

WHITE PAPER

Bimodal Transformation:
The Key to Driving Successful
Change in Insurance

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Why a Truly Unique Sector Requires a Unique Approach to Transformation

Insurance is unlike any other sector. Its products, essentially a promise, are intangible in ways that other products – even other financial services offerings – simply are not. When and how customers will receive the value of their insurance is not always clear at the time of purchase. Some customers will never even “use” the insurance they buy, including policies that can require significant premium payments over time.

Still, insurance is ubiquitous and necessary. The vast majority of individuals in developed economies buy insurance in some form or another, and many consumers have multiple policies. These insurance products protect the people, possessions and experiences that customers value most. Plus, insurance is deeply intertwined with other industries, including manufacturing and shipping, retail, consumer goods, hospitality, automotive, construction, real estate, healthcare and finance. In this sense, it’s essential to the functioning of the global economy.

From the perspective of the business of insurance, the risk-reward proposition is fundamentally different from other sectors. Insurance is highly probabilistic in that insurers accept and price risk in today’s dollars based on historical loss performance and premiums paid in yesterday’s dollars. Then they evaluate potential future claims that may be paid out in tomorrow’s dollars. As a result, insurers simply cannot

determine with great certainty what it will cost to deliver products in the same ways that manufacturers or service industry firms can. The economics of the insurance business, combined with accounting and reporting standards that are different than those used in other sectors, requires very sophisticated methods to quantify uncertainty in terms of adequacy of premiums to pay future claims.

The inherent complexity of the insurance industry is not just financial. Jurisdictional regulations and legal venues shape insurance contracts such that they are often too complicated to understand and interpret for most individuals and businesses. That brings fundamental challenges for insurers that aspire to develop customer-friendly solutions and intuitive experiences on par with big tech and other digital leaders. The paradox of product complexity and delivery simplicity is endemic to the industry and unlikely to change, necessitating unique approaches to transformation and innovation for insurers.

The Importance of Bimodal Change

The uniqueness of the industry requires that insurers transform differently, balancing **what must be done** to fulfill their charters and regulatory obligations with **what they want to do** to innovate, create more value for customers and brokers and generate growth.

- **What insurers must do:** underwrite risks, pay claims, service customers, control losses, comply with regulations, produce acceptable financial returns
- **What insurers want to do:** differentiate offerings, meet shifting customer needs with creative risk solutions, provide responsive and efficient claim settlement, educate and prevent losses, embed controls for seamless compliance, achieve superior financial returns

These obligations and aspirations are not necessarily in conflict, though it is clearly challenging to improve core operations while simultaneously driving breakthrough innovations. Yet, to an increasing extent, this level of bimodal change is what's necessary to establish and sustain market leadership in the insurance industry.

The key to success is linking and synchronizing investments to **improve what must be done so that space is created for what should be done**. That linkage is especially important now, given the pressing need for additional insurance protection and responsive service solutions in the face of longstanding legacy system constraints hindering the speed of innovation.

Indeed, recent history makes a new approach to transformation a necessity. Previous investments in core platform replacement and modernization have produced valuable lessons learned, if not compelling financial returns; innovation has been primarily experimental. The path forward is clear: insurers must work proactively and intentionally on longer-term, disruptive innovations while simultaneously focusing on iterative, near-term steps to streamline and enhance tactical operations.

And the urgency is real: the growing complexity of risk and stakeholder expectations of the industry, combined with accelerated technological advancements like the arrival of generative artificial intelligence (GenAI), means insurers no longer control the pace of change.

The Focal Points of Bimodal Change

Bimodal change requires embracing the new realities of the world economy and ways of working, including digital demand, hyper-scale computing, new forms of data, new forms of risk and risk protection and changing learning preferences and behaviors.

