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Tech Trends 2023: An insurance industry perspective

A perspective on emerging technology trends impacting the insurance industry

Relevance and readiness scale:

We looked at each trend and assigned a value from based on the trend's of adoption by insurers.

Relevance:

How impactful would it be if insurers adopted the trend?

Readiness:

How ready are insurers to adopt the trend?

The emergence of technological advancements is reshaping every industry, and insurers are quickly adapting to these tech trends and using them to reshape their business decisions. From leveraging AI to disrupting conventional claim and underwriting processes, modernizing their legacy landscapes to moving data and infrastructure to the cloud, insurers are on the journey to harness these trends for their business stakeholders and customers. They are using technology as a means to leapfrog their competition through continuous innovation and transformation.

This report provides an insurance-specific take on Deloitte's Tech Trends 2023 report, spotlighting the accelerating technology trends most likely to cause disruption over the next 18–24 months. We explore which trends may be most relevant for insurers and share some examples of how insurers have already started adapting to these shifts by using technology as a business enabler.



Through the glass: Immersive internet for the enterprise

The internet has evolved over a long period of time. And just when you thought that the evolution was maturing, there comes another big wave of technology disruption that changes the way we conduct our daily lives today. Immersive internet is the future wherein human beings would represent themselves using digital avatars on the internet. This would allow for more outcome-oriented customer interactions and a chance for better lifetime value that the insurer could provide through insurance purchases within a single group of companies. There is also a need for the insurance industry to be prepared for creating and distributing digital-only products associated with AR/VR.

Trends in action

As the immersive world is getting more advanced and access to AR/VR headsets is becoming affordable, the insurance industry can leverage this to drive personal accident insurance and servicing of traditional insurance products such as life and annuity, and property and casualty through this additional digital channel. The Insurance industry can also offer insurance for digital products for the immersive world.

This would be very useful for customer centricity with a white-glove experience. All forms of customer interactions may be possible in the immersive/virtual world. This would enable interaction with customers at their preferred choice of time and location.



Opening up to Al: Learning to trust our Al colleagues

Properly managed, Al can provide insurers significant advantages in terms of efficiency, effectiveness and intelligent decision-making. While the benefits of Al are undisputable, questions around its trustworthiness cannot be neglected. While Al can make operations more efficient, it is important to think through implementations carefully – improperly or naively configured, it can rapidly replicate poor behavior at scale. For effectiveness, Al can be viewed as a "wise, experienced colleague." Standard, predictable, and repeatable tasks can be handled by automation, Al/ML solutions, and the human underwriters can essentially focus on fine-tuning and intervening in cases that need higher-order decision-making.

Trends in action

Imagine a future where a customer is applying for car insurance. As they type in what they are looking for in a chat box powered by Large Language Models, the conversational AI bot collects all required information and hands it over to the 'anonymizer' bot, which generates a digital twin without any PII. Now, the insurer can leverage the digital twin to generate quotes, personalized for the customer. Once the customer makes their selection, the insurer can automate and expedite the underwriting process through Subject-Verb-Object (SOV) extraction, 3rd party data augmentation, and digital risk fingerprinting. Similar advancements can be made claims processing through Edge AI – sensors in the car can assess impact, share the data with the insurer, all done in the background while the customer only has to choose whether they want to pursue the Claim or not.

While this future may seem far-fetched, there are point-solutions being built for all individual aspects of the insurance value-chain; the real challenge that insurers face is integrating this into a holistic seamless solution at scale.











Above the clouds: Taming multicloud chaos

In the wake of COVID-19, large-scale transformations became one of the top strategic priorities for insurers. Many insurers stood up digital transformation programs, underpinned by cloud solutions with a focus on utilizing best-of-breed services from cloud providers. That resulted in shifting the traditional approach to migrate workloads in a single cloud to a fit-for-purpose multi-cloud environment. And this trend is now being further amplified with the advent of verticalization by cloud vendors, where the hyper-scalers are beginning to offer insurance-specific platforms by tailoring their solutions and offering capabilities like insurance-specific core systems, data models, and horizontal native applications.

While insurers are benefitting from the innovative solutions and having greater flexibility by adopting a multi-cloud approach, they are encountering significant complexities the along way due to a chaotic mix of platforms, services, security configurations, interfaces, with significant redundancy and overlaps leading to higher costs and demand for cloud-agnostic skills.

