



Modernizing the Insurance Industry with Digital Identity

Meeting the Six Key Requirements of Today's Insurance Business—and Tomorrow's

The drive to digital transformation

In the digital era, the insurance industry faces growing pressure on two fronts. First, firms must meet rising consumer expectations for a more modern, seamless, and convenient way of doing business. This includes unified access across products, a faster claims process, and greater transparency about data security and privacy. Secondly, established insurers must keep pace with innovations introduced by a new generation of “insurtechs,” including more personalized products, usage-based coverage, increased automation, and the ability to collect and analyse greater volumes of data more quickly.

In brief, firms need to better manage current operations while enabling a more agile and effective response to emerging market trends and demands. They must meet today’s challenges while preparing for the challenges of tomorrow—or quickly fall behind the competition.

These demands are now driving firms to deploy a fully modern infrastructure to enable digital transformation. According to Deloitte: “More insurers are looking to bolster core systems, add capabilities, and enhance customer experience through artificial intelligence (AI), digitalization, new sales platforms, alternative product development, and other innovations.” But what does a fully modern infrastructure look like? What requirements does it need to meet?

This ebook examines six key areas of focus for infrastructure modernization in the insurance industry:

1. Personalized experiences, including new service models, personalized products, and unified access
2. Robust privacy and consent controls to facilitate compliance while enabling third-party data sharing to create value-added services
3. Internet of Things (IoT) capabilities to capture new data streams while ensuring security
4. Ecosystems across companies and technologies to enable insurtech partnerships and integrations
5. Cyber-risk and governance measures to control and protect data across diverse devices and extended ecosystems
6. Cloud resources to increase speed, flexibility, scale, and the transition away from outdated legacy systems

A digital moment of truth for the German insurance industry

The German insurance industry is diverse, robust, and thriving. As of 2018, Germany had more insurance firms than any other European country. Almost every citizen and every company is a customer, and German insurers held almost 438 million contracts in 2018. Insurance contributions paid that year accounted for 5.98% of GDP, making insurance one of the most important economic sectors in Germany.

But the industry is also at a turning point. Traditionally risk-averse firms now face customer demands for new ways of interacting—digital, convenient, and designed around the policy-holder's needs. In fact, every third insurance policy is now being purchased online. Connected cars and smart homes bring new requirements for the way insurers write policies and process the relevant data. Within the healthcare sector, mandates around the electronic health record are forcing some areas of the industry to become digital by law.

And competition is increasing. As of 2017, Germany's five largest insurers held over half of the healthcare insurance market. But today, a new generation of venture capital-funded insurtechs are growing market share through innovations such as ultra-customized policies, social insurance, and using streams of data from Internet-enabled devices to dynamically price premiums according to observed behavior.

Meeting the competitive challenge

As digital disruption exposes insurers to unprecedented competition, they must now provide better experiences, develop more personalized products, improve security and governance, and unlock the full value of rising volumes of data. At the same time, firms must manage the skills, expectations, and retention of a changing multigenerational workforce. Digital transformation is now mission-critical. Says Deloitte, "a carrier's ability to utilize new technologies to enhance customer engagement, develop new product offerings, analyze data, or employ automation tools is tightly coupled with the readiness of its core systems."

All of these requirements share a single enabling technology in common: identity. In an age where everyone is connected to everything, all services are becoming digital, and relationships change faster than ever, identity is what links everything to everyone. This makes identity and access management a top priority for every insurer.



Enabling personalized experiences

According to Accenture: “The post-digital era will be one where each consumer, employee, and business partner will seek tailored, contextual experiences, and every moment will represent an opportunity for companies to play a role in shaping it.” Customers now expect services tailored to their lifestyles and business needs, such as pay-per-mile auto insurance models, digital assistants to guide product selection, and new services such as cyber-insurance. Streamlined processes are fast becoming the norm; the vast majority of new life insurance sales now involve digital interactions such as online searches, comparisons, and applications, and policy-holders have a similar expectation for claims as well.

Many firms struggle to meet these demands. Creating a comprehensive digital portfolio of insurance services depends on access to complete, accurate information as well as effective communication across digital channels. However, legacy technology infrastructures create data silos that make it difficult to build a consolidated overview of the customer, or to securely integrate new channels of data into the customer record.