Ecosystem Agility

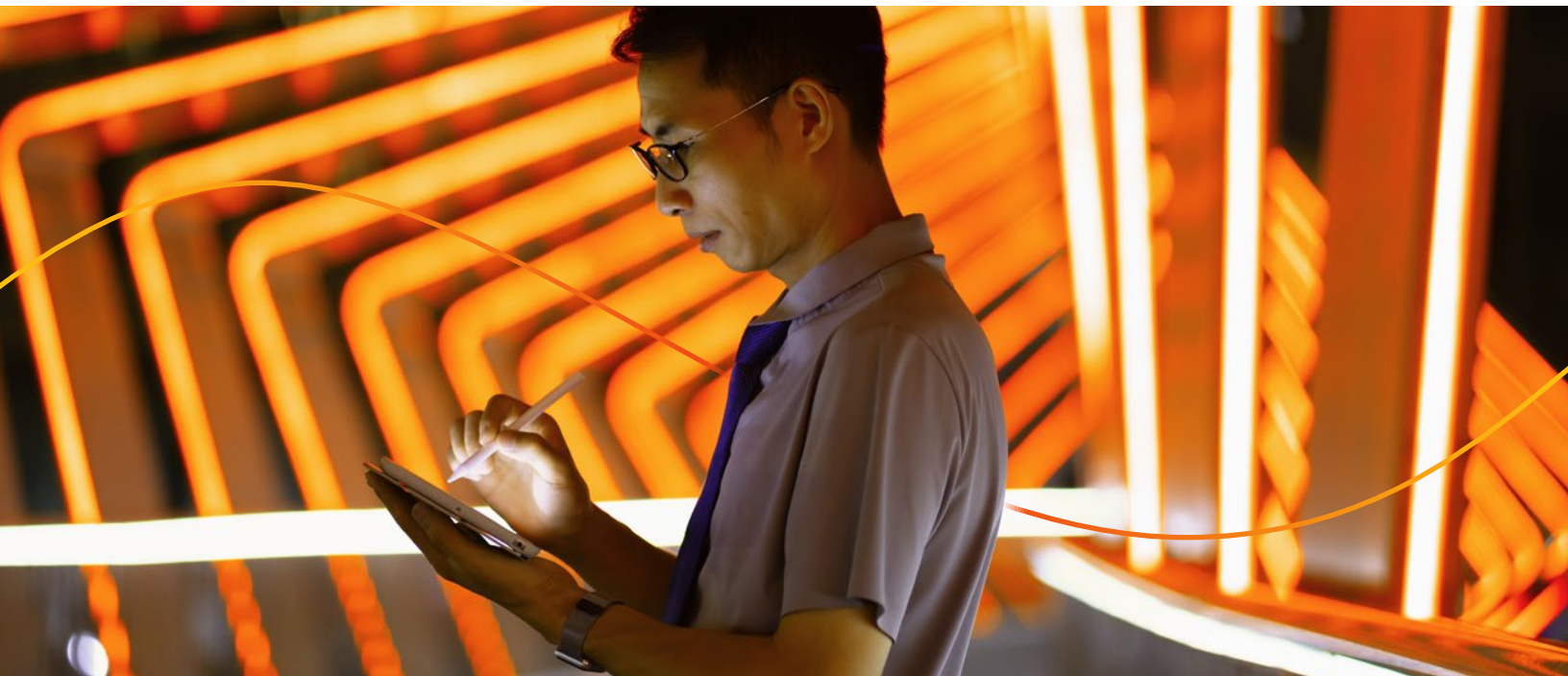
Ecosystems — platform-based networks of participants that collaborate to meet market needs more effectively and efficiently than any one partner can — are one of the hottest topics in the industry. For insurers to fully realize the potential upside, they must devise ecosystem strategies with the right scope and reach. It's important to recognize that ecosystems are not just new sales channels or industry utilities, though they may extend distribution networks and provide access to specialized capabilities. Rather, ecosystems should be viewed as entirely new business models and go-to-market strategies that enable efficient and fluid capital deployment.

