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Insurance Practice

Insurer of the future: Are Asian insurers keeping up with AI advances?

AI's potential for competitive advantages remains largely unrealized in the Asian insurance industry. There is a framework for success: invest in AI not discretely but across the value chain.

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As the insurance industry undergoes a seismic, tech-driven shift,[1] AI continues to push the evolution of how insurers make significant service and operational gains. Indeed, McKinsey estimates that AI technologies could add up to $1.1 trillion in annual value for the global insurance industry: approximately $400 billion could come from pricing, underwriting, and promotion technology upgrades and $300 billion from AI-powered customer service and personalized offerings.[2]

While most large insurers are on the path to AI-enabled personalization at scale,[3] the industry remains at an early stage of transformational AI adoption. For most Asian insurance leaders, traditional organizational structures with multiple intermediaries and limited in-house tech and data resources make it difficult to visualize, let alone quantify, the potential benefits of investing more broadly in AI.

This matters because cross-functional investment in AI can be game-changing—and it will increasingly become a source of competitive advantage. AI adoption has more than doubled in the past five years, and investment in AI is increasing across industries. Among 1,492 respondents to a December 2022 McKinsey Global Institute survey, those who reported the most significant gains from AI adoption—20 percent or more EBIT—tend to employ advanced AI practices, use cloud technologies, and spend efficiently on AI, and they are more likely than others to engage in a range of AI risk mitigation efforts.[4]

The challenge for most insurers is to determine the optimal path from where they are now to where they need to be when it comes to AI maturity and enterprise-wide integration.

Drawing on McKinsey's AI maturity assessment model, in this article, we both outline how Asian insurers can assess their readiness for AI and offer a road map to becoming an AI-powered insurer of the future, realizing gains in profitability, agility, at-scale personalization, and innovation. The basis of this framework is a layered approach to investment in AI across four focus areas: engagement, AI-powered decision making, core tech and data, and organization and operations (Exhibit 1).

AI's potential for insurers: Benchmarking success

The four layers of our integrated AI-capability-stack framework for insurance encompass front-, middle-, and back-office functions. Just as these functional areas are essential to and interreliant within an organization, the layers of the framework are mutually supportive: together, they form a robust structure that benefits internal and external stakeholders.

The global companies setting the benchmarks for AI maturity and capacity—such as Google, Netflix, Tencent, and Uber—illustrate the potential gains that could be realized by insurers that integrate AI holistically across their organizations.

Reimagined engagement layer

A reimagined engagement layer employs AI tools and solutions to create digital-ready engagement and distribution channels that can help provide customers with a consistent, personalized experience. To envision leading-edge personalization at scale, consider Netflix. Each Netflix user has a distinct, customized view of available content—on the platform as well as in emails—that reflects their interests and becomes more extensive, targeted, informative, and engaging over time.

