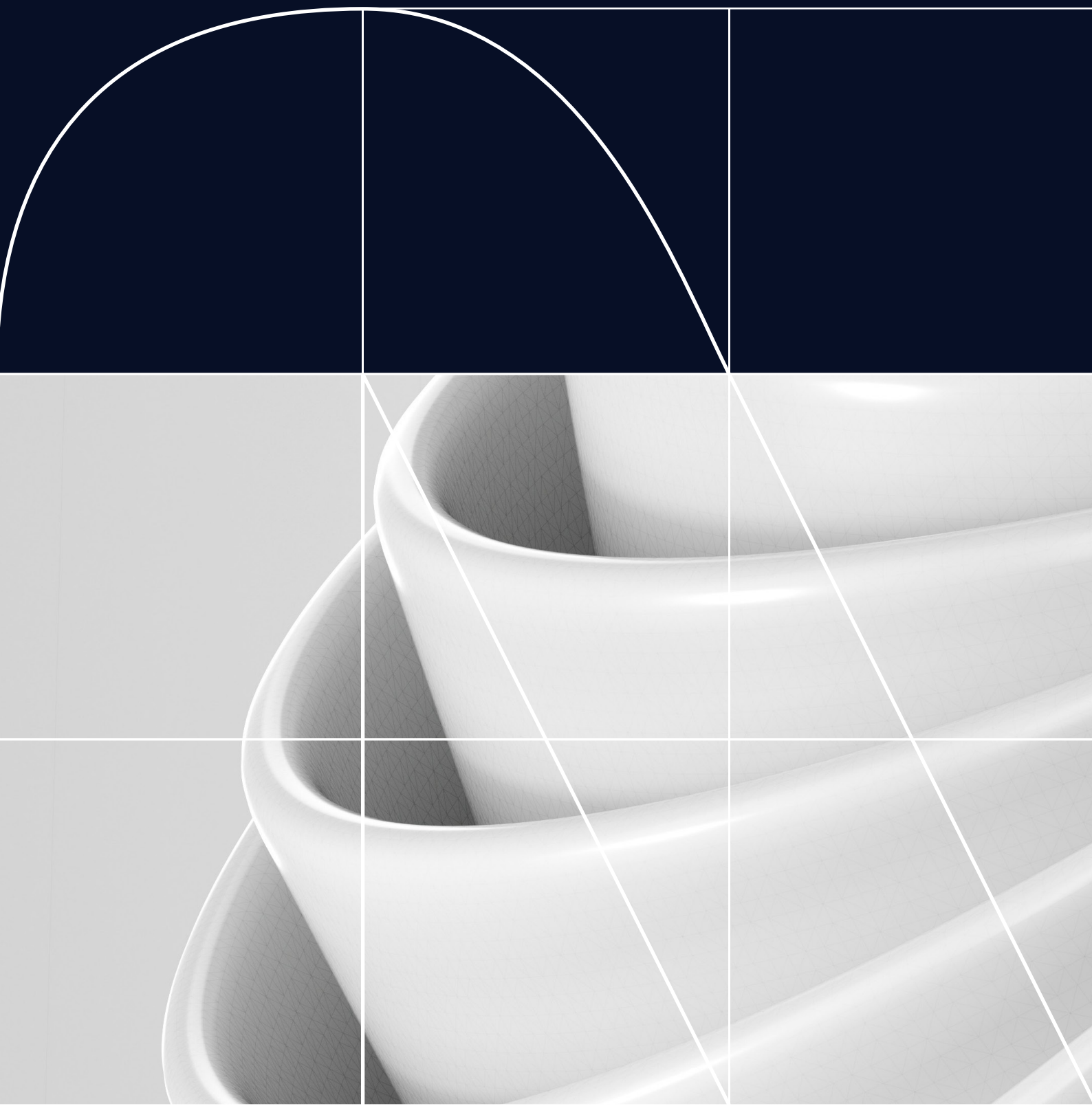
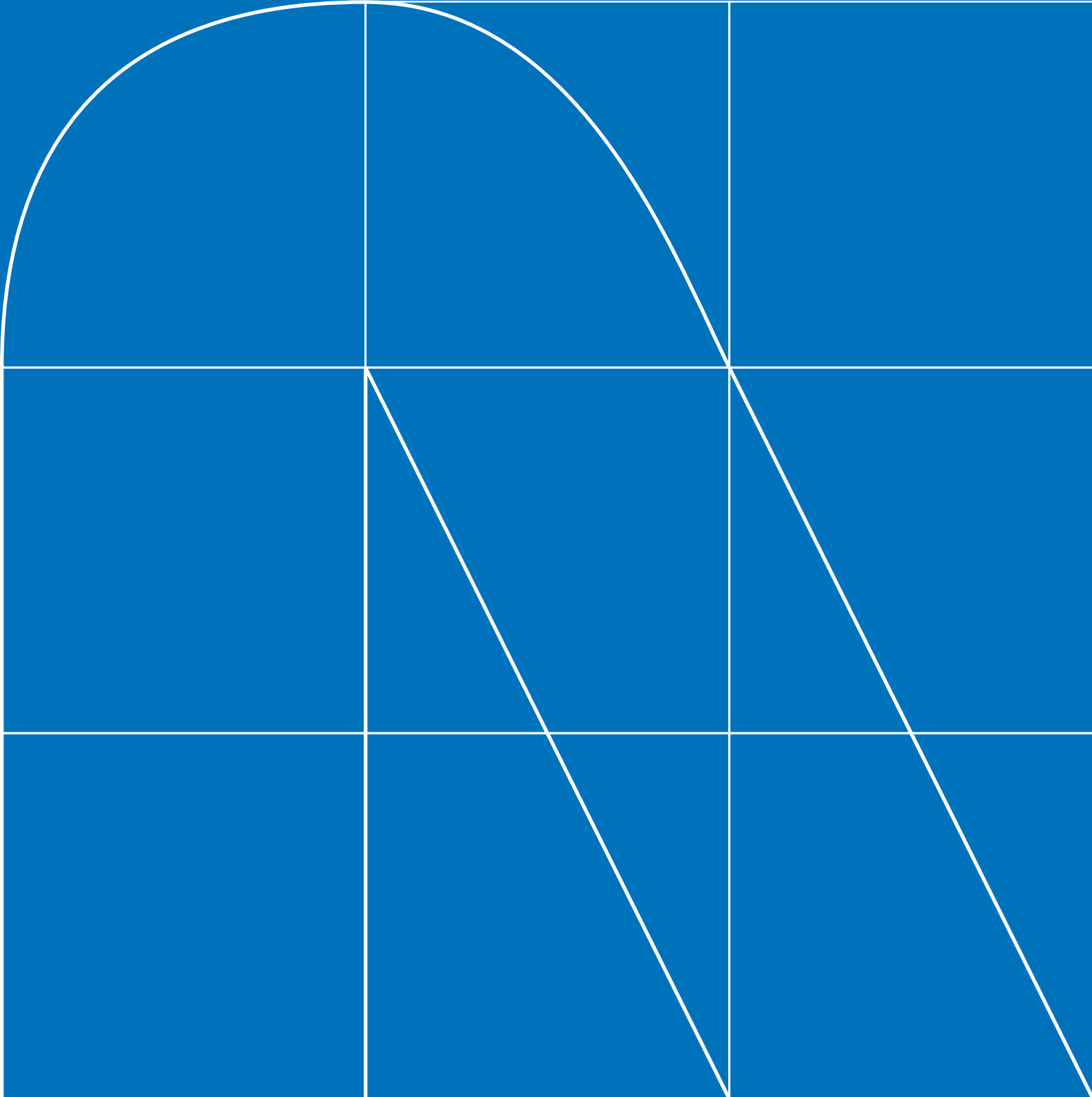


Embracing Insurance Core Modernization for Future-Readiness

Thought Leadership

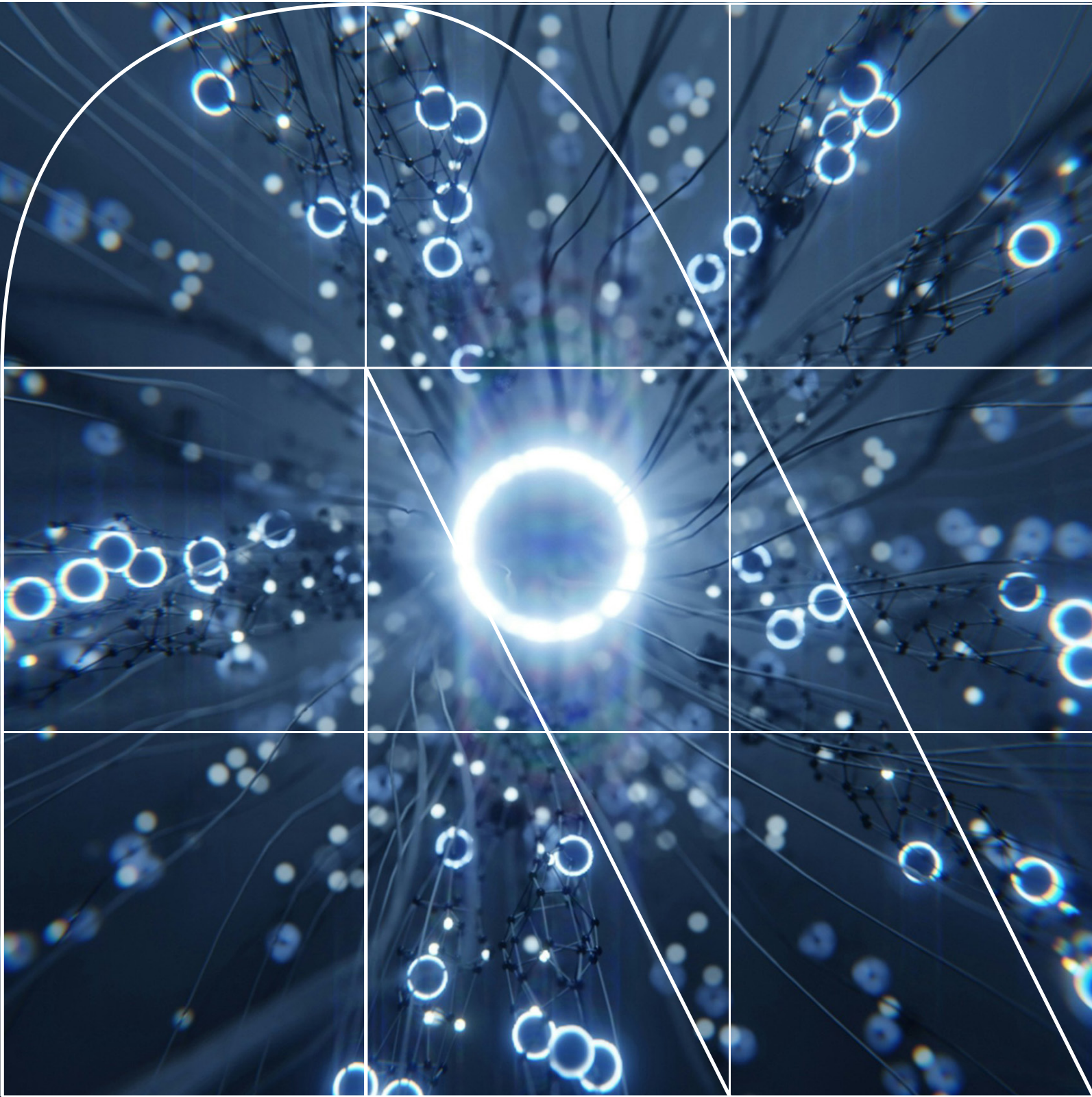




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Introduction

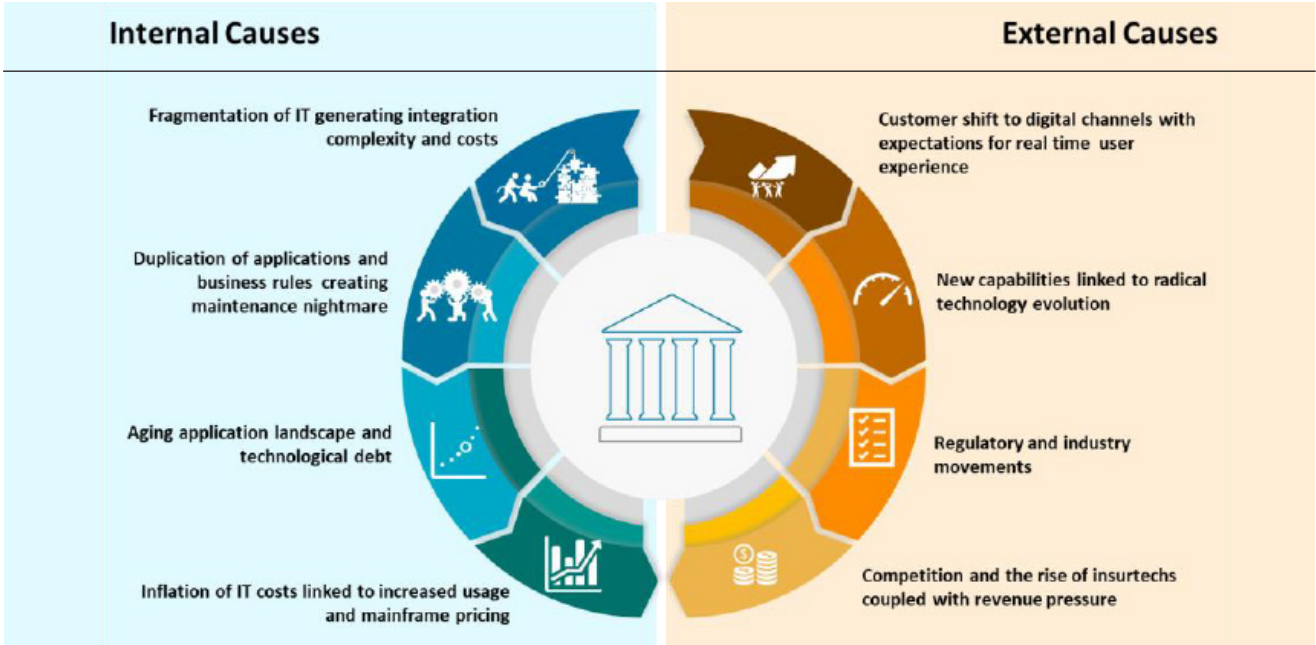


The insurance ecosystem is evolving rapidly due to the challenges and accelerating forces driving a new wave of market transformation. **This transformation is fueled by connectivity, tech integration systems, and the use of AI and data.** The insurance sector is undergoing a swift transformation, driven by emerging challenges and dynamic forces that are shaping a new era in the market.