Tomorrow's ecosystem winners are thinking creatively today, shaping their strategies around the most substantial opportunities for value exchange and creation. New partnerships for white labeling and digital delivery of products are being formed. Smart cities and smart buildings are bringing opportunities for services based on the internet of things and infused with AI. Point-of-sale embedded insurance is maturing to point-of-design models, where risk quantification is enabled through sensor data, eliminating the need for traditional

underwriting processes. Capital is finding the most efficient path to risk transfer with the convergence of insurance, reinsurance and insurance-linked securities (ILS).

In this market, ecosystems are both physical and virtual. Yesterday's competitors could easily become tomorrow's partners; what seems like a simple new technology could actually be a source of vital data and high-value insights. Data access and exchange transcends distribution channels and market access as the new currency of insurance commerce.

Ecosystem success requires both a shift in strategic mindset and the adoption of specific technologies. Connectivity via application programming interfaces (APIs), robust microservices and strong data management discipline (especially in the realm of access and security) are key components. Strong partner management skills and well-designed contracts and metrics — including service level agreements and key performance indicators — are other leading practices. However, despite the importance of technology, establishing the right culture and people, including prioritizing collaboration and agile work styles, is a strategy that must be embraced in the ecosystem era.



Sophisticated Decision Architectures

As business decisions become increasingly complex, data becomes more ubiquitous and technology grows more sophisticated, insurers need a more scientific and disciplined approach to decision-making. Insurers have long pursued a vision of becoming data-driven and adopting user-friendly automation more extensively. But the real call to action is about engineering smart, insight-enabled business rules and information access into every decision, consistently, across the insurance value chain. No longer can insurers rely on oral history, training, automation or an array of user tools, nor can they count on the long-standing practice of apprentice-based mentoring as the primary means of institutionalizing best practices in decision-making. They must develop a cohesive decision architecture that guides and governs decision processes regardless of technological support.

Decision architectures are particularly important for underwriting and claims, although other enterprise functions, including sales, service, risk management and finance stand to benefit, too. Because underwriting owns risk decisions and claims owns claim settlement, these functions drive the greatest opportunities for profit and leakage in the insurance enterprise and require consistent decision behaviors at the individual level.

A decision architecture comprises layers of products, processes, data and rules. It is underpinned by a taxonomy of business rule types and informed by operating model variations, such as the simplicity of risks and claims. Like enterprise architecture that fuels governance and

facilitates decisions around technology and IT, decision architecture similarly establishes an approach to using data, navigating information, harnessing insights, leveraging experience, codifying business rules, challenging outliers and institutionalizing test-and-learn processes to achieve predictable decision behaviors.

The principles of a modern decision architecture are grounded in segmentation, product components, data models, rule reusability, pattern detection, event triggers and outcome clarity. Decision architectures must transcend applications and tools, inbound and outbound data and documents, products and services, organizational structures and individual experience. They must also transcend market cycles and regulatory environments and be engineered for transparency, traceability and explainability.

The arrival of accessible artificial intelligence — in the form of GPTx and other forms of GenAI — introduces opportunities and additional complexities to decision architecture, including accounting for bias, “hallucinations” and limited public data history. Additionally, expanding data volume, iterative decision processes and the changing context presented by hyper-scale computing and tools based on natural language processing, introduce exponential complexity into business decisions. In turn, this drives the need for more sophisticated decision architectures. Without an engineered approach to address these new dimensions of complexity, management teams risk driving blind in their decision making. Investments in core system modernization and new innovations will not deliver optimal value without foundational decision architectures.