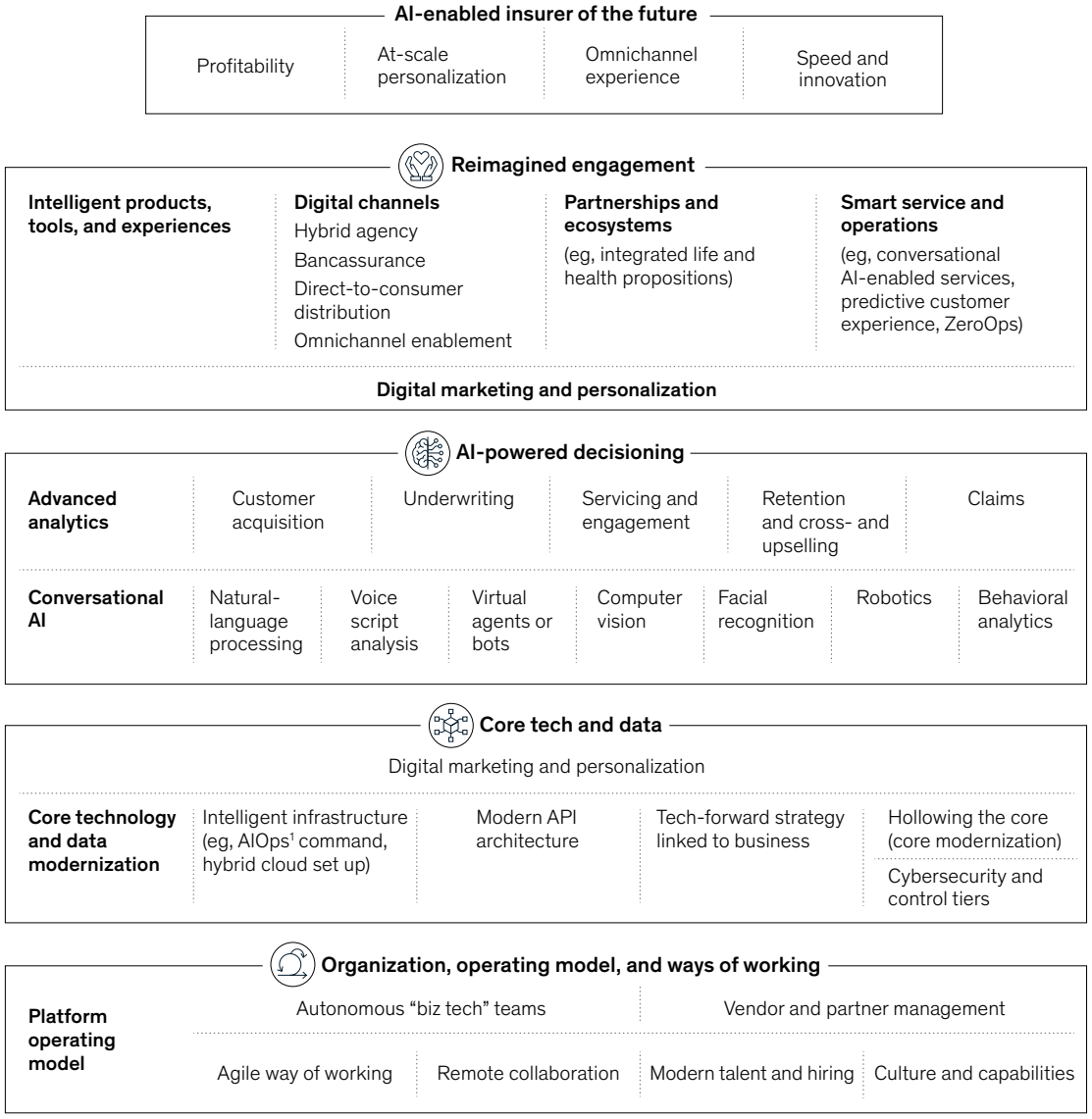
AI-powered decision-making layer

AI and advanced data-and-analytics capabilities can augment complex decision making, allowing businesses to automate repetitive tasks, analyze significantly more data, increase processing speed and accuracy, and create predictive models to improve procedures and enhance performance. Uber Technologies exemplifies the leading edge in AI-enabled predictive analytics, bridging the gap between ride demand and driver supply by using historical ride data and key metrics to ensure every

[1] Ramnath Balasubramanian, Ari Libarikian, and Doug McElhaney, "Insurance 2030—The impact of AI on the future of insurance," McKinsey, March 12, 2021.
[2] "The executive's AI playbook," McKinsey, accessed March 20, 2023.
[3] "How personalization at scale can invigorate Asian insurers," McKinsey, December 2, 2022.
[4] "The state of AI in 2022—and a half decade in review," McKinsey, December 6, 2022.

Exhibit 1

There are four layers to the full-stack AI capability that will define the AI-enabled insurer of the future.



[1]AI for IT operations.

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user of the Uber app has access to a ride within their expected timeframe.