Amidst this backdrop of global market uncertainty and a shifting industry landscape, modernization has emerged as a crucial strategy for insurance stakeholders. It is essential not only for meeting the evolving

demands of customers but also for maintaining competitiveness and sustainability in the marketplace. A significant hurdle in this transformation is Legacy systems. Originally designed for specific insurance applications, but often posing constraints on scalability, time-to-market and interface flexibility, limiting insurers' ability to leverage modern technology efficiently. Core modernization enables insurers to respond to market demands, enhance process automation, manage real-time data across various channels, and develop new products, thereby improving efficiency and customer experience, which in turn can significantly increase revenue and market share.

The Causes of Legacy Modernization



¹Source: Celent: Legacy modernization How Can Insurers Achieve Success?

² On the other hand, Gartner forecasts the global insurance industry IT spending will increase by 9.4% in 2024 to reach \$232.0 billion in constant U.S. dollars. Spend is forecast to grow at a CARG (Compound Annual Growth Rate) of 9.6% from 2023 through 2028, driven by growth in IT services and software at a CAGR of 9.9% and 13.9%, respectively. The value at stake is enormous in terms of revenue and cost savings. They estimate that a modern core platform with digital capabilities—such as greater process automation and the ability to manage real-time information across channels—can improve efficiencies and the customer experience, boost revenue by 25%, and accelerate new-product time to market by a factor of three to four.

However, the journey towards insurance transformation and core modernization encompasses more than just IT; it involves a blend of business and IT interests. Organizations must approach modernization with a clear strategy, meticulous planning, and the collaboration of skilled technology partners to ensure successful outcomes and maximize return on investment.

Reasons for Technological Modernization

³ With operational efficiency at the top of minds, especially as insurers face a possible economic downturn and the need to drive more value to stakeholders, the implementation of process change and technologies is key. The survey found that over half of CIOs are increasing technology investments in 2023, with the most common areas being application modernization, cybersecurity/information security, BI/analytics and APIs.

Benefits of Core Modernization

We can consider the main benefits of Core Modernization as follows:

- **Cost Efficiency:** Modern IT systems reduce operational expenses through transformative programs that eliminate administrative tasks.
- **Enhanced Automation:** Improvements in automation enhance user interfaces, providing digital experiences and convenient distribution channels.
- **Improved Productivity:** Establishing data-driven technology infrastructures facilitates process automation and streamlines operations and workflows.
- **Superior Customer Experience:** Upgraded core systems provide more service options and access to real-time information, reducing churn rates by delivering a dependable user experience.

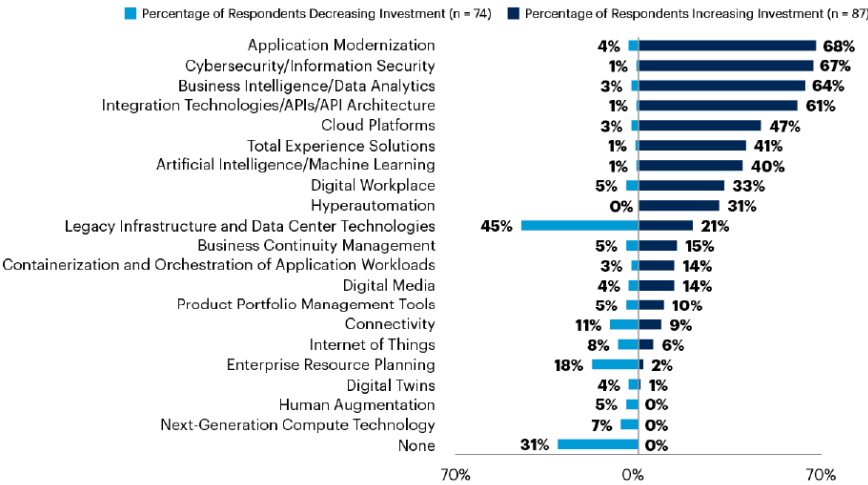
Change in Technology Investments (Percentage of Insurance Respondents)

In the insurance industry, there is a significant shift in budget allocation away from maintaining outdated legacy systems towards investing in advanced technologies. This strategic reallocation is driven by the need to enhance customer experiences and improve operational efficiency. Insurers are recognizing the importance of modernizing their core processing systems not only to stay competitive but also to meet the evolving expectations of today's digital-savvy customers.

In the Gartner’s survey we can see that, 68% of the insurers will increase their investment in application modernization, it being the most invested technology.

We partner with Life and Property & Casualty insurance companies to support this transition, aiming to reduce insurance processing costs and enhance competitiveness in today's market by modernizing core insurance processing systems to add value.

Changes in Technology Investments (Percentage of Insurance respondents)

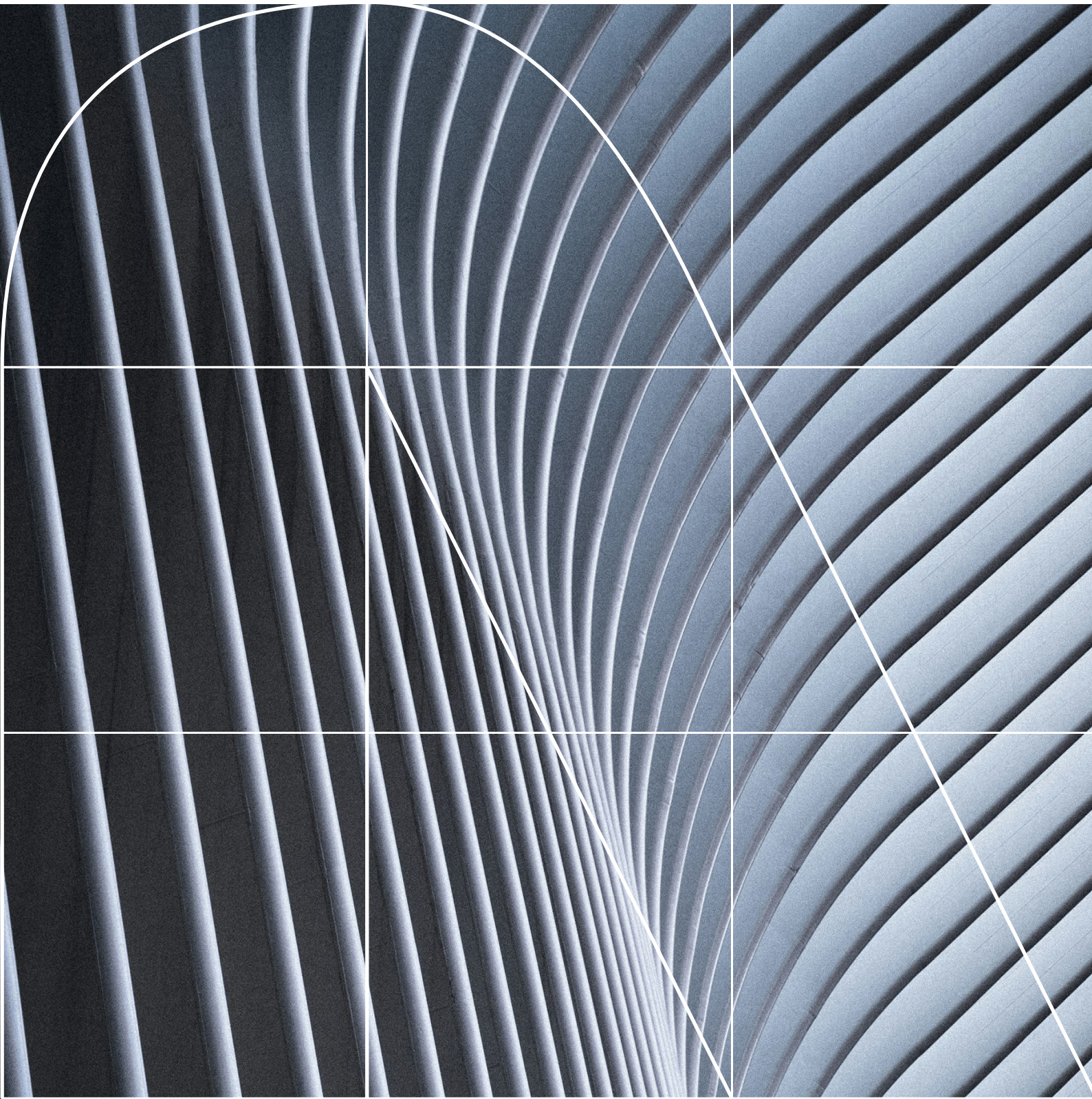


⁴Source: Gartner: Gartner Survey Finds Insurers’ Focus Will Shift from Growing Revenue to Improving Customer Experience & Operational Efficiency in 2023

OBJECTIVE	(% responses stated as top two objectives)
Improve Operational Efficiency	70%
Simplify Architecture	63%
Improve Customer Experience	50%
Support Growth	35%
Cost Reduction	10%

Source: Celent: Legacy Modernisation, How Can Insurers Achieve Success?

Opportunities & Challenges



⁵The insurance sector faces a complex landscape marked by economic deceleration and geopolitical instability, as highlighted in Swiss Re's Sigma 06/2023 Outlook. This environment is expected to temper growth within the primary insurance industry.

The anticipated global real premium growth is projected at a modest 2.2% annually over the next two years. This rate is slightly below the pre-pandemic levels of 2.8% observed between 2018 and 2019, yet it represents an improvement over the 1.6% average growth rate from the past five years. While profitability shows signs of recovery and underwriting gaps are narrowing—thanks to rising investment returns from higher interest rates—the industry might still struggle to meet its cost of capital in 2024 and 2025 in key markets. Additionally, external factors like the ongoing conflict in the Middle East could further strain insurers' capital through inflation and market volatility.

Non-life insurance is confronting challenging claims dynamics, with rising frequency and severity of claims despite declines in economic inflation. The pace of claims growth in the liability line of business challenges the insurability of those risks. It is estimated that natural catastrophe insured losses are on track to reach USD 100 billion in 2023, for a fourth consecutive year, and the sixth year since 2017 (inflation-adjusted). They anticipate further hard market conditions in 2024 at least. In the Property and Casualty (P&C) segment we estimate 3.4% real premium growth globally in 2023, stronger than our forecast for 2024–25 (2.6%). This reflects a significant repricing of risk, especially in claims-impacted lines. Meanwhile, health premiums are projected to rebound, growing at 1.5% in 2024 and 2025 after a decline in 2023.

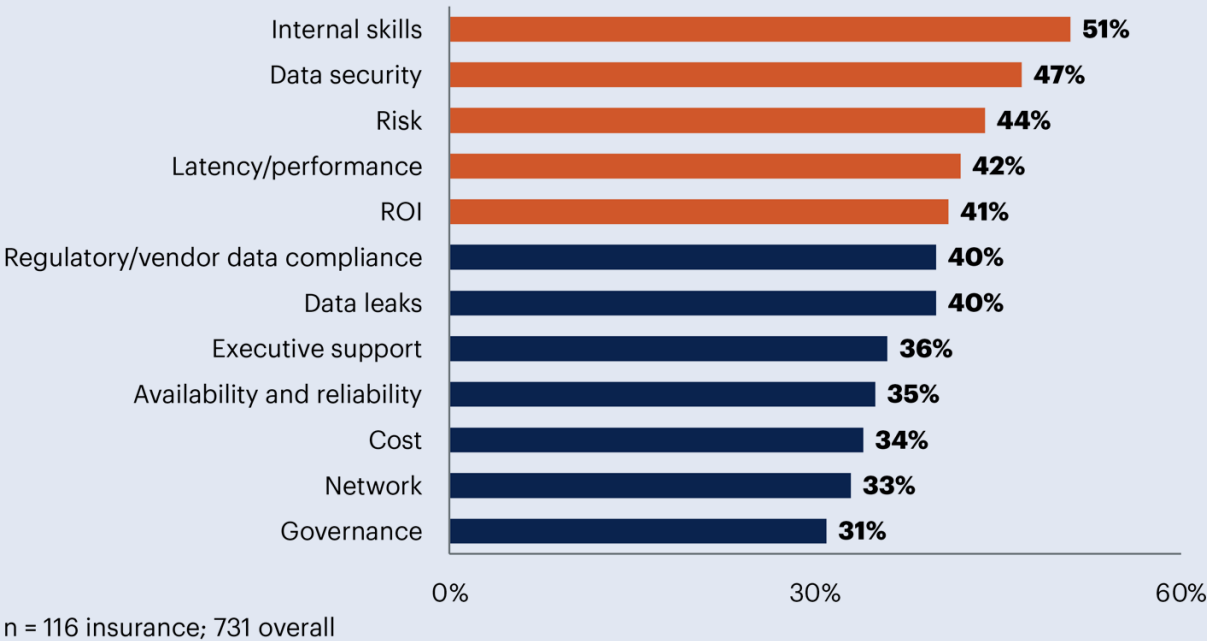
In the realm of life insurance, higher interest rates are boosting demand for savings-type products and supporting bulk annuity transfers. Increased investment yields are likely to enhance profitability in 2024 and 2025, with life premium growth expected to average 2.3% during these years, a notable increase from the 1.5% estimated for 2023. This growth trajectory for the life savings market over the next decade is poised to significantly outpace that of the past 20 years.