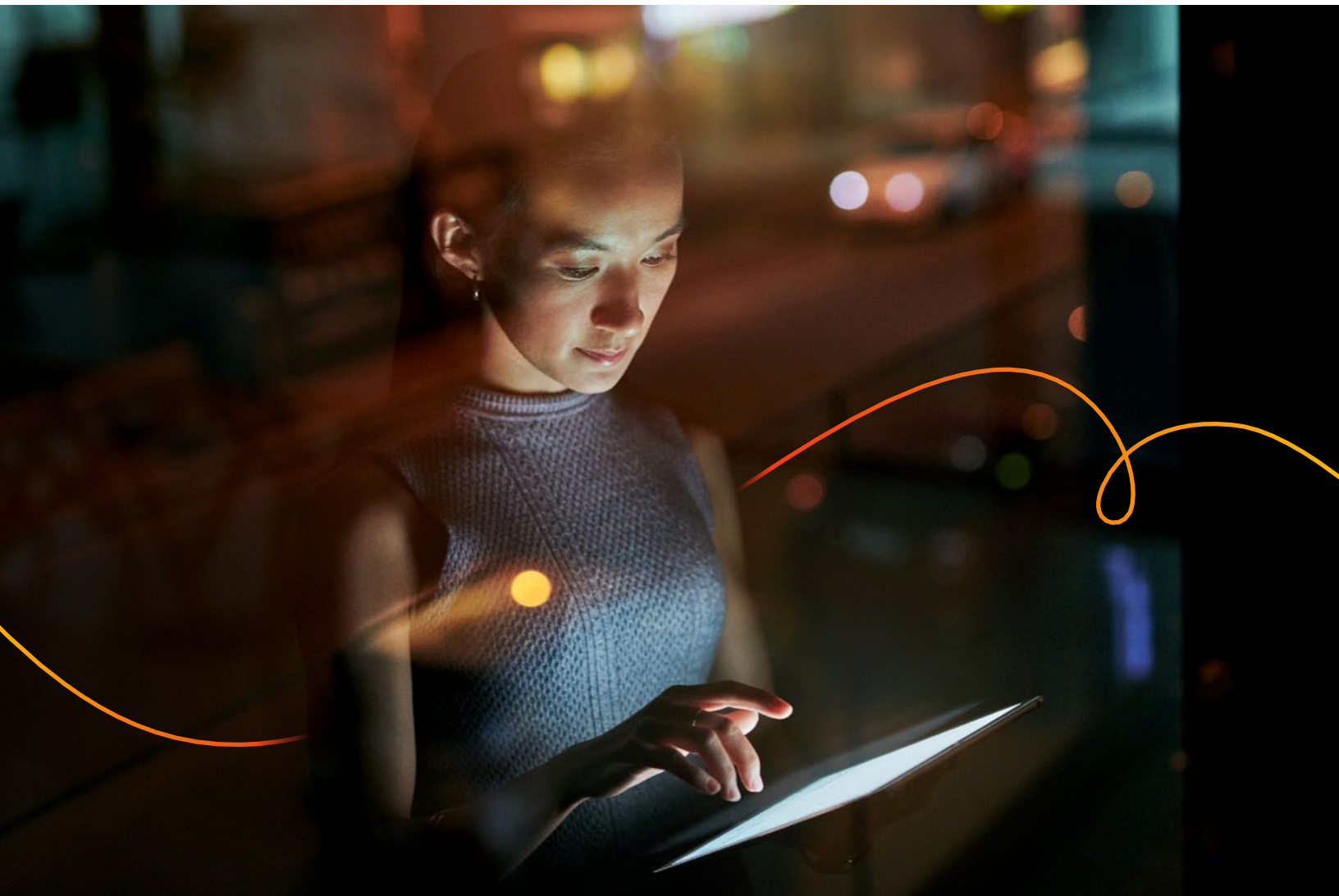
Continuous Insight Generation

Strong decision making is, to a large degree, a function of the organizational ability to generate insights continuously and adjust business rules quickly. Such insight-led decision making also supports operational agility and business adaptability. As the world advances to greater overlap between work and life, the business of insurance is being transformed by always-on data and unique insights into its customers, partners and employees. There is a clear and expanding opportunity to make every decision more informed and, as such, define the next horizon of market leadership in every segment and line of business.