Core tech and data layer

Modernized core tech helps deliver complete, high-quality, real-time data for advanced decision making, facilitating a seamless customer and stakeholder experience. It provides the ability to integrate with multiple third-party platforms for data and intelligence. Tencent, a leading Chinese multinational technology and entertainment conglomerate, has been using its advanced-API platform in its WeChat app to integrate data and decisions, thus providing a seamless, efficient, integrated service experience for more than one billion monthly active users in China. The initiative

significantly expanded WeChat's proposition by being more personalized and providing context-specific offers across payments, retail, and its social networking and chat functionality.

Organization and operating model layer
This crucial layer enables the innovation, agility, and flexibility needed to harness AI-powered capabilities. Cross-functional teams, new talent and skills, flat organization structures, and shared goals have enhanced impact from AI—particularly in aiding frontline adoption and solving crucial frontline decision problems. In Google's relatively flat and cross-functional organization structure, small project teams operate in an agile manner with shared goals and empowered decision making, and talent and skill are valued over seniority. All are vital to Google's reputation as an AI-driven organization and its continued product innovation and growth.

AI readiness for Asian insurers: Building layer depth and strength

While some insurers have achieved select wins by implementing AI solutions within individual layers, the transformation required to achieve the full-stack capability that powers the companies mentioned above remains elusive in insurance.

Often, the problem insurers face is identifying where to start.

The first step is to determine how AI can support the organization's strategic goals and then assess the organization's current state of AI readiness across each of the four layers. A simple scoring methodology can help insurers identify their readiness on a scale from one to five for each layer, with stage five signifying the highest level of AI maturity (as articulated in this article). Insurers with in-depth insight into their AI readiness are better equipped for the next step: creating a road map for implementing AI solutions across the front-, middle- and back-office functions of their companies. This road map allows company leaders to calibrate expectations as well as the resources, time, and investments needed.

Consider a four-phased plan to implement AI in underwriting, for example (Exhibit 2). Value is added in each phase, but it increases dramatically in the third and fourth phases, when greater AI capacity helps enable continuous, personalized engagement and prescriptive actions to support better outcomes for customers.

While the path to becoming an AI-powered insurer of the future will vary based on an organization's stage of readiness in each layer, the end goal remains the same: a more innovative, profitable, digital-forward organization that meets and anticipates customers' evolving needs with highly personalized, omnichannel experiences.

Reimagining the engagement layer
Leaders in other industries—Google, Netflix, and Uber, for example—have achieved stage-five AI maturity within their engagement layer while most leading insurers are at or below stage-three maturity. Some Asian insurers have used micropersonalization based on consumer personas to realize gains in overall engagement; nonetheless, most have fallen short of employing dynamic, one-to-one customer targeting to create the personalized, consistent, omnichannel customer experience that characterizes mature AI-powered engagement. In other words, personalization at scale.

At-scale personalization. Personalization underpins all facets of a reimagined engagement layer and is central to every interaction between products and customers. Creating exceptional customer experiences dominates senior-management agendas, and insurers continue to work toward building personalization at scale to gain a better understanding of customer behavior and offer customers advice on the products best suited to their needs.

AI is now being used to generate highly personalized offerings across industries, tailored to customer specifics such as location, industry, age, and financial history. Customer interactions are also personalized using demographics and past interactions. Most large insurers are halfway along the path of achieving personali-

zation at scale,[5] prioritizing key metrics such as the following:

— *Measurement and attrition.* Attribute click-through rates, conversion rates, and other metrics to different digital channels, and measure improvement to help identify customer preferences and drive personalization to serve the customer.

— *Omnichannel breadth and flexibility.* Build customer data platforms that aggregate data for individual customers from multiple sources, and create a single, more accurate source of information.

— *Next-best action.* Apply a suite of analytics models to support customer acquisition, cross-selling, and other sales functions.