How ForgeRock can help

The ForgeRock Identity Platform provides complete identity and access management (IAM) capabilities to create a strong, unified digital identity for each user, and tie this to users, connected things, and cloud services across digital insurance ecosystems. As a result, insurance organizations can provide seamless user experiences across channels, and can personalize their products and services with ease. Firms can

- **Know your users** – Gain a consistent, 360-degree view so you can know your users across all channels and ecosystems. Firms can share accurate, complete, and reliable data such as digital patient records with relevant parties, while users benefit from a more personalized and meaningful digital IAM experience.
- **Provide exceptional digital experiences** – Remove friction from onboarding and sign-up. Users get to choose how they authenticate and share personal data about themselves, their devices, and their things.
- **Harness IoT data sources** – Capture data from wearables, phones, homes, and cars to better tailor coverage and billing.
- **Improve customer health, safety and efficiency** – Make recommendations based on health data from wearables, enable consumers to secure who has access to what and for how long in smart homes, and provide usage-based car insurance options.
- **Automate common activities** – Use artificial intelligence (AI) and machine learning (ML) to automatically approve access requests, perform certifications, and predict what access should be granted to users.
- **Streamline M&A** – Leverage AI and ML to understand functional redundancies, Segregation of Duties, and other employee data issues.

Ensuring customer privacy and consent

Regulators around the world are raising the bar on privacy and consent, from EU GDPR in Europe, to CDR in Australia, to CCPA in California. Governmental requirements around the creation of electronic health records pose key challenges around the way firms store, manage, and use sensitive personal information. Customers will need to be able to grant, revoke, and transfer access across the healthcare providers they work with, while insurers will need to be able to pull in health data from diverse sources.

Meanwhile, as consumer awareness grows of the importance of data privacy, this will become a key factor in their choice of insurer. According to Deloitte, “insurers may also need to increase transparency about the lifestyle information they access and how they use it to improve coverage, pricing, and service, and thereby convince privacy-sensitive customers that sharing personal data is an attractive value proposition.”

Data privacy isn’t just about regulatory compliance; it’s also about building trust and protecting customer relationships. Organizations must ensure that the identities of users, connected things, and cloud services are verified and authorized. To provide optimal services, they need a secure way to share sensitive data with relevant people, organizations, and devices, and a simple way for customers to consent to data sharing, with full auditability of customer data sharing. As the user base grows, the system must scale accordingly.

How ForgeRock can help

The ForgeRock Identity Platform protects privacy and helps address data protection regulations by enabling customer-controlled consent and data sharing across cloud, mobile, and IoT sources. This makes it possible for firms to:

- **Empower customer visibility** – Provide a centralized dashboard for customers to conveniently manage their profiles and privacy preferences while ensuring compliance with data privacy regulations such as the right to be forgotten under GDPR.
- **Enhance customer trust and mitigate risk** – Give customers the freedom to decide who and what can access their personal data, for how long, and under what conditions.
- **Increase secure sharing** – Leverage simple, standardized mechanisms for authorization and API security across all relevant insurance services.
- **Enable on-demand permissions management** – Scale permissions management to tens of millions of customers as business grows.



Leveraging new data streams such as IoT

Connected devices offer exciting possibilities for insurance customers—for example, authorizing their smart home and alarm systems to send sensor data on floods, alarms, and other incidents to their home insurer for immediate mitigation and faster claims. By sharing telemetry data with their car insurer, customers can take advantage of usage-based billing. The key to enabling models like these is consent, which allows customers to choose which data to share, with whom.

As the number of IoT-dependent insurance services and devices per customer grows, including connected smart home and car equipment as well as healthcare wearables and app-equipped smartphones, managing each device's identity and tying it back to the customer in question will be a mission-critical capability. By understanding the relationships between users and devices, managing the consents between them, and enabling fine grained authorization, firms can make the IoT a powerful value driver for their business as well as their customers.

How ForgeRock can help

The ForgeRock Identity Platform allows insurance providers to modernize their services by building digital identity ecosystems that support new, user-friendly technologies that naturally evolve alongside the IoT. Designed for IoT scale and complexity, the solution makes it possible to seamlessly connect customers, partners, and providers with myriad devices, applications, and services. Firms can:

- **Keep data consistent** – Maintain comprehensive, unified customer profiles integrating data from wearables, devices, apps, smart homes, connected cars, and other entities.
- **Manage IoT devices at scale** – Allow IoT devices to be automatically registered as identities and managed from a central location with full privacy, integrity, and security.
- **Govern IoT data** – Enable secure registration for people, devices, and connected things; link them together; authorize and deauthorize their access to data; and apply policies that dictate security and privacy practices, as well as personalization.
- **Incorporate microservices** – Securely connect microservices to a modern IAM platform through an identity gateway running at the edge, in the cloud, or in a container.
- **Visualize data** – Build graphs and dashboards to analyze data pulled in across users, their devices, and services.