Machine learning, GenAI, rules engines, modeling software, digital ingestion and event architectures must be aligned and integrated with core processing platforms and advanced data platforms to enable continuous insight generation. Business rules — whether fully automated or technology-guided — must be continuously analyzed against performance outcomes and

refined for more accurate decision making. The power of these capabilities can be dynamically infused into decision-making processes at the right points, alerting leaders to key trends and patterns that may affect their decisions, even as more decisions are automated and fueled by compelling analytics.

Continuous insights will drive ongoing improvement in the highly iterative processes (e.g., underwriting, claims) at the heart of the business, as well as within the foundational decision architectures that drive every part of insurance operations. Event-based data streaming and semantic rules for pattern identification enable variability and customization in engaging customers at every touchpoint. As GenAI is integrated into core processing and analytics platforms — such as conversational, functional and visual AI — continuous insight generation will be further fueled by timely information sources and enhanced by powerful tools that synthesize and summarize with business user engagement.



Engineering-Led Approaches

The proven principles of engineering can empower insurers to deliver on bimodal change, simultaneously transforming the core and innovating in new ways to drive growth. A systematic, engineering-led approach to transformation starts with methodical thinking and analysis to find patterns and correlations and to break down big problems into discrete addressable components. Multiple engineering disciplines – including business engineering, data engineering and software engineering – can help insurers deliver on ambitious transformation programs over the long term and boost operational performance in the immediate term.

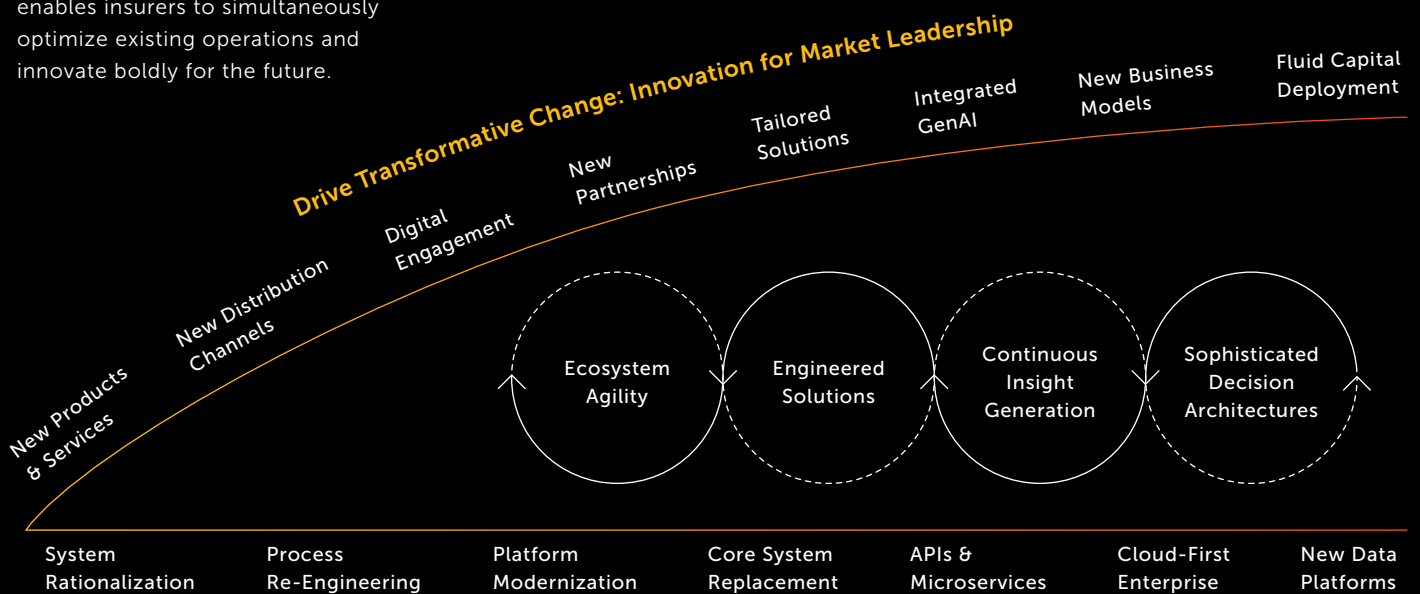
For the business, engineered products and processes result in increased speed-to-market, greater scale and lower costs. For IT, sound engineering practices readily identify and manage architectural connections, as well as solution delivery interdependencies. These engineering practices also mitigate the risks commonly associated with complex transformations. Contrary to constraining nimble, agile innovation delivery, engineering-led approaches enable higher velocity by industrializing code factories. Similarly, GenAI promises to accelerate the software development lifecycle (SDLC) with automated code generation, code conversion, testing and backlog grooming.