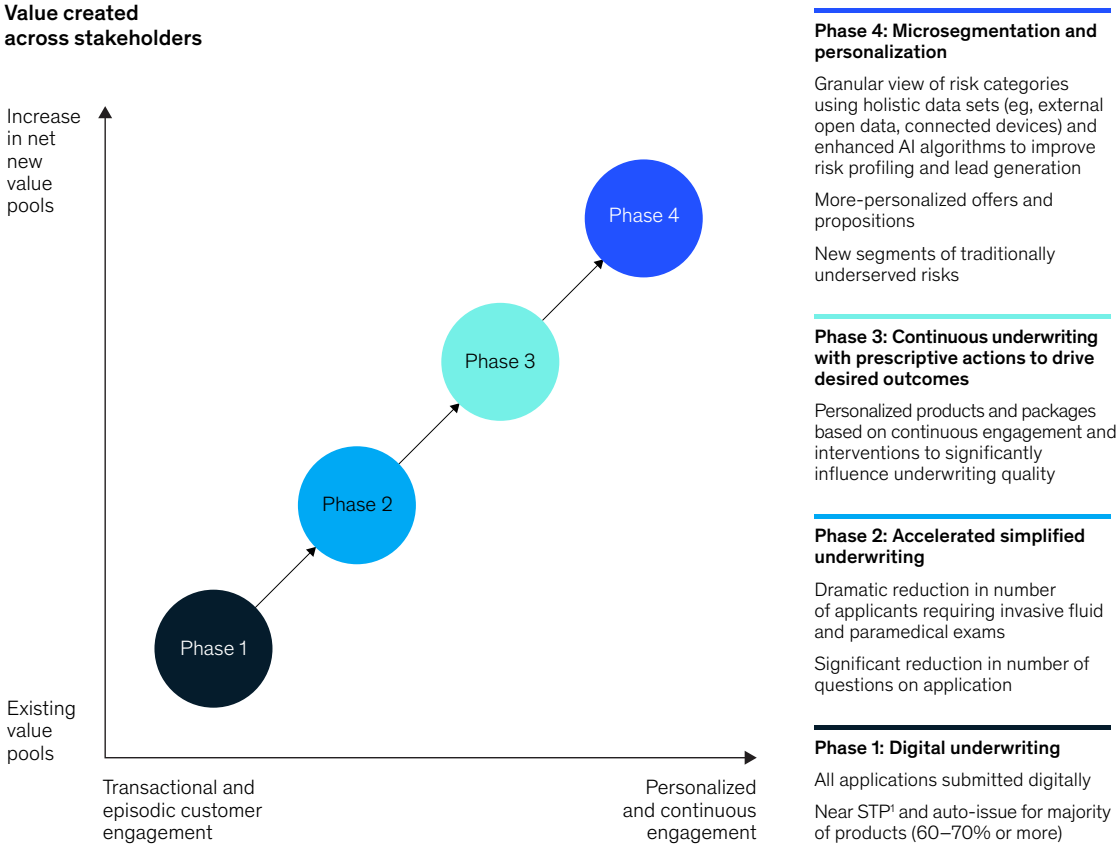
— *Tailored content.* Deliver individually curated, personalized content to customers at every interaction and point of contact.

As Asian insurers seek to deploy personalization strategies successfully and augment AI initiatives

[5] "Personalization at scale," December 2, 2022.

Exhibit 2

There are four layers to the full-stack AI capability that will define the AI-enabled insurer of the future.



[1] Segmentation, targeting, and positioning.

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and investments across the engagement layer, three distribution models are worthy of note.

Digital hybrid agency. Globally, agents continue to be the largest distribution channel for most insurers—but retaining an edge and driving growth in agency will require competitive investment in digital and AI solutions.

It can be done: a global insurer that redesigned its agency channel to be AI-ready realized an incremental impact of several million dollars over the subsequent years. Specifically, the insurer used geospatial network optimization to identify geography-specific agents demand and capture growth opportunities and then used this data to inform its local recruitment strategy. Ramp-up time from newly hired agents to full productivity fell significantly, and retention rates rose. The company increased activation and productivity among agents with a behavior-driven, next-best-action recommendation engine and customized learning plans based on agents' individual performance.