⁶Amid these challenges, insurers are also navigating the complexities of technological transformation. Those who have begun investing in cloud technology are focused on achieving a substantial return on investment. However, merely transferring legacy systems to the cloud without a strategic alignment to business goals may not deliver the long-term benefits anticipated. Insurers must ensure that their cloud adoption strategies are well-aligned with their evolving business and operational models to realize the expected ROI (Return on Investment).

Furthermore, replacing core systems represents a significant cost and business risk to the organization. Such projects can take 12 to 18 months to initial production go-live and can easily cost upward of \$5 million, and often much more. Given the high stakes and risks involved, for many insurance CIOs, core system modernization is a pivotal, once-in-a-lifetime project that could significantly influence the future trajectory of their organizations and their professional careers.

Overcoming Challenges in Core Modernization

Top Five Challenges to Legacy Modernization
Sum of top five



⁷Source: Gartner: Insurance CIOs Must Respond to Three Shifts in Legacy Modernization

Gartner’s research highlights the most common mistakes observed in insurance core system modernization.

Many seem obvious at first sight, but it’s surprising how often these mistakes are still being made. The common thread through all these mistakes is having a shared understanding of scope, and then ensuring it is documented and understood by all parties involved in the modernization effort. Both functional and nonfunctional scope will of course change as the project progresses. Having the scope documented at all stages ensures the effectiveness of change management, safe handoffs between parties and ultimate acceptance of the new system. Even where CIOs take due care on mitigating modernization mistakes, there are still too many instances where the vendor’s pricing overrides all other risk considerations, leading them on a sure-fire road to disaster.

Here are some key shifts in how insurance CIOs should address legacy modernization:

- 1. Value of Existing Assets:** It’s essential to recognize the value of high-utility assets as much as the need for system replacements. Legacy does not mean obsolete; they are systems that no longer support current and anticipated business needs.
- 2. Focus on Digital Transformation:** Shift the focus from the costs associated with implementation and migration towards digital platforms. Success should be measured by key performance indicators, such as the percentage of business processes that can be automated without manual intervention.
- 3. Hybrid Architectural Complexity:** Address the technical complexities inherent in modernizing core systems on a hybrid architecture. Avoid reducing legacy modernization efforts to mere technology projects by aligning program goals with broader business modernization objectives.

4. Continuous Modernization: Implement a strategy of continuous modernization at the enterprise level to monitor and upgrade a portfolio of interdependent technologies. These technologies collectively support the products, rules, and processes needed to manage insurance contracts.

5. Identify and Mitigate Friction Points: Continuously identify, prioritize, and address the most severe friction points where business capabilities are poorly supported by applications.

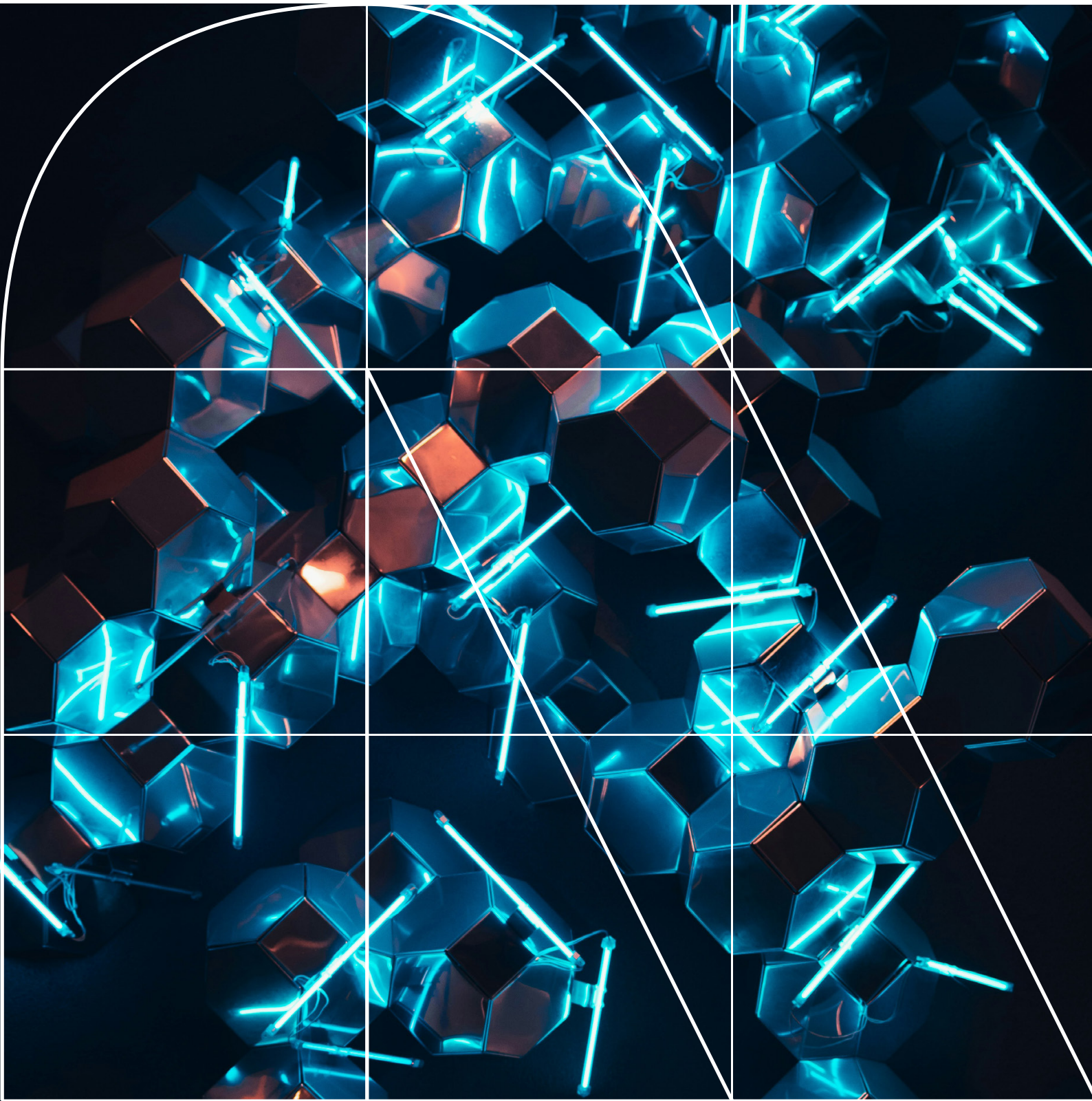
6. Technological Differentiation: Classify technological solutions based on their expected lifespan and the stability of technological advancements to tailor approaches for stable versus rapidly evolving software markets.

7. Strategic Cloud Adoption: Clearly articulate and document strategic priorities for cloud adoption within your organization. This clarity will guide key decisions and facilitate communication across the organization.

8. Financial Planning for Cloud Adoption: Collaborate with finance departments to model the budget impacts of various cloud scenarios. This planning is essential for covering the additional operational expenses required for tools, platforms, resources, and professional and managed services needed to support the cloud journey of core insurance platform components.

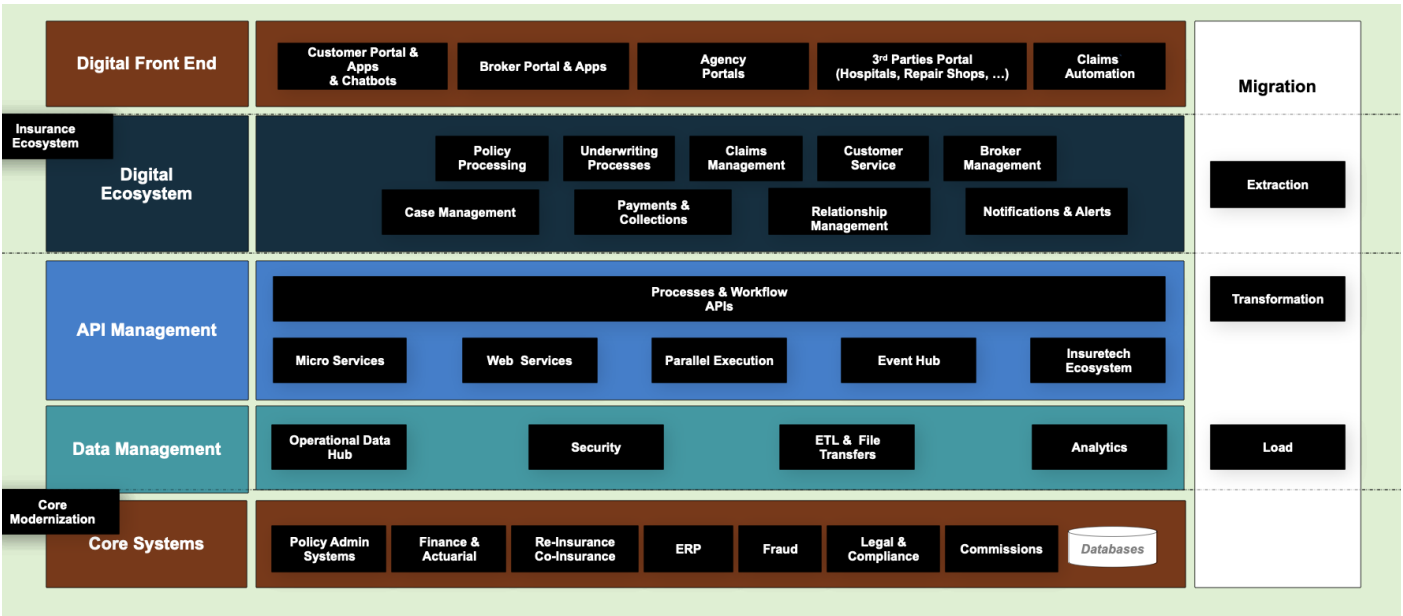
9. Optimizing Mainframe Utilization: For CIOs relying on mainframes to support core insurance processes, develop a mainframe strategy that includes a detailed application analysis. This strategy should determine the optimal placement of workloads and the resources required to support them.

Modernized Insurance Ecosystem: Key Elements & Trends



This framework outlines the architecture for a digitally transformed insurance company, integrating modern technology with core business processes to enhance efficiency, customer experience, and operational effectiveness.