At the same time, engineered solutions do not mean all logic is coded. Instead, advanced engineering practices can solve the business needs for speed and flexibility with composable architectures and consoles that enable functional configuration and easier data, screen and rule changes. Well-engineered solutions not only provide interoperability through API-microservices architectures but also provide for management tooling in support of increased reusability and extensibility. Engineered solutions also embed critical business architecture for products, services, processes, data and rules in an adaptive and resilient manner. The combined engineering muscle of business product architecture and system product configuration architecture fuels high-velocity factory capabilities that deliver on both core transformation and innovation strategies.

The business of IT can also benefit from engineering methods applied to operating models, SDLC and IT operations. In fact, the ability to harness the power of transformation and innovation for operational excellence and breakthrough results depends on the various elements of IT – architecture, experience design, development, continuous testing, DevOps, cloud, data, security, end-user training and adoption – adapting and scaling with the needs of the business.

BIMODAL TRANSFORMATION

An engineering-led approach enables insurers to simultaneously optimize existing operations and innovate boldly for the future.



Lay the Right Foundation: Continuous Improvement & Optimization for Operational Excellence

Executing on a Bold, Achievable Vision

The foundation for bimodal change will play out in different ways across the enterprise, with varying demands and business cases for core transformation and unique opportunities for innovation. Segments of the insurance industry are at different points in their change journeys and many digital innovation priorities are currently focused primarily on consumer product lines, driven largely by the race to digitize the customer experience.

Modern cloud-based package solutions and SaaS vendor options are at different stages of maturity between life and property and casualty (P&C) segments. P&C has proven outcomes with core transformation in claims, the first generation of underwriting automation and predictive models and new policy administration systems for personal lines and small commercial. Insurers now understand the reality and limitations of their package solutions and are preparing for investments in custom components and digital innovation around these core platforms.

Commercial and specialty insurers are underway with core platform replacement; in some cases, implementing their first solutions to replace manual tools for policy and billing. They are also investing in critical underwriting workbench solutions. Across P&C, insurers are tackling legacy environments and disparate data repositories with investments in cloud-based

data platforms. Life insurers are at the beginning of core platform modernization and, in many cases, choosing to componentize and wrap their legacy platforms to enable digital capabilities and innovation, especially for consumer interactions and service. Package solutions for core platforms are still maturing to cover a broader range of product lines and higher levels of configuration and automation and will increasingly address the needs and growing appetite for investment with life insurers.

Yet the bold vision of transformation remains largely unrealized across the industry. What's possible with today's technology has not been fully explored, even as the pace of change and customer expectations continue to increase. If anything, the velocity of technological change and magnitude of data accessibility are gaining speed at an unprecedented rate in the world at large.

As a stronghold of the financial services sector, the insurance industry has so far fended off threats of disruption from non-industry players and InsurTechs. But the paradoxical challenge remains: delivering a complex risk transfer product in ways that are simpler and easier for consumers and businesses. Leaders that successfully invest in bimodal change will be best positioned to dominate the market and achieve high-performance returns for stakeholders.



