumers as higher premiums.

With technologies on IBM Z® such as IBM Machine Learning for z/OS® and IBM z/OS Platform for Apache Spark, insurers can execute self-learning behavioral models to build a unified view of the customer, understand lifestyle, profitability, and preferences and apply insight to take action in real time. These capabilities enable sophisticated, highly optimized analytic processing on IBM Z where the most current, business critical data resides with no data movement. By using in-the-moment insight by combining real time transactional data with other data sources such as social, geospatial, image recognition and Internet of Things, insurers can create a highly personalized customer experience enabling them to become trusted advisors to their customers during risk scenarios. Analyzing data in-place significantly reduces the security risk and data governance complexity associated with copying business critical data. These technologies can also be used to rapidly identify emerging patterns of fraud as they are occurring to minimize losses and reduce investigation and recovery costs as well as automate and accelerate pattern finding for loss prediction, P&L (Profit and Loss) analysis and preventative insurance with greater accuracy than statistical modeling. Additionally, IBM Z operations analytics solutions can integrate cognitive capabilities to optimize performance and availability of business-critical systems.

Increasingly, sophisticated, financially motivated attacks, coupled with evolving IT environments and pressures on reputation and profitability, have made it imperative for insurers to proactively manage potential security risks and downtime to their IT infrastructure. The theft of information assets and the intentional disruption of online processes are among the most critical business risks facing insurers today. The number of breaches continues to rise as attackers become more sophisticated, and increased use of mobile devices and expanding ecosystems introduce new vulnerabilities to exploit. Extensive use of encryption is one of the most effective ways to help reduce risks including loss of data via breach and can help meet complex compliance mandates.

IBM Z has unrivaled encryption capabilities to help defend and protect business-critical data against external and internal attacks, including privileged users. Insurers can protect all the business-critical data that resides on IBM Z - at rest and in flight – transparently with no changes to applications with IBM Z Pervasive Encryption. Centralized data encryption policy-based controls significantly reduce the costs associated with data security and achieving compliance mandates, including the General Data Protection Regulations (GDPR) in Europe, The Basic Act on Cybersecurity in Japan, and the emerging Insurance Data Security Model Law in the U.S. Centralized multi-factor authentication for users with elevated privileges can help prevent unauthorized access to business-critical systems and sensitive data by rogue insiders or external attackers using compromised administrator credentials. Integrated encryption, data protection, identity and access management, security intelligence and audit on IBM Z provide insurers with a highly optimized, cost effective security environment.

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Insurers need to respond to the rapidly changing marketplace and threat of disruption from new competitors by transforming and modernizing their business applications and processes, operating models and underlying technology rails. Highly flexible, agile systems that can respond quickly to customer needs, market requirements, technology innovations, and regulatory requirements are enabled to connect and interact with the ever expanding ecosystem of partners, which is essential for insurers to remain competitive and relevant. Additionally, customers expect the services from their insurance providers to be available at all times and to be highly secure. IBM Z is the industry's most secure and highly available enterprise server with record uptime and 99.999% availability with the capability to seamlessly expand for future growth and spikes in demand.

Insurers are transforming core business applications using APIs and microservices to increase agility and flexibility while reducing cost. Without changing backend systems or requiring IBM Z skills, mobile and cloud app developers can create new services using APIs and microservices to connect to the existing data and transactional systems on IBM Z with IBM z/OS Connect EE. Insurers are also adopting DevOps to support agile, collaborative software development and are looking for modern tooling across their enterprise. IBM offers an end-to-end suite of DevOps products and tools that can be used across multiple platforms including IBM Z. Additionally, IBM Z supports modern programming languages, tools and open standards such as Docker, Node.js, Swagger, MongoDB, JSON, etc. enabling developers to create and deploy new APIs and services with greater speed and responsiveness.

Insurers are also looking at new, innovative technologies such as Blockchain to reimagine key business processes such as risk provenance, reinsurance, auto, or medical claims settlement, regulatory compliance and loan syndication using smart contracts to establish agreements with their network partners. IBM Blockchain platform offerings include a high security business network, a cloud services offering underpinned by IBM LinuxONE™ that provides a permissioned network with the highest transaction rates and a hardened security environment with unique features including the Secure Service Container – a virtual appliance lockbox.

IBM Z helps the world's most complex organizations and quickly growing enterprises to outthink the competition. Rely on IBM Z to deliver agility and efficiency through cloud, transact faster through Blockchain, create outstanding customer experience through analytics, and ensure service and data protection through the world's most secure systems.

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