Insurance Digital Ecosystem - P&C and Life Core Modernization Frame



Source: NTT DATA

Main Core Systems Functionalities

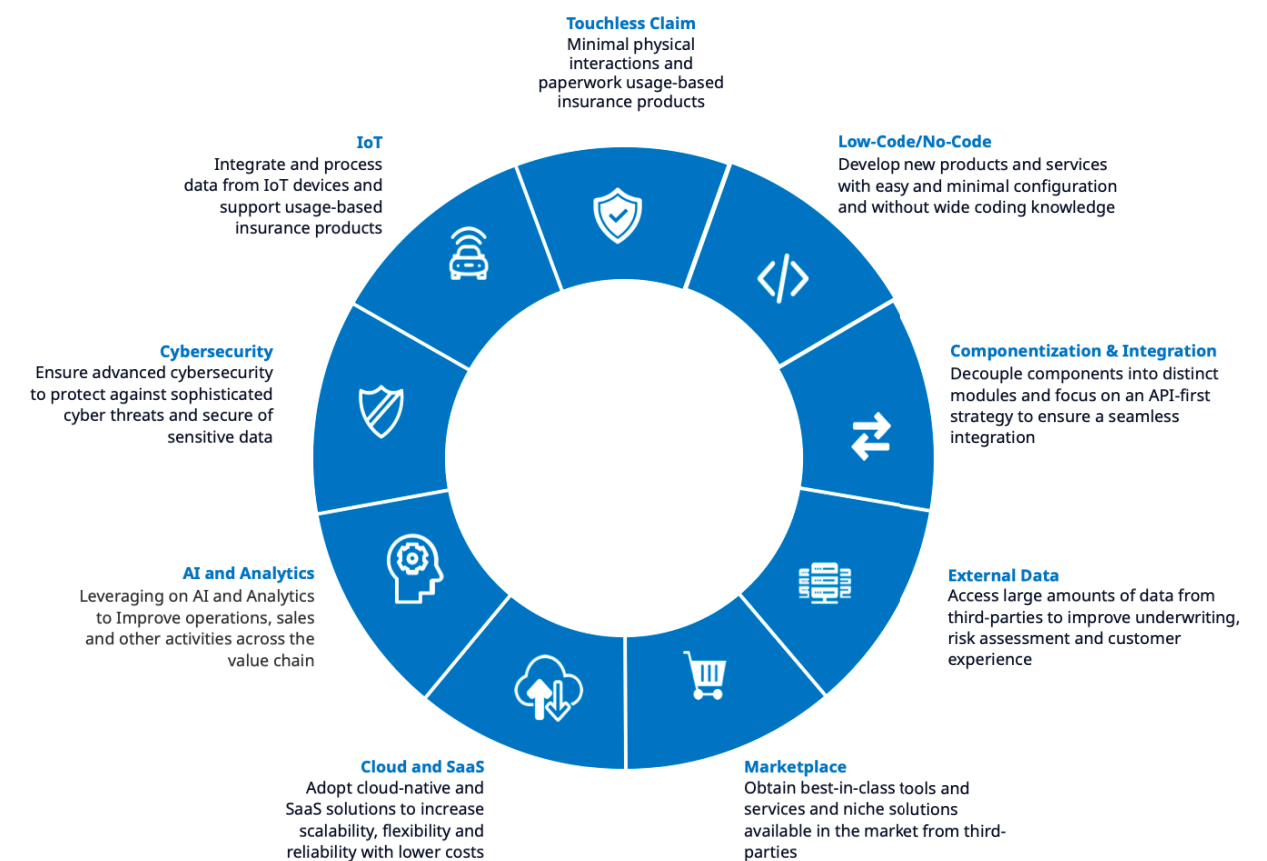
- **Client Information Management:** Enables comprehensive management of client data, providing easy access to all client information and necessary documents.
- **Finance and Actuarial:** Improves the accuracy and efficiency of underwriting and rating systems that calculate and manage the risks associated with insuring customers' assets.
- **Re-Insurance:** Facilitates risk transfer to other insurers, enhancing financial stability and risk management through mechanisms like treaties and facultative reinsurance.
- **Enterprise Resource Planning (ERP):** Integrates finance, HR, procurement, and other internal processes into a unified system, enhancing operational coherence.
- **Fraud Detection:** Utilizes advanced tools to detect, prevent, and manage fraudulent activities, safeguarding transaction integrity.
- **Legal & Compliance:** Ensures all operations comply with local, national, and international regulations, mitigating legal risks.
- **Commissions Management:** Manages and tracks agent and broker commissions, ensuring accurate and timely compensation.

Strategic Modernization Roadmap

Before undertaking a modernization journey, it is essential to have a path ahead. Recognizing that there is no one-size-fits-all approach, is crucial to evaluate different alternatives and thoroughly assess the advantages and disadvantages of each option. Developing a comprehensive modernization road map becomes imperative, outlining sequences and markers that can be expected throughout the journey. This road map guides organizations to navigate the modernization process effectively and track progress toward their desired objectives. Organizations can set themselves up for a successful modernization initiative by carefully planning and strategizing.

Emerging Trends in the Market:

In the dynamic insurance industry, cutting-edge technologies are transforming traditional processes to boost efficiency and agility. Undertaking a legacy modernization initiative within an organization can lead to multiple projects. These projects may involve streamlining applications, modifying infrastructure (such as leveraging the cloud), implementing new data management approaches, transforming processes, restructuring teams, and addressing talent requirements. Below is a detailed exploration of the emerging trends resulting from these modernization efforts.



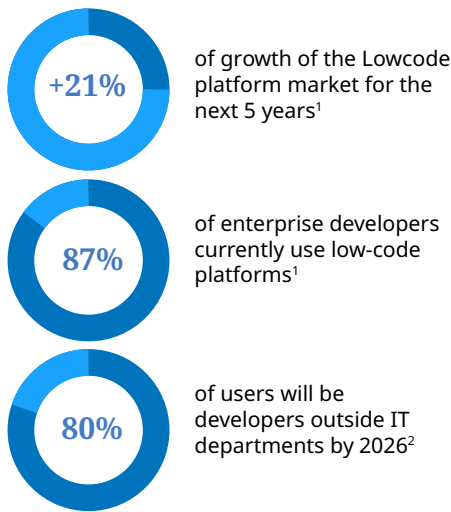
Source: NTT DATA

Low-code / No-code:

The adoption of low-code/no-code platforms reflects a shift towards greater agility and responsiveness. Low-code/No-Code tools empower business users – not just IT developers – to rapidly adapt and customize their systems. As such, insurers are ditching the lengthy development cycles and IT dependency and instead allowing for real-time, impactful changes through intuitive interfaces and tools.

Benefits:

- 1 Faster time-to-market for new products and services: to outpace the competition.
- 2 Reduced reliance on IT resources, empowering business users to take ownership and freeing up IT for strategic initiatives.
- 3 Agility to adapt to changing market demands and customer needs instantly.



Source: 1) The Low-Code Market Could Approach \$50 Billion By 2028, Forrester - Jan 2024; 2) Gartner Forecasts Worldwide Low-Code Development Technologies Market to Grow 20% in 2023, Gartner - Dec 2022; and 3) Gartner Magic Quadrant For Enterprise Low-code Application platforms, October 17, 2023.

Componentization and API-First Strategy:

This approach involves breaking down bulky core systems into microservices and connecting them via APIs. This strategy fosters a modular, flexible, and interconnected technological framework, facilitating:

- **Modular Agility:** Breaks down the modernization process into smaller, independent modules simplifies the process, reducing complexity and risk. Individual modules or components can be added, enhanced, or replaced without affecting the entire core system.
- **Seamless Integrations:** Opens APIs to connect PAS with other systems (claims, billing, CRM) and external applications.
- **Ecosystem Expansion:** Leverages APIs to unlock new channels, partners, and customer touchpoints and Integrates with Insurtech and third-party vendors to offer innovative products and services.

Benefits:

- 1 **Flexibility and Agility:** Modular components and APIs allow quick system updates and seamless integration.
- 2 **Development and Innovation:** APIs and componentization speed up development and foster innovation.
- 3 **Customer Experience and Interoperability:** Real-time data access and independent scaling enhance performance and customer satisfaction.

External Data Integration:

Insurance systems are becoming data powerhouses by going beyond traditional sources and integrating external data sources. There are two approaches gaining traction in the market:

- **Pre-built Integrations:** Partnerships with data providers streamline access and utilization of external data.
- **In-house Analytics:** Development of proprietary analytical tools to derive insights directly from integrated data sources.

Benefits:

- 1 **Deeper Risk Profiles:** Providing a more complete picture of policyholders, allowing for precise underwriting and reduced risk.
- 2 **Market Intelligence on Demand:** Delivering real-time market insights, helping insurers tailor products and services effectively.
- 3 **Enhanced Customer Experience:** Streamlining data access and automating processes through integrations with data providers, leading to faster quotes, and claims processing as well as offering more personalized products and services.

Digital Marketplace:

A robust partner ecosystem is a key differentiator for insurers. Vendors are increasingly investing in digital marketplaces with content from System Integrators (SIs), Insurtech, and technology partners to address a key challenge: providing insurers with the breadth and depth of solutions they demand. Modern policy administration vendors are adopting these marketplace strategies to meet the same challenge. The

strategy allows insurers to gain access to best-in-class tools and services, tailored to their specific needs and market niche through:

Benefits:

- 1 **Wider ecosystem:** Vendors curate a marketplace offering access to various third-party solutions, from data analytics tools to Insurtech innovations.
- 2 **Seamless Integration:** These solutions integrate seamlessly with the core policy administration system, creating a unified and streamlined workflow.
- 3 **Continuous innovation:** Insurers can have access to cutting-edge tools and features as they emerge, ensuring your PAS evolves with the market.

Cloud-Native and SaaS Solutions:

The shift towards cloud-based and SaaS solutions is marked by significant benefits in scalability, cost efficiency, and operational flexibility. Cloud-native platforms are particularly trending in the market due to their capabilities related to AI and analytics.

Benefits:

- 1 **Scalability:** Easily scale resources up or down to match business needs without significant upfront investment.
- 2 **Flexibility:** Quickly deploy and update systems to meet changing market demands and regulatory requirements.
- 3 **Cost Efficiency:** Reduce capital expenditure on IT infrastructure and maintenance, shifting to a predictable operating expense model.
- 4 **Speed to Market:** Accelerate the launch of new products and services with rapid deployment capabilities.

5 Enhanced Security: Leverage advanced security features and compliance certifications provided by cloud service providers.

6 Operational Resilience: Improve disaster recovery and business continuity with robust cloud infrastructure.

Cybersecurity:
Post-COVID-19, the increase in cyber threats has made cybersecurity a critical focus for insurers modernizing their systems. Investments are being channelled into advanced security measures like data encryption, role-based access control, and behavioral analytics to safeguard against increasingly sophisticated cyber threats and ensure data integrity. Besides the more commonly used data encryption, role-based access control and API security features, some vendors are also investing in behavioral analytics, threat intelligence, payment card industry compliance and advanced authentication methods.

Benefits:

1 Behavioral analytics: monitoring user behavior within the system to detect any unusual or suspicious activity that may indicate a security threat.

2 Threat intelligence: gathering and analyzing information about potential cyber threats to proactively identify and mitigate risks.

3 Payment Card Industry (PCI) Compliance: integrating with PCI-compliant payment partner.

4 Advanced authentication: includes methods such as out-of-band identification and biometrics.

Usage-Based Insurance and IoT Integration:
The Internet of Things (IoT) is rapidly expanding and is poised to significantly impact the market in the coming years. In 2023, the global IoT insurance market was valued at USD 15.09 billion and is projected to grow at a compound annual growth rate (CAGR) of 29.7% from 2024 to 2030. The adoption of IoT in the insurance industry is still in its nascent stages, yet it is gaining momentum. There's an increasing number of insurers offering usage-based products, and technology vendors are starting to invest in IoT capabilities and digital platforms. This is particularly visible in the automotive and transportation segment with car electronics tracking cargo conditions, driver conduct, and routes. However, challenges such as data privacy concerns and fraud potential remain significant hurdles.

IoT for Dynamic Pricing:
Traditional pricing engines, which rely on predefined rules, often fail to adapt to unexpected events. In contrast, advanced IoT platforms utilize decision-making tools like “what-if” scenarios, allowing insurers to simulate and predict pricing outcomes more accurately. These platforms enable the daily calculation of millions of rates and product options, drawing on analytics that synthesize insights from everyday behaviors. This capability not only helps businesses scale efficiently but also enhances consumer convenience and personalization.

Benefits:

1 Personalized Insurance Policies: Tailors insurance coverage and premiums based on individual usage patterns and behaviors.

2 Real-Time Risk Assessment: Continuously monitors and evaluates risk using real-time data from IoT devices.

3 Improved Customer Engagement: Enhances customer interactions by providing insights and feedback based on IoT data.

4 Proactive Claims Management: Facilitates quicker and more accurate claims processing by utilizing precise data from IoT devices.

5 Enhanced Underwriting Accuracy: Uses detailed IoT data to improve the accuracy of underwriting decisions.

6 Operational Efficiency: Streamlines operations by automating data collection and analysis from IoT devices.

7 Risk Mitigation: Identifies and addresses potential risks early through continuous monitoring, reducing the likelihood of large claims.

8 Reduced costs.

9 New revenue sources.

AI and Analytics:
Artificial intelligence (AI) and analytics are increasingly vital in the insurance sector, enhancing operational efficiency, customer experience, innovation, decision-making, and overall performance. The rising adoption of Generative AI (GenAI) is set to revolutionize traditional insurance operations with generative AI becoming increasingly integrated into insurers’ day-to-day workflows, it has the potential to transform business through increased productivity and job satisfaction while enhancing customer experience and optimizing costs.

Benefits:

1 Personalized Customer Interactions: AI tailors interactions based on customer data, boosting satisfaction.

2 Improved Risk Assessment: GenAI and Machine Learning algorithms analyze data for better underwriting and fraud detection.

3 Operational Efficiency: AI automates tasks like claims processing, and cutting costs.

4 Innovation in Product Development: AI-driven insights aid in developing new products.

5 Data-driven decision-making: AI and sophisticated analytics provide predictive analytics for informed decisions.

6 Compliance and Regulatory Adherence: Gen AI ensures compliance and maintains audit trails.

Touchless Claims:
The emergence of touchless claims processing represents a paradigm shift in the industry. Using a combination of AI, computer vision, and automation, touchless claims processing minimizes physical interactions and paperwork, streamlining the entire claims lifecycle.