FUNCTIONS MOST LIKELY TO BENEFIT FROM THIS BIMODAL CHANGE INCLUDE:**Distribution, Sales & Service**

Sales processes and distribution channels will become much more fluid in the future, with more access points via ecosystems, replacing yesterday's discrete and rigidly defined channels. Partnership capabilities will matter more than price for many customers. Ubiquitous data access and continuous insight generation will result in stronger recommendation engines and more targeted and fully automated sales processes.

Quoteless, automatic delivery of risk protection through unified platforms will improve on existing product-centric distribution models and fragmented, multi-touch processes. Predictive and proactive segmentation will enable precise outreach, immersive experiences and customization at scale, a significant upgrade over today's generalized user experience. Forms of embedded insurance and smart contracts will disaggregate the traditional insurance value chain and afford insurers new opportunities to flex their capital and expand their customer origination channels.

**Underwriting**

Underwriting has been the most neglected area of the industry in terms of technology and data enablement and stands to gain the most from bimodal change. Risk and product complexity will continue to drive a range of operating models and decision behaviors and both decision architectures and automation will need to flex to support this variability. Underwriting will be the focal point for next-generation product and pricing innovations and central to data-driven risk selection and account servicing.

New forms of digital ingestion and predictive models, fueled by GenAI large language models, will enhance underwriting efficiency and effectiveness. The paradigm of point-in-time data access driven by binary processing will break with the advent of continuous event-driven data streaming, which will bring continuous insights to underwriting across the account lifecycle. Engineered product architectures will enable record speed in new product development and market launches through reusable configurations across both core platforms and surrounding digital components.





Claims

While great strides have been made in the replacement of core claims administration platforms with modern SaaS solutions, the claims function has yet to benefit from true digital innovation. Goals for straight-through processing are largely unfulfilled and access to timely analytics remains out of reach. With bimodal change on the horizon for claims, transformation of data platforms and surrounding digital solutions for both the adjuster and the key stakeholders, including policyholders and vendor partners, will soon be underway.

Digital claims solutions will flex for variable claim complexity, from first-notice-of-loss and segmentation to claim evaluation, reserving, negotiation, payment and downstream recovery. Claim stakeholders will be able to access information more readily. Self-service experiences will become more intuitive, thanks to GenAI. Ongoing, event-based data streaming will bring continuous insights to improve rules-based processing and predictive models, while digital ingestion tools will drive new levels of claim-processing efficiency. Predictive claims settlement will give way to more prescriptive claims outcomes.



Finance, Actuarial & Risk

The backbone of recording and reporting insurance performance — finance and accounting — has a track record of making investments in core transformation (e.g., cloud-based ERP solutions). Similarly, actuarial has invested in advanced tooling for precision and speed in rate promulgation and predictive model development. Risk and regulatory functions have addressed increasing compliance requirements with new processes and tools for improved exposure aggregation and capital modeling.

Bimodal change for these functions will bring step-change benefits from new cloud-based data platforms and GenAI technologies in the form of material improvement in speed of data access, quality of analytics and integrity of system of record data. Finance functions will be more prepared for the accelerated pace of ecosystem partnerships, new business models, acquisitions and new products thanks to fluid data fabrics providing real-time and ubiquitous access and continuous monitoring capabilities enabling dynamic and iterative analytics and adjustments.



While data and technology undoubtedly fuel bimodal transformation, a clearly defined purpose can inspire change across the organization. Senior leaders must align investments to both the business strategy and organizational purpose, even as they set clear, quantifiable targets for tangible economic returns.

Because the global economy is increasingly dependent on insurers to find creative solutions to emerging risks and coverage gaps, profits and purpose do not have to be in conflict. Purpose is most effectively operationalized via links to key performance indicators with boundaries set by organizational risk appetite. Purpose is especially important now as the insurance industry is being held accountable for its intentional actions to protect people, businesses and communities, as well as its contribution to environmental sustainability.

Why Bimodal Transformation? Why Now?