Trends in action

Insurers can overcome the overwhelming complexity and chaos from adopting a multi-cloud strategy by bringing in a layer of abstraction and automation that sits above the burgeoning multi-cloud and provides access to common services, known as meta-cloud or super-cloud, leading to better integration, stability, security, and performance across cloud platforms.

These solutions will help insurers to architect the underlying cloud solutions in a way that enables integration of the network layer, embed security by design, and ultimately build CICD (Continuous Integration Continuous Deployment) pipelines that allow business users to choose their preferred hyper-scaler based on business outcomes.



Flexibility, the best ability: Reimagining the tech workforce

While insurers have been able to achieve greater stability over the course of the COVID-19 pandemic, they are still facing significant market uncertainty in the face of changing macroeconomic trends; continued emerging risks as a result of global events, such as geopolitical instability and climate change; and a labor force requiring up-skilling. As such, insurers have recognized the need to create an "adaptable" technology organization – one that is able to respond to the highest priority needs to optimize the return on investment for technology initiatives – both near and long term. Insurers are moving toward product-and-platform based models where they are focusing on customer journeys and reorganizing in a way that helps them drive business agility.

Trends in action

Preparing the insurance technology workforce for outcomes-oriented work requires a multi-faceted approach to transformation:

First – Drive a new level of partnership between CIO/CTOs and CHROs – the needs of the tech talent workforce are unique (due to the nature of their work and increasing levels of human/Al partnership). **Second –** An integrated approach to address talent attraction, development, and retention. This requires openness across the organization to pull new levers for each component of the talent strategy. Improving talent development and attraction can be done through an intentional focus on cultivating engineering culture, providing robust, flexible, and on-demand learning resources (including immersive boot camps), and creating multiple operating channels to accommodate workforce (and tech stack) maturation timelines. **Finally –** Retaining the tech workforce is routed in a satisfying work experience. Providing creative recognition models, modern workplace technology, and a clear mission/vision/purpose helps create the conditions for flexible, outcomes-based work as the insurance industry continues to evolve.











In us we trust: Decentralized architectures and ecosystems

Decentralized architecture is an information network where no single entity has exclusive control over the outcome. Advanced technologies such as Blockchain and Web 3.0 help build trust and enable data sharing. This trend started with the API imperative a few years ago. As insurers have embraced APIs and micro-services-based architectures, they have started seeing increased technology performance, avoiding a single point of failure and driving the ability to scale. As organizations begin to understand decentralized architectures, they are also growing to appreciate the utility of newer capabilities like Blockchain with stakeholder trust-building as the primary benefit. Decentralized architectures and business models demonstrate that none of us is as trustworthy as all of us.

Trends in action

The insurance industry operates with a conservative risk appetite. As blockchain experimentation and adoption continues, insurance companies and regulators are beginning to better understand the ways in which they can leverage blockchain. Insurance companies are automating processes across the business data life cycle such as underwriting, claims adjudication, renewals, reinsurance, reporting, and payments. The organizations that have completed their proofs of concepts are now on their path to utilizing decentralized blockchain technology to bolster trust as a competitive advantage.



Connect & extend: Mainframe modernization hits its stride

Most businesses today feel that their legacy systems (like mainframes) are performing well on the types of workloads they were originally designed to do. The problem is that the business and technology environment has moved on, leaving business leaders expecting more functionality from their IT systems, available at faster speeds. Rather than rip and replace legacy core systems, enterprises are increasingly looking to bring them into the modern era by connecting and extending them to emerging technologies. Through tried and true approaches to legacy system modernization, businesses are leveraging assets like mainframes—and their precious data—to drive digital transformation.

Trends in action

Most insurers are facing the challenge of being heavily reliant on legacy technology platforms like mainframe which lack agility and inhibit their digital journey to meet everchanging customer expectations. To date, the core insurance operations and processes of most North American insurance companies run on legacy platforms.

Insurance companies are looking to unlock the ability to incorporate AI and ML, real-time decision-making and data processing efficiency as part of the modernization effort. Furthermore, they have experienced the reduction in skills supporting these legacy platforms, which is pushing them on the path of modernization. Overall, insurers have realized the criticality and importance of tech modernization, but with the risk involved and the high cost of modernization, these insurers are taking cautious steps to kick off their digital transformation journeys.









Learn More

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