Benefits:

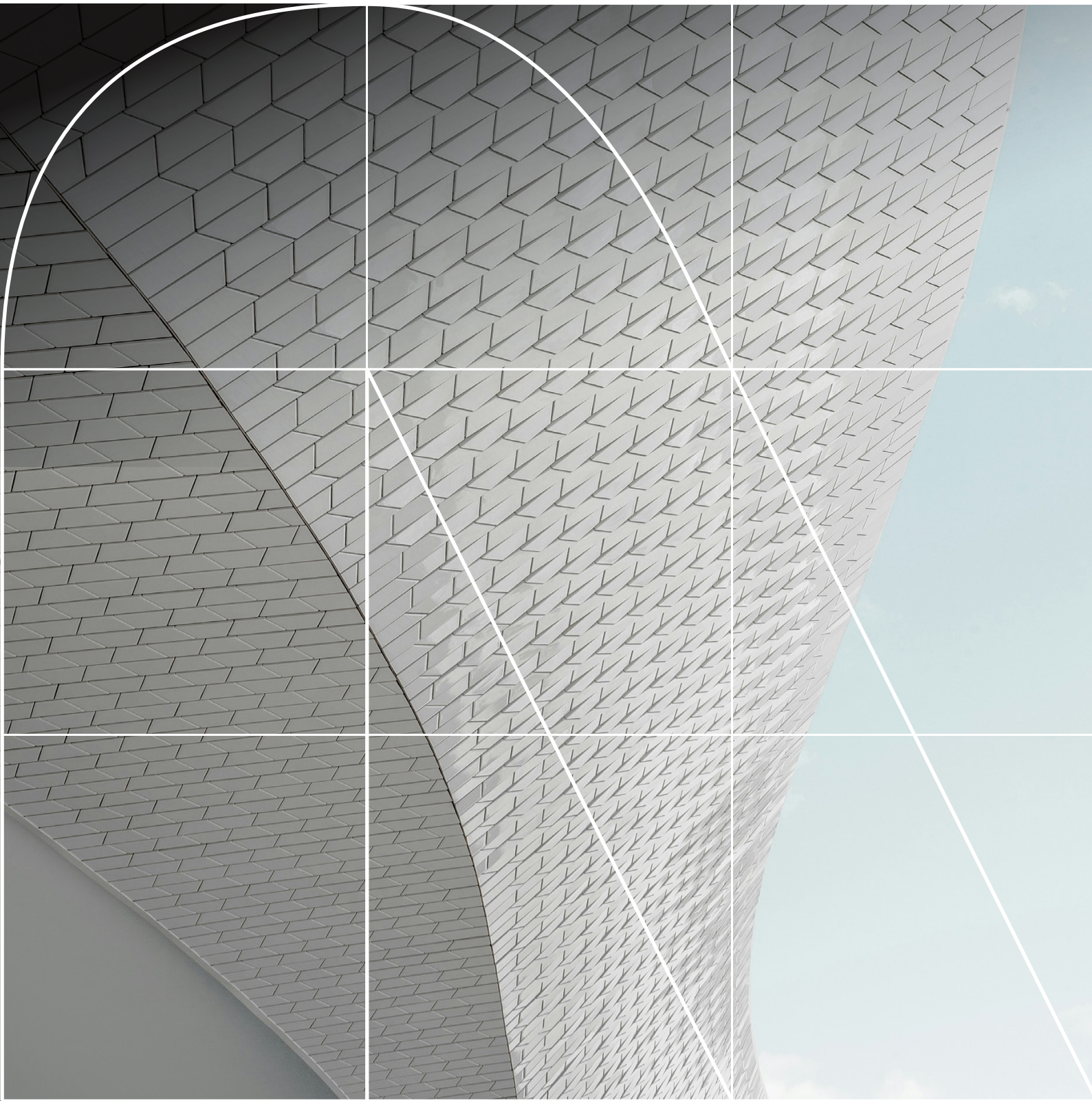
1 Digital Documentation eliminates the need for physical paperwork.

2 Computer vision and AI technologies enable automated damage assessment.

3 Reducing the reliance on manual inspections and accelerating claim resolution and Touchless claims processing integrates seamlessly with existing systems, and

4 Ensuring a smooth transition and minimizing disruption in the claims handling process.

Incumbents and Insurgents Pioneering Tech Upgrades in the Insurance Industry



The leading players in the insurance sector are demonstrating why technological upgrades are essential for growth and maintaining market relevance. These examples highlight the significant benefits of embracing disruptive technologies.

Collaborations and Innovations:

⁸AWS & AXA to Develop Global B2B Risk Management Platform

Amazon Web Services (AWS) and AXA are jointly developing a global business-to-business (B2B) risk management and prevention platform and associated software services. AXA, an insurance and asset management firm, will leverage AWS analytics capabilities to add services for existing clients and AWS clients through the AXA Digital Commercial Platform (DCP). The collaboration with AWS will bring together that company's tech capabilities and AXA's commercial insurance expertise, creating the next generation of risk management insights and services.

AXA DCP uses industry, business and environmental data; geospatial analytics; and generative artificial intelligence (AI) to help clients monitor their assets and navigate risks like natural disasters, supply chain disruptions and cyber threats.

⁹Duck Creek's cloud platform, AI, and data, support our cloud strategy with Microsoft Azure

Azure enables the transformation of key processes in the cloud to bring new products to market quickly. Azure makes it possible to move to the cloud to reduce costs, enhance processing time, access value-added cloud services, and utilize AI to sim-

plify the claims process for an improved customer experience. Another feature, Azure ExpressRoute offers different ways for insurers to connect to services. For example, ExpressRoute can help an insurance company connect its on-premises legacy system to the cloud to help bridge the gap during digital transformation.

¹⁰Microsoft with different Insurers:

- **GEICO:** Has adopted an aggressive hybrid-cloud course, which started with streamlining and automating procedures around infrastructure and application deployment, lifecycle management, application monitoring, and high-availability testing. By moving to the cloud, GEICO has been able to achieve a significant digital transformation while helping the company grow at a record pace and improving customer experience.
- **Zurich Insurance Group:** Wanted to improve its existing customer intelligence (CI) platform and implemented Microsoft Dynamics 365 for more than 2,500 users spanning 30 countries. As a result, they have seen marked improvements in the service experience for both customers and brokers. They are also identifying and facilitating cross-selling opportunities across borders far more effectively.

Insurtech Innovations

Earnix and NTT DATA enhance Customer Capabilities and Drive Innovation

Earnix, the leading global provider of AI-based SaaS solutions for financial services, announced a global collaboration with NTT DATA to support property and casualty insurers with cloud-based, intelligent solutions for pricing, rating, underwriting and policy personalization. This alliance allows insurers to leverage AI to transform the rate-making process, incorporating real-time feedback to deliver personalized experiences. This allows the flexibility needed to meet the demands of today's customers, streamline core systems, boost operational efficiencies and deliver personalized experiences to customers.

Cytora engaged by Chubb to enhance Claims Automation

¹¹Cytora is a pioneer of Generative AI applied to insurance workflows that digitize insurance workflows at unparalleled levels of performance, configurability and scalability across the enterprise. The collaboration is focused on enabling Chubb Claims documents to be automatically digitized, eliminating the need for manual intervention. Cytora's platform enables Chubb teams to create, compose and deploy AI-native Claims document flows in a scalable approach across multiple markets and lines of business.

Socotra

¹²Socotra has announced that its insurance policy core platform, Connected Core, is now available on AWS Marketplace. This makes it easier for insurers to adopt the platform, resulting in faster implementation times and improved efficiencies. The availability of Connected Core on AWS Marketplace and the launch of Socotra CorePlus are a sign of Socotra's commitment to helping insurers

modernize their operations and improve their customer experience. By providing insurers with a cloud-native platform that is highly configurable and includes several features that can help improve customer experience, Socotra is well-positioned to help insurers succeed in the digital age.

InsureMO offers a Solution for Core Modernization in the Insurance Industry, the Middle Layer, a Step Towards Core Modernization

¹³InsureMO is a digital insurance service platform designed to bridge the gap between traditional legacy systems and modern digital interfaces. This platform functions as a middle layer, facilitating seamless connectivity and integration of new digital functionalities without the need to completely overhaul existing systems.

The partnership between InsureMO and NTT DATA leverages the strengths of both entities to drive digital transformation in the insurance industry. Implementing InsureMO enables insurers to modernize their core systems in a cost-effective and accelerated manner. This middle-layer approach enhances digital capabilities while minimizing disruption to existing operations.

Moreover, the rich set of APIs provided allows insurers to connect with various digital tools, enhancing functionality and reducing implementation costs by avoiding expensive system replacements. Insurers can modernize gradually, scaling digital offerings over time to spread costs and reduce financial strain.

SmartCOMM

SmartCOMM is significantly enhancing the policyholder experience throughout the policy and claims lifecycles. This transformation is achieved through its advanced Customer Communications Management (CCM) solution, which enables insurers to efficiently manage and streamline essential business documents and customer communications from a single, centralized platform. The solution supports omnichannel engagement and allows for customized branding and client-specific adaptations, optimizing the operational environment. By leveraging NTT DATA's expertise in integration along with SmartCOMM's technology, insurers are equipped with the tools to enhance operational efficiencies and elevate the customer experience.

Percipience

¹⁴Percipience's Data Magnifier plays a pivotal role in the core modernization of insurance companies by providing a robust data and analytics platform. It enables organizations to organize, access, utilize, and monetize existing and new or third-party data effectively. The platform's latest enhancements include greater self-service functionality and support for generative AI applications, which are crucial for modern data architectures¹. With features like self-service enablement, detailed data lineage at the attribute level, and integration with generative AI through its Insurance Data Assistant (IDA), Data Magnifier allows insurers to get answers to natural language questions without the need for complex queries.

This streamlines the decision-making process and improves operational efficiency. Additionally, the platform's administration console and workflow management tools support underwriting and claims processes, increasing transparency and team productivity. By deploying on industry standards and being core system agnostic, Data Magnifier ensures that insurance organizations can modernize without the need for expensive system replacements, making it a key enabler in the journey toward digital transformation.

NTT DATA Approach

Core Modernization Strategy

Core modernization of IT infrastructure requires analyzing and addressing legacy technologies that hinder innovation. Due to the absence of a one-size-fits-all solution for re-platforming or remediating all mainframe systems, insurers should adopt a phased approach to modernization.

Legacy systems, such as mainframes and older open systems, have long been the backbone of many organizations' IT infrastructures. However, these systems often come with high maintenance costs, limited scalability, and an increasing risk of obsolescence. Migrating applications to the cloud offers a solution, providing cost efficiency, scalability, and enhanced performance.

To minimize operational disruption, companies should pinpoint specific business challenges to target for updates. The modernization strategy should focus on three key areas:

- **Infrastructure:** Begin with the infrastructure, which typically involves Kubernetes-based containers, hybrid cloud infrastructure, and API-centric approaches.
- **Applications:** Modernize core applications by moving them to container and cloud environments. This can be achieved by either adding new layers to existing architectures or completely overhauling applications to create new architectures.
- **Approaches:** Use various approaches to enhance system agility, ensuring applications work together effectively.

Despite their reliability and processing power, mainframes are costly to maintain and lack the flexibility of modern systems. Similarly, open systems, which include a variety of server-based applications, face challenges related to aging infrastructure and escalating operational costs.

Selecting a modernization strategy depends on business needs and the desired benefits, guided by experts who provide timeframes and functional roadmaps for system changes.

IT teams must balance the process with existing applications to enhance delivery capabilities and minimize risks. Modernization approaches include:

- **Replatforming the System** (Migrating it to the Cloud): Migrate parts of the legacy system to the cloud with minimal changes, improving agility and efficiency.
- **Replacing the System with a Vendor Solution or a Customized Solution:** Opt for a vendor or custom-made solution to completely rebuild outdated applications, thereby optimizing business practices and enhancing maintainability and scalability.
- **Middle Layer Solution:** Add new application layers via APIs without changing the core architecture, scaling the system to the cloud.

Migrating from legacy systems to the cloud is a strategic move that can unlock significant benefits for organizations. By carefully choosing between rehosting and replatforming, businesses can navigate the complexities of migration and achieve a more agile, cost-effective, and scalable IT environment.

Vision and Implementation

The vision of core system modernization is to transform a tightly coupled code base and hardware into modularized cloud applications, where traditional layers are converted into components that can be consumed only as needed. Various strategies can be combined to tailor an approach that meets specific requirements.

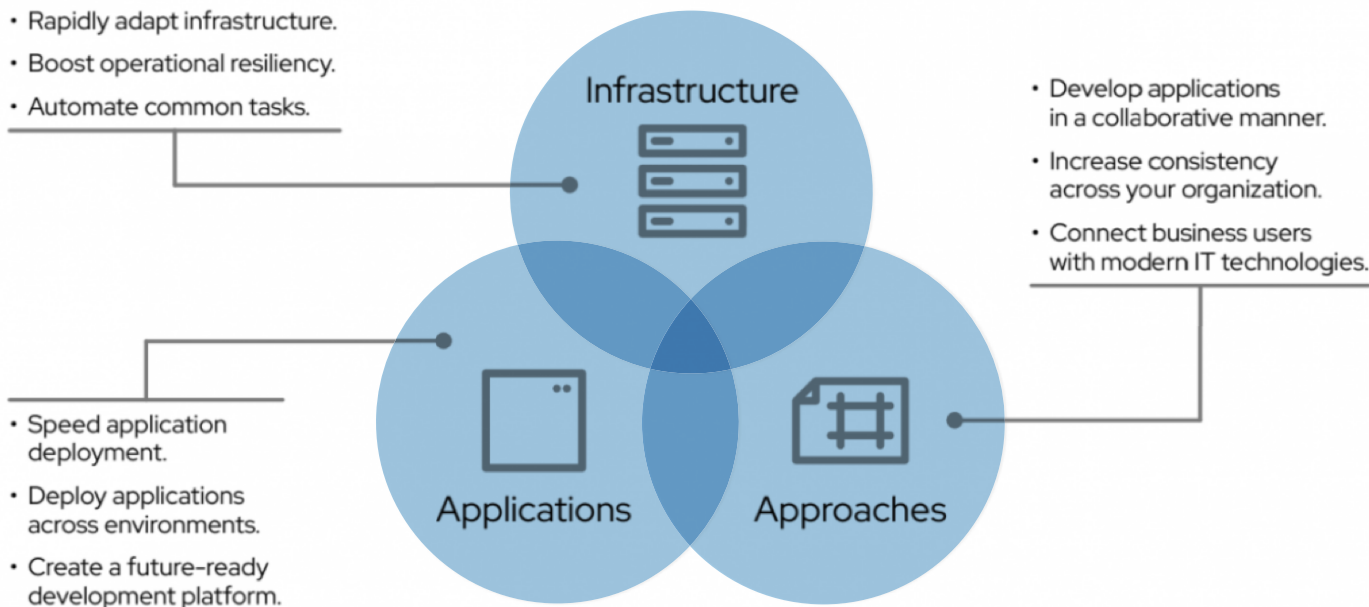


Figure 1. Each core modernization area provides different business outcomes.