The insurance industry is poised to embrace a new bimodal approach to core transformation and digital innovation. Insurers have the opportunity to engineer their future with deliberate actions, intentional solution choices, human-first design and purposeful execution.

As a mainstay in the global economy, insurance is expected to evolve with the needs of consumers and businesses. However, as providers of products that are intangible and based on future promises, insurers must better educate buyers, simplify access to financial protection, more intelligently align risk with product and pricing and service customers on par with other industries.

Successful transformations take two fundamental forms:

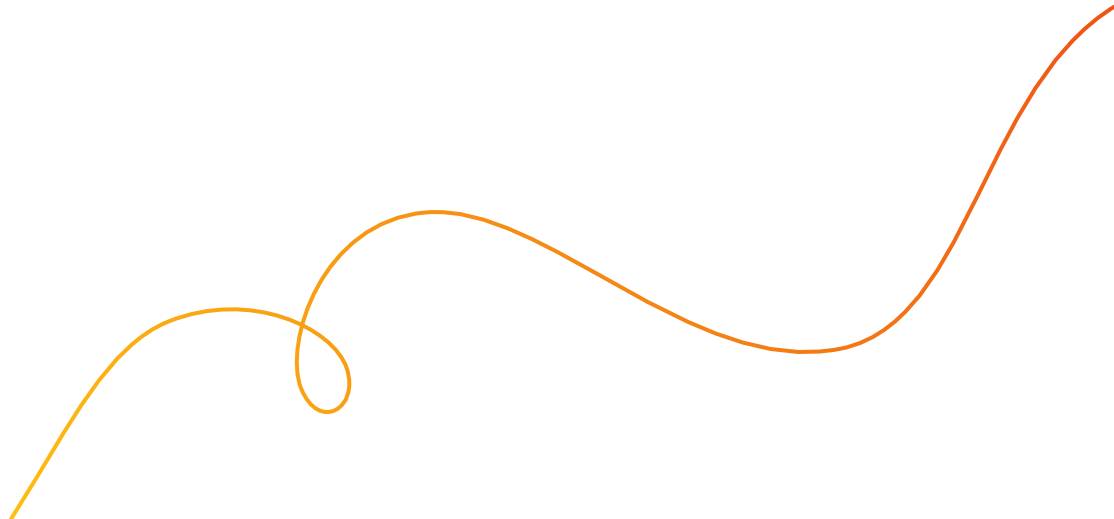
- Establishing a baseline of operational excellence, based on automation, digitization, integration and simplification, which cannot be done without updated core platform systems
- Innovating in ways that drive profitable growth, breakthrough performance improvements, meaningful differentiation and sustainable market leadership — building upon the resiliency of core platform capabilities with new and emerging custom solution components

The first mode of change sets the stage for success and the second enables organizations to thrive and excel over the long term. When combined, these two speeds of transformation can prepare insurers for new challenges in the future, like a more intensely competitive and open market and inevitable disruption. A bimodal approach makes ongoing transformation based on continuous improvement a manageable reality.

As such, insurers can satisfy what they **need to do** with core platform transformation to improve operational efficiency while pursuing what they **want to do** with differentiated digital and custom solutions that unleash growth and dramatically improve business outcomes.

The advent of GenAI is a wake-up call for the insurance industry. The technology promises to have an impact comparable to the arrival of the internet, and is already permeating everyday life and business with new capabilities driven by hyper-scale computing. Insurers must accelerate their ability to drive bimodal transformation and innovation and embrace change to prepare for a future where the traditional industry is in question.

The time is now for insurers to architect their own futures, rather than perpetuating reactionary behaviors and following the lead of other firms. Insurance is no less important for individuals and families, businesses and communities, and society as a whole, but the reasons people need insurance — and how they prefer to buy and use it — are changing rapidly and profoundly. The inherent tension between the complexity of the industry and aspirations for simplification remain, forcing organizations to either proactively engineer change or try to keep up with change driven by others.





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The Future. Made **Real.**[™]