Connecting industry ecosystems

As traditional firms race to achieve digital transformation, external partners and insurtechs can help drive innovation and open new revenue streams. For example, in 2016, Allianz collaborated with the German InsurTech Simplesurance to distribute products in 28 countries via customer portals and online shops. Links to other industry apps such as real estate, car sales, and travel can help firms obtain new customers who were not even thinking about insurance. Aggregated data from fitness devices and apps can help lower premiums for existing healthcare policies, and value-added services can be provided with customer consent through third-party partners. Many in-house groups will also be developing their own technological innovations, and will need to connect these with the environments of both their own organizations and third-party partners.

Ecosystems are also central to the creation of electronic health records, which pull information from internal silos and doctors, hospitals, pharmacies, and other related organizations to create a 360-degree digital view of the patient. Providers need access to this complete view to guide treatment and, in the case of private insurances, to understand coverages, while private insurance providers need to know which treatments they need to pay for, and to whom. Customers need a digital dossier to manage their direct insurance contracts as well as for end-to-end claims handling across external parties.



Connecting industry ecosystems

In pursuing these strategies, firms will need to overcome the friction introduced by their existing technology infrastructure. This is especially true of traditional IAM environments that are fragmented, inflexible, and lacking scalability. Identity APIs enable organizations to easily connect with partners and customers through a secure and seamless experience by linking together people, legacy and modern systems, and services in an open ecosystem.

How ForgeRock can help

The ForgeRock Identity Platform provides modern identity to help insurance organizations securely expose rich APIs for seamless ecosystem integration and continuous delivery. Firms can:

- **Create new revenue streams** – Meet customer expectations by delivering seamless, omnichannel experiences that leverage third-party integrations secured through a standards-based, API-first identity platform.
- **Secure APIs** – Protect APIs and users with a gateway to enforce authorization for any type of traffic. Firms can monitor API traffic, throttle traffic volume, and detect anomalies.
- **Leverage existing technologies** – Bridge legacy systems with modern applications and extend the ForgeRock platform with plug-in technologies, including tools for strong authentication, risk and fraud management, identity proofing, and identity enrichment.
- **Facilitate transformation and meet regulations** – Aggregate internal and third-party consumer and patient data in a single view. Consumers can have secure access to their electronic health records in one place and control who can access it, for how long.



Maintaining security and governance

As the EU GDPR and other regulations continue to strengthen rules for data privacy and security, insurers can't allow their increasingly diverse business ecosystems to undermine standards and compliance. This is especially critical given the relentless advance of threats such as ransomware, DDoS, remote control trojans, and other attacks. It's no longer enough to simply authenticate and authorize access at the initiation of an online session; activity must now be monitored continuously for suspicious behavior or unusual activity that might be malicious.

At the same time, as insurers seek to leverage new data sources and analytics tools to guide marketing, pricing, and underwriting strategies, they must evolve their data management processes to aggregate and govern diverse data sources more securely and efficiently. Throughout the data lifecycle, firms must ensure that each customer's profile remains unified, accurate, up-to-date, and in full compliance with regulatory mandates governing data privacy and security.

Recognizing the urgency of the challenge, Deloitte observes: "Many carriers are struggling to meet new regulatory requirements because siloed legacy systems often lack integration. The overwhelming volume of data being maintained can also be problematic."

How ForgeRock can help

The ForgeRock Identity Platform lets firms protect against the latest threats while driving personalization. The solution captures rich context to make intelligent access decisions in real time, allowing borderless workforce collaboration and dynamic customer journeys. Firms can:

- **Visually design user journeys** – Use an intuitive interface to create login and self-service experiences for employees and consumers with a variety of security and risk profiles.
- **Secure and optimize logins** – Easily configure, measure, and adjust login journeys using rich digital signals and risk-based factors. Out-of-the-box, existing, and custom authenticators can be used. Login analytics help improve the customer experience.
- **Reduce risk and aid compliance** – Avoid excessive or unnecessary access to applications, systems, and data by detecting security policy violations, flagging high-risk users and entitlements, and automatically removing excess privileges.
- **Aid compliance** – Simplify access reviews needed for compliance, easily audit user access to systems and resources, and use out-of-the-box reports and templates for internal and external auditors.