Reference n° 15

Our business-driven approach Aligns the Core Modernization Strategy with the Organization's Business Goals to Maximize Value

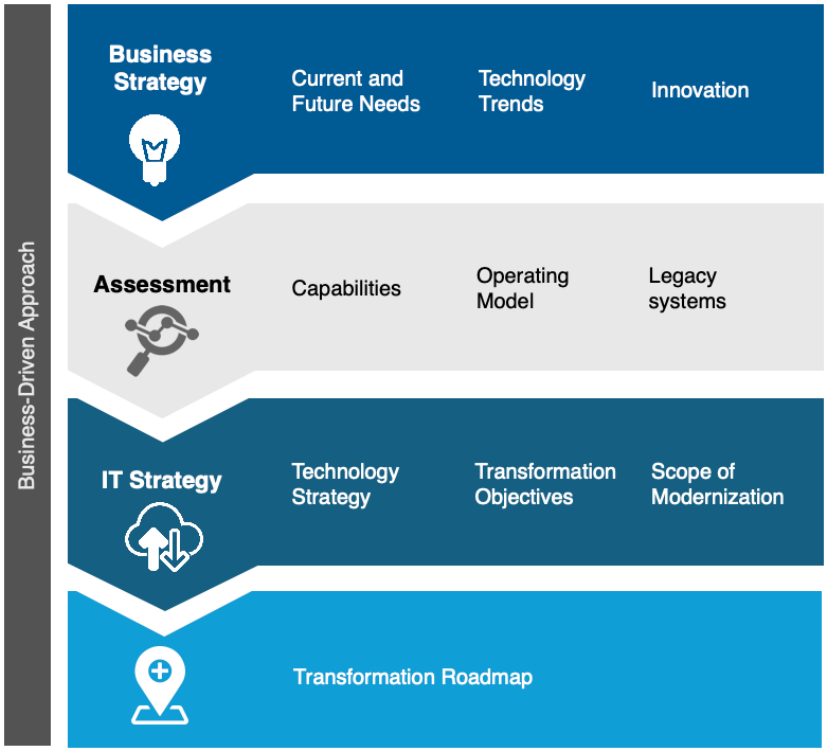
This approach begins with a Business Strategy phase, where we evaluate business needs and strategic objectives, and identify relevant technology trends and innovations.

In the **Assessment** phase, a comprehensive evaluation of existing legacy systems is conducted to understand their limitations. This phase also involves identifying pain points and improvement opportunities, measuring the organization's current capabilities, and assessing its digital maturity level. A gap analysis is performed to highlight

discrepancies between the current state and the desired future state.

Defining the **IT strategy** is crucial to align IT initiatives with business strategies, ensuring organizational coherence. This involves defining key objectives and outlining the scope of the transformation project, including the processes, functionalities, and core system components that will be affected.

Finally, a **high-level Roadmap** for the transformation process is developed, providing a strategic guide to navigate the organization from its current state to the envisioned future state.



Source: NTT DATA

Replatforming the System

(Migration to the Cloud)

Cloud is considered to be the main enabler for Insurance companies looking for improved customer experience, data-driven and connected with the ecosystems.

Most Insurance companies today feel that their **legacy systems are performing well on the types of workloads they were originally designed to do.**

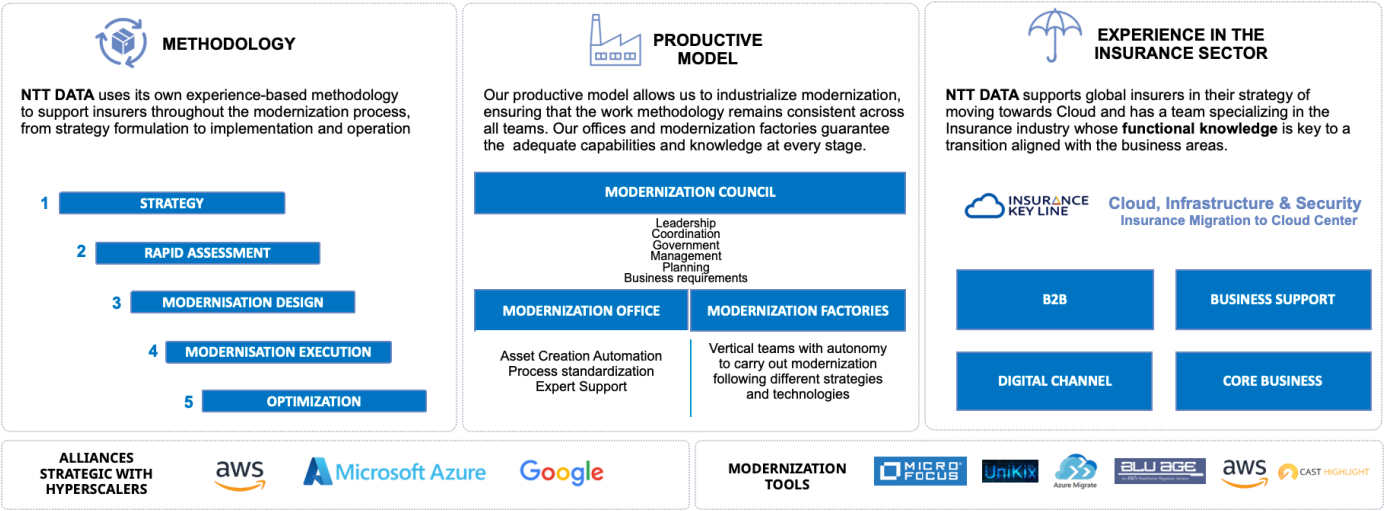
The problem is that the business and technology environment has moved on, leaving **business leaders expecting more functionality from their IT systems,** available at faster speeds. Rather than replacing legacy core systems, enterprises are increasingly looking to bring them into the modern era by connecting and extending them to emerging technologies.

Insurance companies are looking to unlock the ability to incorporate **AI, real-time decision-making and data processing** efficiency as part of the modernization effort. Insurers have realized the criticality and importance of tech modernization, but with the risk involved and the high cost of modernization, the insurance industry is taking cautious steps to kick off its digital transformation journeys.

Capability layers beyond modeling objects like claims and policies in software development can refer to different levels of functionality or abstraction within a system. These capability layers work together to create a modular and scalable architecture that separates concerns and allows for easier maintenance, testing, and evolution of the system.

Each layer focuses on specific aspects of the application's functionality, promoting encapsulation and reducing dependencies between different parts of the system: Presentation, Business Logic, Data Access, Integration and Infrastructure layers.

Insurance companies are migrating their core mainframe infrastructures to the cloud due to significant technical and economic benefits. Technically, the cloud offers unparalleled scalability, integration with modern technologies, and robust security and compliance features. Economically, it reduces high maintenance costs and enhances operational efficiency through a pay-as-you-go model. This migration enables insurers to respond swiftly to market changes, innovate faster, and improve customer service, ensuring a competitive edge in a rapidly evolving industry.



Source: NTT DATA

An Enterprise Capability Model for insurance outlines the key functional areas and processes that an insurance company must develop and manage to operate effectively. This model serves as a blueprint for aligning business strategy with operational execution, ensuring that all capabilities necessary to deliver value to customers are systematically developed and optimized. By assessing each capability's cloud readiness, companies can prioritize and sequence their migration efforts.

The process begins with an evaluation of current systems to identify gaps and dependencies. Business goals are then aligned with cloud migration objectives, creating a detailed roadmap. Each capability is migrated in phases, starting with the most critical and cloud-ready functions. Throughout the transition, rigorous testing ensures functionality and performance, while continuous monitoring and optimization

leverage cloud-native features for enhanced efficiency. Stakeholder engagement and comprehensive training programs ensure smooth adoption and user proficiency. For example, migrating policy administration involves evaluating current processes, setting clear objectives, planning the migration, executing data transfer, and training staff on the new cloud-based system. This structured approach ensures a strategic, efficient, and comprehensive cloud transition, ultimately enhancing operational agility and innovation in the insurance sector.

Digital Channels

- Reusing platforms.
- Allowing personalization.
- Increasing collaboration and social network connectivity.
- Adding analytics and monitoring capabilities.
- Allowing IAM and SSO management to activate Cloud solutions.
- Advanced Operational Marketing consuming RT information from the Insurance Core Systems.

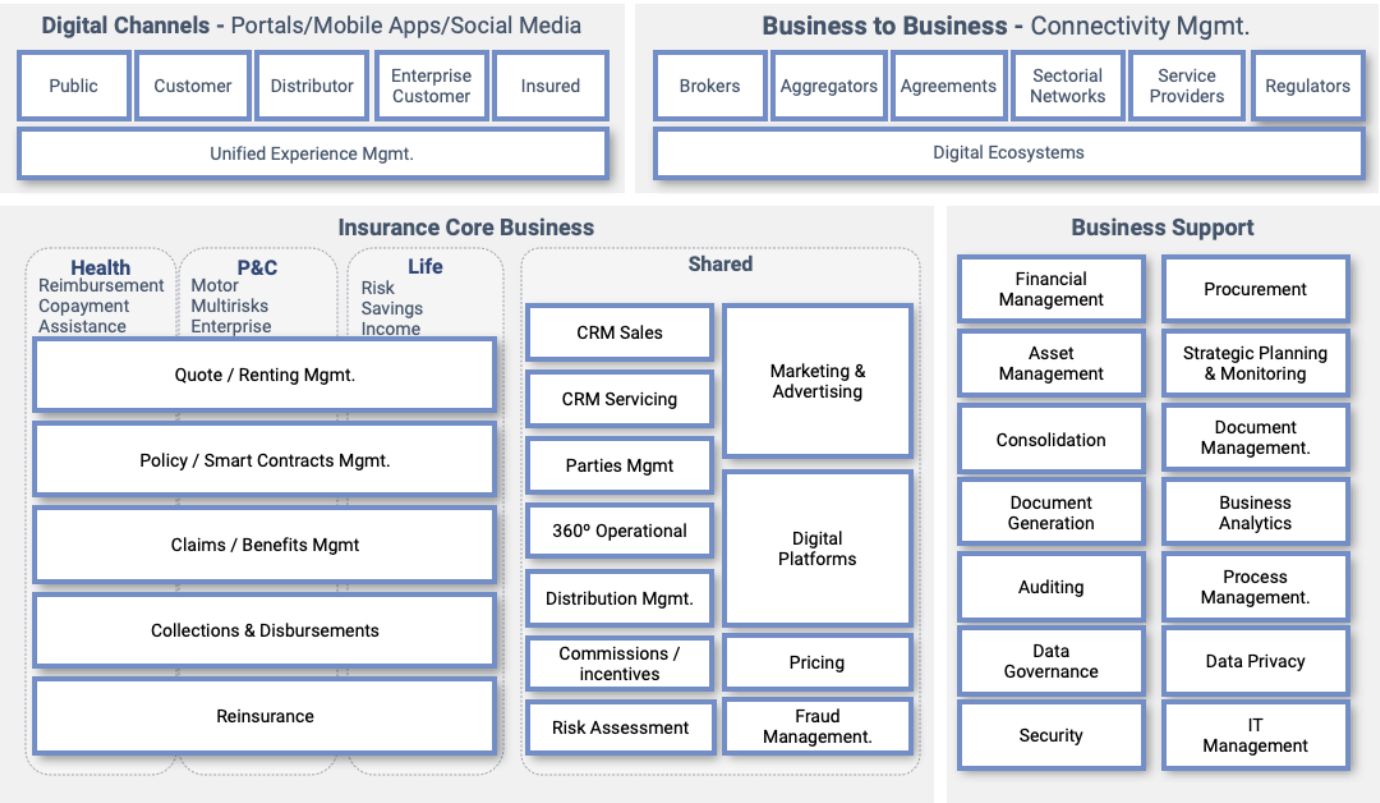
Business to Business (B2B)

- Easing Broker management and simplifying distribution agreement deployments.
- Allowing embedded products under ecosystems strategy.
- Reducing cost on bulk quotation offerings.
- Automating document exchange support.

Digital Channels

- Adding capabilities to the Product Workshop.
- Speeding up the renewal process, Calculation of reserves and provisions.
- Simplifying Massive claims entry processes and massive entry services processes.
- Reducing cost on the Portfolio Management.
- Easing channel availability:
- Offer and policy management.
- Claims management.
- Services management (Health).
- Simplifying 360° Operational for digital channels and CRM.
- Enabling RT Fraud, pricing & propensity models thanks to using Advanced BI linked directly to the Insurance Core system.