Another leading insurer in Asia optimized its agency channel by shifting from experience-driven operations to digital operations. It reformed its business outlet operation with embedded digital tools to support and optimize agent activity, improving productivity and growth by 5 to 10 percent. The insurer also empowered customer acquisition and conversions using AI-based audio and video illustrations of insurance knowledge, illness explanations, and more to complement agents' interactions with customers. The insurer's AI-based assistants support online interactions in real time and record a monthly average of approximately 100,000 client-meeting hours, enhancing customer experience and acquisition efficiency. AI-facilitated policy issuance at this company was more than $100,000 in 2021, and agent productivity improved, as measured by a 25 to 30 percent increase in net book value per agent.

Digital bancassurance. Bancassurance remains the second-largest channel driving life insurance sales globally and, due to legacy bank systems, is perhaps the most challenging to transform. Nonetheless, a leading Asian bank redesigned and simplified the insurance journey for its insurance partner, using customer analytics and microsegmentation-based customer personas to personalize lead nurturing. Based on these analytics, journeys selected were either "fast" (moved directly to the product list) or "long" (with content integration), depending on customer preferences. Within four to five years, bancassurance penetration almost doubled and first-year premiums increased by 30 to 40 percent.

Digital D2C distribution via ecosystems. Several insurtechs are paving the way for embedding insurance offerings in ecosystems and supporting multiproduct offerings on a single platform. Partnerships with leading players (generally the top 15 percent) to offer select products with simple terms, a short process, and fast and convenient claims can help meet specific user needs for health, auto, life, accident, and other types of coverage. User data analysis can provide insurers with customer insights to inform product innovation and achieve differentiation in the market.

A leading insurtech harnessed its parent group's traffic and data capability to create a competitive advantage in the insurance business. Insurance services are embedded in the parent company's mobile app, which has more than a billion monthly active users. The insurtech integrated its mobile app's ecosystem, expanding its distribution channels and providing app users with access to offline medical networks not restricted to policyholders.

Creating an AI-powered decision-making layer

Although the insurance industry generates a massive amount of data across various levers and channels, this data is not, for the most part, being leveraged to build a sophisticated decision-making layer that provides a highly personalized customer experience. AI technologies could be used to complement existing pricing and underwriting decision making. Specifically, these technologies could help support claims decisions and identify claims leakages by dynamically collecting and evaluating data points such as adjuster notes, damage images, text submissions, submitted documents, and patient histories.

In a mature AI-powered decisioning layer, a suite of state-of-the-art analytics tools and edge capabilities is supported by a solid database

system with clean, well-structured, analytics-ready data; a defined agile-delivery process; and a well-developed, analytical organization deeply connected to the business.

Advanced analytics can simplify and augment decision making across the entire insurance value chain. In our experience, significant gains in efficiency, critical metrics, and more can be realized throughout the value chain:

— *Marketing.* Insurers can use AI-driven customer lifetime value (CLV) management to sift through large amounts of data. This can uncover insights to help identify high-potential customers early enough to take action at all four stages of the customer life cycle: acquisition, onboarding, engagement, and retention. For example, an insurer using AI-driven CLV management achieved a major increase in gross written premiums.

— *Underwriting.* Using AI to support risk scoring can enable continuous underwriting and achieve multiple desirable outcomes. The insights resulting from continuous engagement, microsegmentation, and personalization, for example, can help develop customized products and packages.

— *Pricing.* Employing built-in pricing models that use machine learning for risk selection and developing data domains for governance can help provide granular monitoring of KPIs and real-time monitoring of emerging loss, pricing trends, and shifts in the portfolio risk mix.

— *Claims.* One insurer is using AI to help identify fraud, waste, and abuse in health insurance claims, driving reductions of more than 5 percent in overall claims spend.

— *Servicing.* An AI-supported customer complaint journey powered by real-time sentiment analysis, smart workflows, and other capabilities helped one insurer significantly reduce the number of repeat complaint calls.

New technologies such as generative AI amplify the impact possible across the value chain in very quick order (see sidebar, "The potential of generative AI in insurance").