Evolving to the cloud

Cloud resources and technologies play a central role in insurance infrastructure modernization as well as strategic business evolution. Says Deloitte, “conversations about cloud have generally shifted from IT-centric topics such as where to more efficiently house data, to business-driven considerations such as how cloud can enable system modernization and business model transformation. This is possible due to the benefits of speed, flexibility, and scalability, in addition to the operating cost efficiencies cloud can provide.” With computing power and storage on demand, the cloud also provides ready capacity to leverage advanced technologies such as machine learning and artificial intelligence.

At the same time, there are as many ways to adopt the cloud as there are businesses. Firms need the freedom to bridge traditional infrastructure to cloud as best fits their own business requirements and technology roadmap, without disrupting current operations, with the flexibility to deploy resources flexibly across their hybrid environment.

How ForgeRock can help

The ForgeRock Identity Platform offers flexible deployment on-premises or in the cloud so that insurers can use a common identity platform to protect applications and services across any type of environment—traditional, multi-cloud, hybrid cloud, or as a service. Firms can:

- **Preserve existing investments** – Realize all the features and benefits of IAM modernization without having to first retire existing identity solutions, using an API-first design to enable both environments to coexist for a seamless transformation.
- **Start quickly** – Choose any combination of on-premises, container, and as-a-service implementation options, and get the first project running quickly, then scale as needed.
- **Deploy with confidence** – Perform fast, efficient deployments for critical use cases with expert assistance for optimal results, alignment with business priorities, and effective cost control.
- **Build a next-generation system** – Scale beyond employees to accommodate the identities of customers, devices, and services on a flexible, agile, unified platform architecture.

Insurance industry modernization in the real world

In 2017, one of the world's largest insurance providers with a major market in Germany was starting to face intense competition from online insurance companies. In order to compete and retain their customers, the firm needed to implement a large-scale digital strategy that would support omnichannel needs and offer a better online customer experience.

Challenge

The firm wanted a new solution for their online portals and a way to define a digital identity for their customers in a multichannel approach via online, insurance brokers, and other channels. The firm also wanted to improve digital experiences by making it easier for customers to manage their data and policies. Due to a significant increase in products resulting from mergers and acquisitions, a proliferation of product-specific customer portals had emerged that did not offer customers a 360-degree view of the company's services. As a result, customers struggled with multiple logins to different portals. This required a significant upgrade to the company's existing IAM capability, which was already falling short of current needs. To enable future-proof management of customer data, the new solution needed to:

- Offer secure single sign-on and maximum protection for customer data
- Provide interfaces to enable complete and validated identities from external systems
- Meet rigorous security standards, as well as key requirements of the EU GDPR



Solution

The firm implemented the ForgeRock Identity Platform within its Amazon Web Services (AWS) environment, using automatic deployment scripts to accelerate the migration of its existing identity systems. The ForgeRock Identity Platform became the bridge between the existing backend systems and is now offering customers a consolidated view on more than 20 current products and solutions. Leveraging a cloud deployment model enabled regular updates throughout the year, making them quickly available to customers without having to compromise on the platform's availability, stability, or security. A subsequent update in July 2018 included the integration of adjacent technology, completing the firm's requirements.

Result

The firm now uses the ForgeRock Identity Platform as a digital customer identity system across Germany. New projects can be connected to the platform quickly to support new business and technology initiatives. In one key innovation, an existing broker portal used by field staff to manage their contracts has been fully modernized to better meet customer needs. Insurance customers now appreciate new and convenient ways to manage their policies.

"The agility gained through the new platform has so far been a foreign word for most large companies. Decision-making processes here sometimes take longer than we now need to implement the entire project. With the ForgeRock platform and the resulting opportunities, we are leaders in our industry."

– Global Insurance Company

About Forgerock

ForgeRock®, the leader in digital identity, delivers modern and comprehensive Identity and Access Management solutions for consumers, employees and things to simply and safely access the connected world. Using ForgeRock, more than a thousand global customer organizations orchestrate, manage, and secure the complete lifecycle of identities from dynamic access controls, governance, APIs, and storing authoritative data – consumable in any cloud or hybrid environment. The company is privately held, and headquartered in San Francisco, California, with offices around the world. For more information and free downloads, visit www.forgerock.com or follow ForgeRock on social media.



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