Enterprise Capability Model for Insurance



Source: NTT DATA

We are currently collaborating with several global and local insurance companies to define and execute strategic migrations of their core mainframe infrastructures to the top tech Giants. The primary goals across these projects include enhancing scalability, achieving significant cost reductions, and improving operational agility. This initiative involves rehosting and replatforming key applications to leverage robust cloud capabilities.

Each project begins with a comprehensive assessment of existing mainframe systems, carefully identifying dependencies and evaluating their readiness for cloud migration. A detailed migration roadmap is then developed, prioritizing critical applications to optimize efficiency and minimize disruption.

The execution phase includes secure data migration, rigorous application testing, and validation in the cloud environment.

Continuous monitoring and optimization post-migration ensure sustained performance, security, and compliance.

These efforts aim to modernize IT infrastructures, enhance service delivery, and foster innovation within the insurance sector, leveraging tech giants' scalability and cost-effective cloud solutions. This summary provides a snapshot of our ongoing collaborations and serves as a reference for these transformative projects.

Core Modernization Dilemma: Make or Buy Decision Facilitation

The decision to make or buy a new core system should be based on a thorough analysis of the organization's business and IT strategy and considering the following factors: Costs, Timelines and Capacity, Operations and Processes, Competitive Advantage, Regulation and Requirements.

According to a study* carried out by Celent in 2023 in EMEA, ~30% of Insurers prefer to make their own core systems (either through pure developments or by using low-code platforms), while ~60% opt to buy commercial off-the-shelf (COTS) solutions.

Each approach has its advantages and disadvantages, and they should be evaluated considering the organization's business and IT strategy and objectives:



Source: NTT DATA

Vendors Analysis: The complexity of a core system implementation requires a comprehensive analysis of vendors’ capabilities.

These projects can be a sizable financial undertaking and their infrequency means that insurers lack the skills and experience to execute them.

According to Gartner¹⁶, the risk of failure of these initiatives is around 50%.

As such, insurers should consider the following factors in the selection of the right vendor:

Vendor Viability and Consolidation	• Evaluate vendor size and revenue to assess stability and long-term viability. • Consider potential consolidation plans or new core launches by complex vendors.
Talent and Skills Availability	• Assess vendor workforce size and experience levels to ensure adequate support. • Evaluate SI partner relationships and their ability to provide skilled resources.
Deployment Models Supported	• Verify cloud deployment capabilities and vendor maturity in supporting cloud environments. • Understand cloud options (private, hybrid, public) and service-level agreements.
Line-of-Business Support	• Validate vendor prebuilt content for accelerated LOB deployment. • Assess native support for local integrations and reporting requirements beyond dashboards.
Integration Capabilities	• Evaluate API coverage, usability, orchestration, and management across systems. • Assess vendor's production experience with API integrations for digital experiences.
Pricing Models	• Understand pricing models (premium-based) and underlying costs. • Analyze pricing flexibility and inclusions to avoid surprises. • Conduct a comprehensive TCO assessment beyond initial pricing.

Replacing the System

(Insurance Vertical Market Solution)

We implement insurance solutions from the best vendors in the market, offering both pre-built solutions and best-of-breed configurations to meet our customers' specific needs.

Our Solution:

- Implement the vendor solution, either by installing a full package solution or integrating best-of-breed components.
- Configure and customize the solution.
- Reengineer business processes based on the target solution.
- Migrate data.
- Support the go-live and optimization.

Why NTT DATA?

- NTT DATA regularly evaluates the different existing software solutions in the market to be able to identify the best solution for the specific requirements of our clients.
- We have capabilities in the configuration/integration of best-of-breed core insurance solutions, working close with the vendors to reduce the risk of the projects.
- We have partnerships and alliances with key vendors in the market.
- We developed internal assets and solutions.

Custom-Made Solution Implementation

We develop custom-made insurance core systems tailored to our clients’ specific needs.

Our Solution:

- Design a robust and scalable system architecture.
- Employ Domain-Driven Design (DDD) to ensure the system accurately reflects business domain and processes.
- Define the integration model with existing applications and legacy systems that may remain.
- Elaborate requirements, develop and test the solution.
- Migrate data.
- Support the go-live and optimization.

Why NTT DATA?

- NTT DATA executed custom made development projects for insurers which want to maintain a differential asset compared to their competitors.
- Our experience led us to implement platforms which support Life, Health and main P&C Business as Auto, Home, Commercial, Travel and others, throughout all the value chain, including Product Definition, Policy Management, Claims, Administration.
- We leverage on internal assets to accelerate the development of custom-made solutions.

Low Code / Middle-layer Solution Implementation

In the many facets of Celent’s insurance modernization systems¹⁷, the middle-layer option involves retaining some legacy components, focusing the modernization effort on tools and systems with a high-digitization priority. To accelerate the digital transformation, insurers typically adopt low-code or Middle Layer solutions platforms that may be combined with other technologies to achieve a more efficient, flexible and agile change.

Our Solution:

- End-to-End data driven digital journeys - offer a coherent set of tools to manage change across the system.
- One-and-done interactions.
- First Call Resolution and Paperless Operations.
- Capabilities to quickly design new products and deploy them in a digital front end.
- Significant Reduction in Inbound Calls.
- Zero Human Touch for up to 65% of all Claims, with real time claim tracking.
- Enables business users to make changes in products, processes, and interfaces via simple tools (configuration and parameterization).
- Digital Self-Service (> 90% User Self Service Adoption).
- Open Architecture (API enabled).
- Collaborative environment to efficiently implement changes, from project inception through build and testing to maintenance and ongoing change.
- World-Class Reusable Digital Assets.
- Shorter Time to Value - Rapidly Build, Deploy and Transform.

Why NTT DATA?

- NTT DATA helps in improve their digital presence; to automate their operations and to have a best time to market, we suggest the implementation of purpose driven solutions using Low Code .
- Achieve best time with purpose-driven solutions using Low Code.
- Utilize insurance accelerators and adopt an Agile approach.
- Quickly achieve proposed objectives.

Capabilities and Assets

GIDP

GIDP (Global Insurance Digital Platform) is a modular and extensible framework developed by NTT DATA with a set of interchangeable functional modules defined on a modern architecture, avoiding a ‘monolithic single core’. Its functional architecture integrates mature, proven solutions and accelerators, giving access to leading technology with lesser implementation risk and higher future proofness.

What Makes GIDP Unique?

Full ecosystem capabilities	Flexible architecture	Seamless technology	Scalable	Enabler for the data-driven enterprise	Customer experience
• Policy admin systems • Entire service ecosystem (new business, claims, etc.) • BPA tools • Internal/external system integration • Hybrid/cloud/as-a-service options	• Leverages existing technology investments • Connects to all technologies and partners • Addresses specific initiatives and easily incorporates only the features and connections necessary	• Uses newest technologies • Includes best-of-breed technology partners • Remains current with the latest patches/upgrades • Integrates with existing components using standard interfaces	• Able to address smaller, more targeted solutions • Flexible to handle smaller volumes at a reasonable cost • Flexible pricing • Robust to handle rising complexity as process scales	• Standardized data layer, analytics engine and dashboards accelerate implementation and decision-making • Client business is mapped into the GIDP platform core capabilities	• Standardizes and automates processes across all channels • Provides a 360-degree view of customer policies • Enables communication for product innovation across the ecosystem
Benefit • Complete solution • Robust methodology	Benefit • Agility at the process, component and data levels	Benefit • Functionality • Integration • Support	Benefit • Fast • Flexible pricing • Ability to scale • Low risk	Benefit • Higher revenue • Improved competitive advantage • Value creation	Benefit • Personalization • Customer engagement

Digital Inception is a framework that accelerates the analysis and blueprinting of any transformation program and can play an important role in the strategic phase of the modernization of a core system.

Life Insurance Software Selection presents an integrated view of the approach to be used in the market analysis for the implementation of a new core system that leverages on benchmarks, templates and tools to support the decision-making process.

NTT DATA's Hyper Automation Platform

It is a framework that includes a set of assets for the automation of a wide variety of activities: Management, Development, Testing, Support, Operation, etc. that accelerates the modernization of a core system.

Code Generation

We have two types of tools for development from software models and development from rules



Migrations

Source code analysis to identify patterns



Platform that combines Azure OpenAI and proprietary features for software development and modernization of outdated systems

Processes

Low-code platform combined with BPMN flows. It has 4,000+ connectors and pre-designed flows with which to build applications and bots to automate all kinds of technical, management and business processes.



Managed Services



Ticket Automation Using AI



Automated solution to analyze service activity

Development Assistant

Smart Development Assistant - Get suggestions from an AI trained on best practices and code from your own project.



Generation testing



Dedalow Testing generates e2e test code in web and mobile apps.



Functional test documentation and evidence management



Unit Test Generation

Front-end design

Visually design your requirements without coding. Get your Front-end from a design system from Figma or using your client's own components.



Integrated Testing

TOK (Time-Out Killer) is a time-optimizing tool for development teams working with distributed environments



Source: NTT DATA

Assets that Accelerate Software Implementation or Customization including Core Systems

- **Axet Gaia:** A value layer that streamlines generative AI use with pre-engineered prompts, simplifying accurate responses across various fields (development, testing, technology, etc.).
- **Deptapps:** Enables one-click creation and deployment of Top-Down and Bottom-Up applications, secured with credentials and profiles, on both cloud and desktop.
- **Iwokone:** A centralized code generation tool from NTT DATA Centers, improving existing tools for employees by combining lessons from various code generation assets.
- **Diana:** An AI-based programming assistant that auto-generates code to fix errors, fine-tunes projects, and offers suggestions based on your code and APIs.
- **Vesta:** Generates dynamic unit tests during software development, using user interaction data for test creation, mock data, and coverage.
- **TOK:** Provides an interface for developers to manage application requests, cache, modify, or store them for testing, automating maintenance processes for efficiency and competitiveness.
- **BIMAC:** An AI-based testing platform that automates and enhances testing coverage, accuracy, and speed using machine learning algorithms to identify defects and reduce manual testing.
- **Coding:** A platform combining Azure OpenAI technology and unique features, providing developers with tools to tackle complex projects and deliver custom code with high automation.
- **Rosetta:** A solution that builds the complete dependency map of a project, allowing users to query classes or methods and analyze the full impact of calls, providing certainty in development and planning decisions. In addition, by connecting to Coding, we can generate technical documentation using AI.
- **Ceres:** A single, efficient platform for test and development projects that need to manage test plans and compliance testing. Its compatibility with Excel and other market-leading tools, such as Testlink and Qmetry, facilitates team interaction and increases efficiency in test execution.
- **Vortex:** provides a WYSIWYG (What you see is what you get) interface with the look & feel of the client's components, allowing the client to display quick designs in their own style and generate the corresponding code.
- **Ionika:** An integrated and modular platform that enables enterprises to build adaptable and scalable end-to-end automation solutions by integrating digital transformation technologies from NTT DATA and best-of-breed vendors in areas such as RPA (Robotic Process Automation), BPM (Business Process Management), Advanced Analytics, Process Mining, Artificial Intelligence, and OCR (Optical Character Recognition).

UniKix Mainframe Rehosting Software by NTT DATA

- **Dolffia** (by NTT DATA): Leverages the powerful cognitive capabilities of modern AI to solve the challenge of processing a growing quantity of unstructured documents every day, considerably reducing the time and effort needed to process documents manually and allowing businesses to extract more value and insight from their content.

- **Syntphony Compliance Management** (by NTT DATA): effectively manages regulations and streamlines manual text processing tasks such as extraction, classification, interpretation, comparison, and analysis of requirements. Furthermore, we handle risk registration, management, assessment, and mitigation, as well as the generation and submission of necessary documents for regulatory approvals.

‘Migration Suite’

NTT DATA's mainframe rehosting software, UniKix, is designed to help enterprises preserve existing is a framework that enables data migration for any line of business, from multiple source applications to the core target applications. This framework is based on a migration solution (Capsule) to standardize the migration processes, create synergies, reduce the costs in each migration, and allow the application of data normalization and information quality control.

Application investments and extends the benefits of distributed platforms to migrated IBM CICS transactions, IBM IMS applications, IDMS, Natural Adabas, and other assets.

Key benefits include:

1. **Cost Reduction:** UniKix can significantly lower IT operational costs by 30%-70% by eliminating expenses related to MIPS, hardware, and licenses.

2. **Simplified Cloud Adoption:** UniKix facilitates easier transition to cloud environments by allowing mainframe applications to operate without needing re-architecture. It preserves the core business logic and user interfaces while maintaining the existing application structure.

3. **Mainframe Simplification:** UniKix aids in identifying and resolving dead code and technical debt through detailed analyses of mainframe applications and code structures.

4. **Enhanced Automation and Reduced Talent Dependency:** By supporting the integration of CI/CD (Continuous integration and continuous delivery/deployment) pipelines and migrating mainframe applications to the cloud, UniKix decreases reliance on aging IT personnel, mitigating the risk associated with retiring staff.

The points of differentiation of the solution are as follows:

- **Cost-effectiveness:** Lower-cost alternative to re-architecting mainframe applications to contemporary code and technical microservices architecture.
- **Flexibility:** The software enables organizations to harness the virtualization benefits of Cloud without

having to invest in new skills for cloud and modern application management.