Modernizing the core tech and data layer

A modernized core tech and data layer helps uncover as well as deliver advanced intelligence through a seamless front-end experience for customers and the distribution network. Organizations with mature, AI-ready core tech and data layers have capabilities across the core tech stack, including a well-defined data infrastructure; data governance; advanced analytics tooling; technology operating model; a mature, hybrid cloud infrastructure; API architecture and linkages; and advanced cybersecurity and controls infrastructure.

Once the above elements are defined in this layer, organizations can achieve sustained transformation by hiring talent to build these differential capabilities in-house, rather than outsourcing the foundational stack required. In

The potential of generative AI in insurance

Generative AI has dominated recent headlines, largely thanks to the growing popularity of AI chatbot ChatGPT. The technology could be a significant contributor to the insurance industry's efforts to redefine business models across the value chain, improving efficiency, combating fraud, lowering costs, and hyperpersonalizing customer interactions. In sales and distribution, generative AI could be used to create personalized marketing content and tailor offerings based on customer demographics. It can help create more effective personalized scripts for agents and bancassurance reps to foster conversions. It could also be used to provide real-time, personalized advice and answers to basic customer queries to support customer relationship management.

fact, many players have developed distinctive stacks that have been monetized across insurers.

A leading Chinese digital insurer gathered customer behavioral data to develop innovative products, improve customer profiling and segmentation, and more. Data-driven services also helped the insurer grow its customer base and refine its data analytics, including dynamic pricing, automated claim settlement, and enhanced risk management effectiveness, serving more than 500 million insured customers in 2021.

The company redefined the insurance value chain with continuous iterations and upgrades to its system to improve business efficiency, meet the diversified insurance demands of customers, and create value for stakeholders. A 2020 upgrade to its self-developed cloud system increased the company's processing capacity by more than 50,000 insurance policies per second. The insurer's core systems are available to major insurers in Asia, and the company maintains wide-ranging partnerships with internet platforms. Insurer customers can connect with various ecosystem partners locally and launch a variety of limited and scenario-based protection products. This technology arm of the company serves more than 30 insurers across life, property and casualty (P&C), and health, and more than half of its revenue was generated by recurring income.

Optimizing the organization and operating model layer

A modernized organization, operating model, and way-of-working layer supports AI readiness by providing the right talent, structure, and culture to put AI-powered capabilities into action. Transitioning from a traditional linear model to a cross-functional operating model facilitates expert-driven AI insights generation and adoption at the front line.

The benefits of a cross-functional team structure that integrates business, AI, and technology functions can lead to faster alignment, increased flexibility, and high adoption of AI in the organization. These benefits are exemplified by data-driven organizations such as Google and Netflix that operate in relatively flat, cross-functional structures. Most insurers, however, have retained their traditional organizational structures and implemented AI only on a limited basis. This can impede their AI readiness by reducing their capacity to implement the transformation needed in other layers of the AI capability stack.

As demonstrated by a European banking group that adopted an agile business model, obstacles to transforming traditional linear structures can be overcome, and gains in employee engagement, efficiency, speed to market, and client experience can be realized. For example, the banking group was able to release software and updates within two or three weeks rather than five or six times each year, and its employee and customer satisfaction scores rose dramatically in the first 15 months following its operational shift.

The evolution of insurance: What's ahead?

In the short term, organizational shifts like those described above will help carriers prepare for AI-enabled improvements. In the long term, shifts will prime the insurance industry to realize the kinds

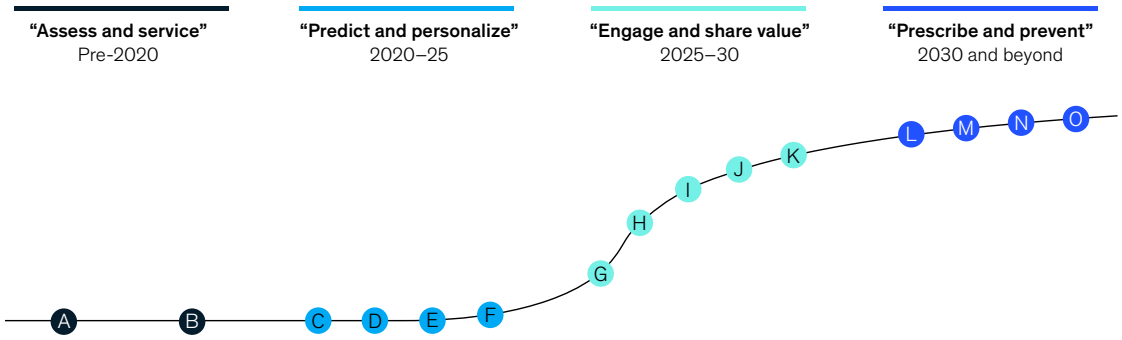
Transitioning from a traditional linear model to a cross-functional operating model facilitates expert-driven AI insights generation and adoption.

of AI-enabled gains experienced in other industries. As AI applications advance and become fully integrated across the customer industry, the breadth and nature of services and products that life insurers can provide will evolve from simply assessing and servicing claims to prescribing and preventing them (Exhibit 3). From automated processing to predictive analytics and prescriptive algorithms, AI offers the potential to enhance insurance protections with insights to support integrated life, health, and wealth solutions and personalized preventive strategies.

The importance of employing strong risk management practices in insurance cannot be overstated. The reality is that along with its potential

Exhibit 3

In the future, life insurers' focus is likely to evolve toward proactively preventing adverse events.



A **Individuals provide data** that is used to assess risks and provide standard products and care suggestions

B **Policies are priced,** purchased, and serviced in predefined service-level agreements and cohorts

C **Information collected from external sources and devices** is used to proactively assess risk and provide personalized wellness products and care suggestions

D **Majority of financial planning is done through algorithmic platforms,** with agents humanizing advice and building customer relationships

E **Advanced algorithms** match leads to best-fit channel and advisors

F **Pricing sophistication increases,** with more-tailored pricing and smaller risk pools

G **Integrated engagement platform** facilitates data, insights, and transactions across multiple industries, allowing for value sharing between entities

H **Highly dynamic, usage-based insurance products proliferate** and are tailored to the behavior of individual consumers

I **Lines between life, wealth, and health products blur** as integrated solutions come to market

J **More than 90% of policies use accelerated and automated straight-through underwriting;** manual underwriting ceases for most products

K **Agents use smart personal assistants** to optimize their tasks, as well as AI-enabled bots to recommend deals for clients

L **Smart contracts enabled by blockchain** instantaneously authorize payments from a customer's financial account

M **Prescriptive suggestions provide interventions** for agents or digital channels to actively influence outcomes

N **Personalization** is used to craft tailored strategies and coverage for each household

O **Robo and DIY channels can approximate human empathy and conversational capabilities,** facilitating a 70–90% servicing-cost reduction and providing a resolution within minutes

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to revolutionize the industry, AI presents insurance players with potential challenges related to data privacy, inherent biases, interpretability, and more. Privacy breaches, intellectual-property infringements, and job displacements stemming from AI adoption are all too possible and illustrate why companies are better positioned for success when following blueprints based on proven models and best practices to implement and scale AI.

The Asian insurance industry stands at a crossroads for AI-powered transformation: technological advances can offer new and expanding growth opportunities, and lagging behind other sectors could exacerbate challenges to attracting and retaining top global talent and meeting evolving customer expectations. Though complex, a properly structured, layered approach to expanding AI capacity throughout the insurance value chain can help Asian insurers realize long-standing goals and set new benchmarks for success as AI-powered insurers of the future.

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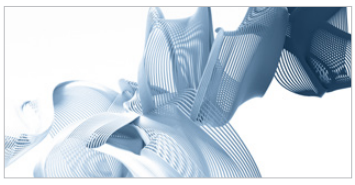
Further insights



How the Asian insurance market is adapting to the future

How personalization at scale can invigorate Asian insurers

How Asian insurers can use digital marketing to fuel growth