- **A holistic approach that includes software and services:** UniKix is a solution owned by NTT DATA. Organizations can take advantage of having both the UniKix product and NTT DATA application services. Along these lines, companies can leverage the benefits of not only implementing UniKix but also utilizing NTT DATA's application modernization services and client experiences to address modernization challenges.

- **Partner ecosystem choice:** In addition to having the option to utilize NTT DATA services for UniKix setup and implementation, organizations also can tap into UniKix's coalition of certified technology and services partners to select the right services partner of choice.

- **Key aspects of UniKix's value proposition focus on:**

_Faster transformation time and business value: By rehosting and simplifying modernization initiatives by retaining existing application architecture, organizations can achieve business transformation and benefits from Cloud more quickly.

_Cost reductions: Utilizing UniKix to rehost mainframe applications on the cloud helps organizations save expenses on compute and license costs. Organizations that utilize UniKix have generated huge cost savings.

Generali Case in Brazil

Generali Brasil Seguros (GBS) is an insurance company specialized in mass insurance, group life, and large corporate risks, which involves insurance products negotiated through partnerships with banks and retail companies. GBS is part of a global initiative known as Insurance in a Box (IIAB), aimed at modernizing and standardizing insurance applications in Generali worldwide.

In December 2022, GBS and NTT DATA signed a contract to launch IIAB in Brazil. This program involves not only replacing legacy insurance applications with a modern technological platform but also revising all major insurance processes and operations to improve efficiency. The first phase of the program was successfully implemented in February 2024, and phase two is already underway. GBS and NTT DATA anticipate a long and successful partnership that will benefit various areas of the company, including innovation and the establishment of an insurance product factory.

The IIAB Brazilian team, comprising members from Generali Brasil Seguros and NTT DATA, achieved a significant milestone in advancing insurance technology. Their recent project highlights their dedication and sets a new benchmark for complex system installations. In an unprecedented eleven-month timeframe, the team deployed a comprehensive cloud-native ecosystem, featuring a cutting-edge insurance core system seamlessly integrated with numerous critical applications. This remarkable accomplishment underscores their collective expertise and commitment to excellence.

Since its inception, the newly implemented ecosystem has demonstrated exceptional operational benefits for Generali Brasil. With over 120,000 records processed, it has facilitated a remarkable BRL 9 million in Gross Written Premium (GWP), showcasing its immediate impact on the company's operations.

However, the project's significance extends far beyond immediate gains. The implementation process involved meticulous scrutiny and optimization of numerous processes and procedures, laying the groundwork for enhanced efficiency and scalability in Generali Brasil's operations. This strategic foresight demonstrates the team's dedication to fostering sustainable growth and innovation within the organization. Reflecting on the journey, the team expressed immense pride and satisfaction in their contributions to this important organizational transformation. They remain committed to further collaboration and innovation throughout 2024 and 2025, with plans to forge critical partnerships and introduce new insurance products that will further elevate Generali Brasil's position in the market. As the team looks ahead with optimism, they hint at more positive developments on the horizon, promising further good news in the near future. With their track record of success and dedication, the IIAB Brazilian team continues to redefine the realm of insurance technology and organizational innovation.

Insurance Cloud Migration

In the rapidly evolving business and technology landscape, insurance companies face the critical challenge of modernizing their legacy systems to meet contemporary demands for enhanced functionality and faster service delivery. While traditional systems continue to handle their initial workloads effectively, they fall short in incorporating advanced technologies like artificial intelligence (AI) for real-time decision-making and efficient data processing.

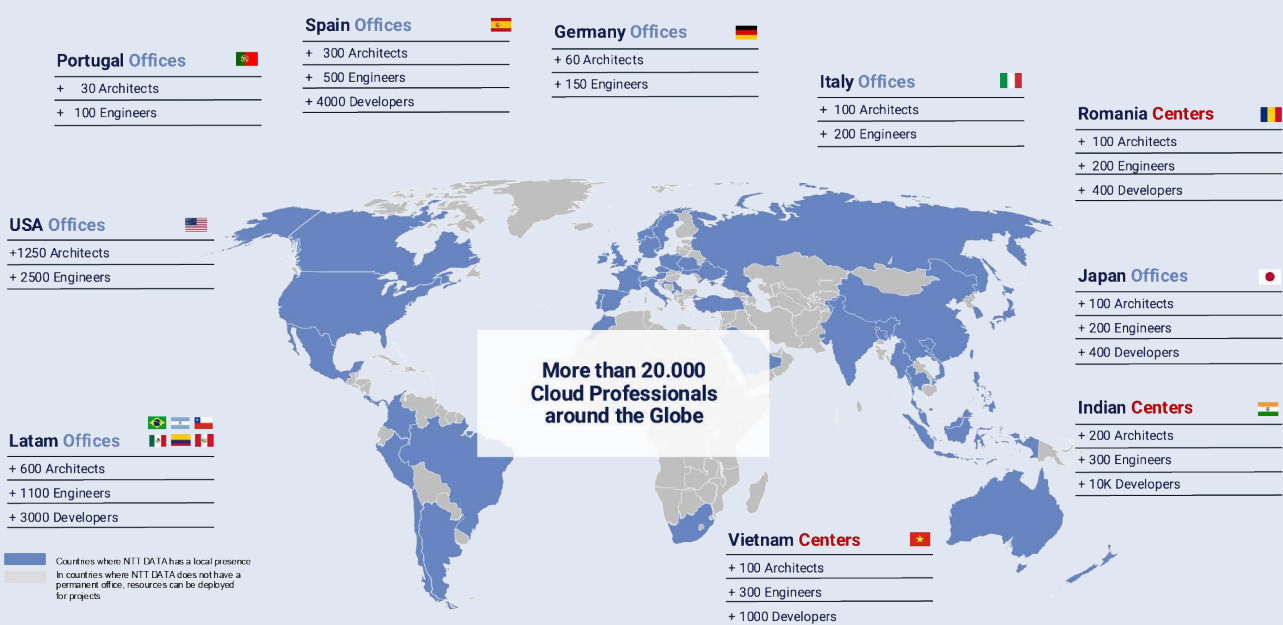
NTT DATA's comprehensive approach to facilitating this transformation boosts customer migration by blending internal and new capabilities to scale and industrialize processes effectively.



Insurance Cloud Migration aims to provide value to insurers who want to retain their assets while reducing operating costs and leveraging cloud capabilities for business development. The mission focuses on integrating internal and external capabilities to enhance NTT DATA's position in Insurance Application Migration.

NTT DATA's initiative focuses on creating a reusable cloud migration solution tailored for the insurance in-

dustry. This solution is designed to provide significant benefits including a reduction in costs and acceleration in core system transformation. Leveraging a scalable delivery model from our High Performance Centers, we ensure that modernization efforts are both efficient and cost-effective. Our methodology incorporates advanced assets such as automated testing tools, code migration and analysis tools, and a migration management tool, all developed with the aid of AI to enhance scalability and efficiency.

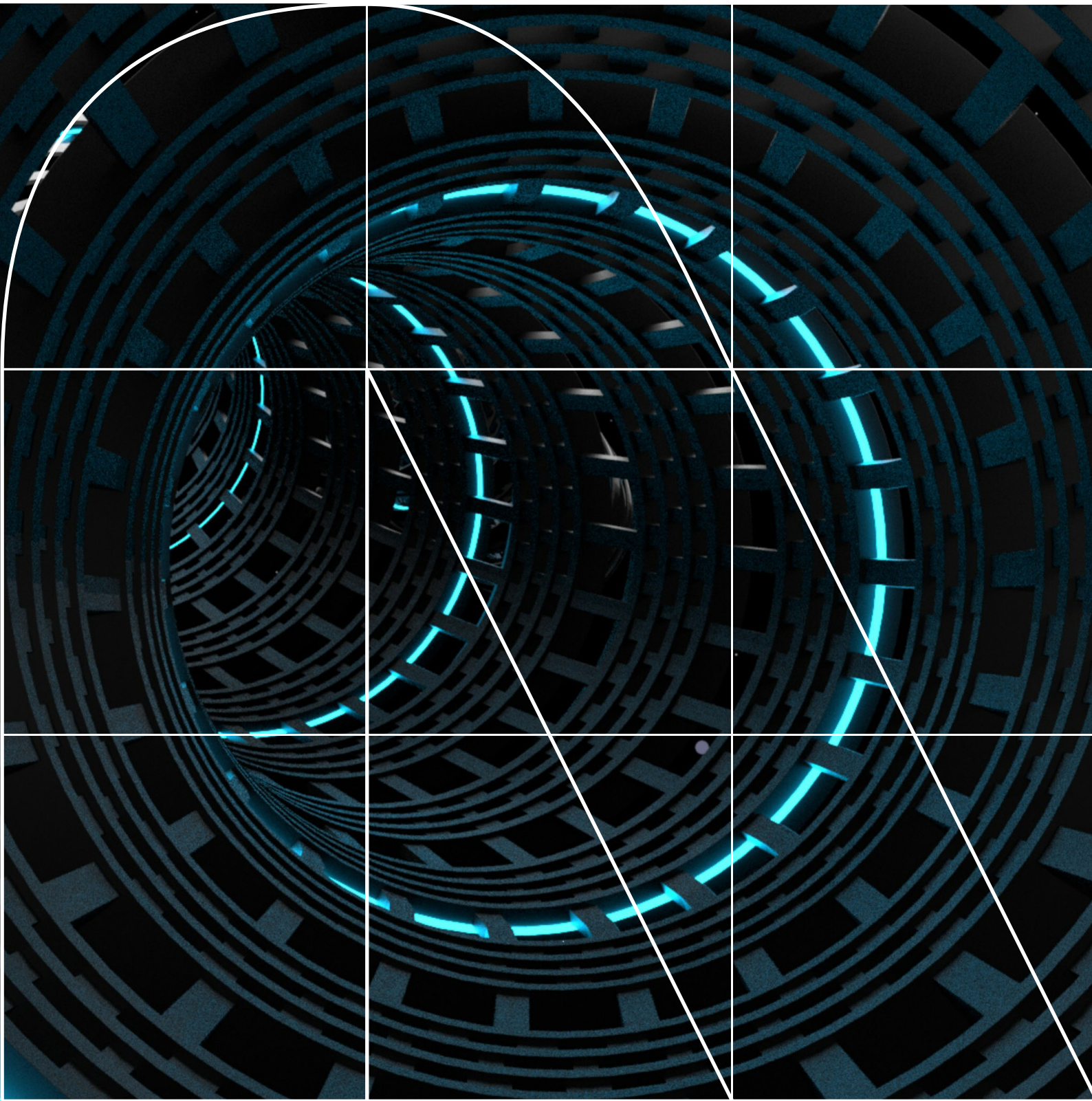


Our case studies highlighting the measurable improvements in operational efficiency and cost savings. Additionally, it outlines the strategic partnerships and investments necessary for driving this initiative forward.

Through this cloud migration strategy, NTT DATA aims to empower insurance companies to not only adapt to the current technological landscape but also to thrive in it, delivering superior customer experiences and maintaining competitive advantage in the market. The initiative underscores the critical importance of aligning modernization efforts with business goals to achieve sustainable growth and innovation.

Key Takeaways:

Embracing Modernization for Future-Readiness



Future-Readiness

This successful modernization project¹⁸ underscores the importance of embracing technological advancements to stay relevant in today's dynamic business environment. For companies entrenched in legacy systems, modernization is not just about upgrading technology but is a strategic investment in future readiness. The key lessons from this journey include the value of a strategic, phased approach, the critical role of comprehensive system assessment, and the importance of choosing the right modernization strategy to meet business objectives.

- Carriers that choose a step-by-step, veneer approach to modernization **can achieve cost reduction and service differentiation benefits from partnering with a strong technology advisor to selectively modernize processes** without taking on undue operational risk all at once or requiring extensive spending.
- **Investing in core systems modernization requires extensive capital and a commitment to a fresh start but puts carriers on a future-proof trajectory.** Carriers that advance to a cloud-first administrative platform will benefit from a highly configurable system that speeds time-to-market for new launches.
- With cloud-first platforms, insurers **can innovate faster while reducing costs to operate**, gaining a competitive advantage by meeting customers where they are.
- Carriers must balance modernizing their existing phone-based contact center with investing in the digital transformation of marketing and sales channels. **As customers shift digital channels, insurers**

have an opportunity to improve satisfaction and deepen their customer relationships, with better customer data leading to more cross-sell and upsell opportunities.

- With fraud around the globe growing more sophisticated each year, carriers should consider **investing in modern digital tools that leverage AI and machine learning to detect fraudulent claims to lower claims expenses**. With the right business acumen, a carrier can break into the cyber insurance business market by investing in the right data solutions.
- Use innovation labs to experiment with Insurtech. If significant cost benefit or product differentiation is observed, craft a strategy to ensure that **Insurtech remains a viable business partner and claims the benefit of its offerings**.

Next Steps

As the industry adapts to an increasingly digitized world and new insurance ecosystems, it's up to each carrier to make the right technology investments to equip it for a successful future. Transitioning to a modern platform from legacy systems is a huge undertaking, and there are many approaches with no single correct strategy. **An experienced technology partner can help carriers clarify their goals, identify potential hot spots in their modernization journey, and create a timeline of investments to tackle according to their priorities.**

Modernizing core systems and applications puts insurers in the driver's seat when meeting market challenges. By implementing cloud platforms, insurers open the door to new revenue opportunities and forge stronger customer relationships.

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