



Digital Business

Catching the Consumer Data Wave: A New Opportunity in the Insurance Ecosystem

With the profusion of insurance consumer data coming online, the role of data intermediaries is emerging as a key player in the insurance ecosystem. Insurance distributors are especially well-suited to take the lead in analyzing user data and sharing insights to drive innovative product offerings and growth.

Executive Summary

The eruption of customer wellness and activity data captured by wearables, lifestyle apps and other digital platforms presents a tipping point for the insurance industry. Today's digital generation expects brands to use consensual data to enhance their experience by offering more personalized services and offerings. The

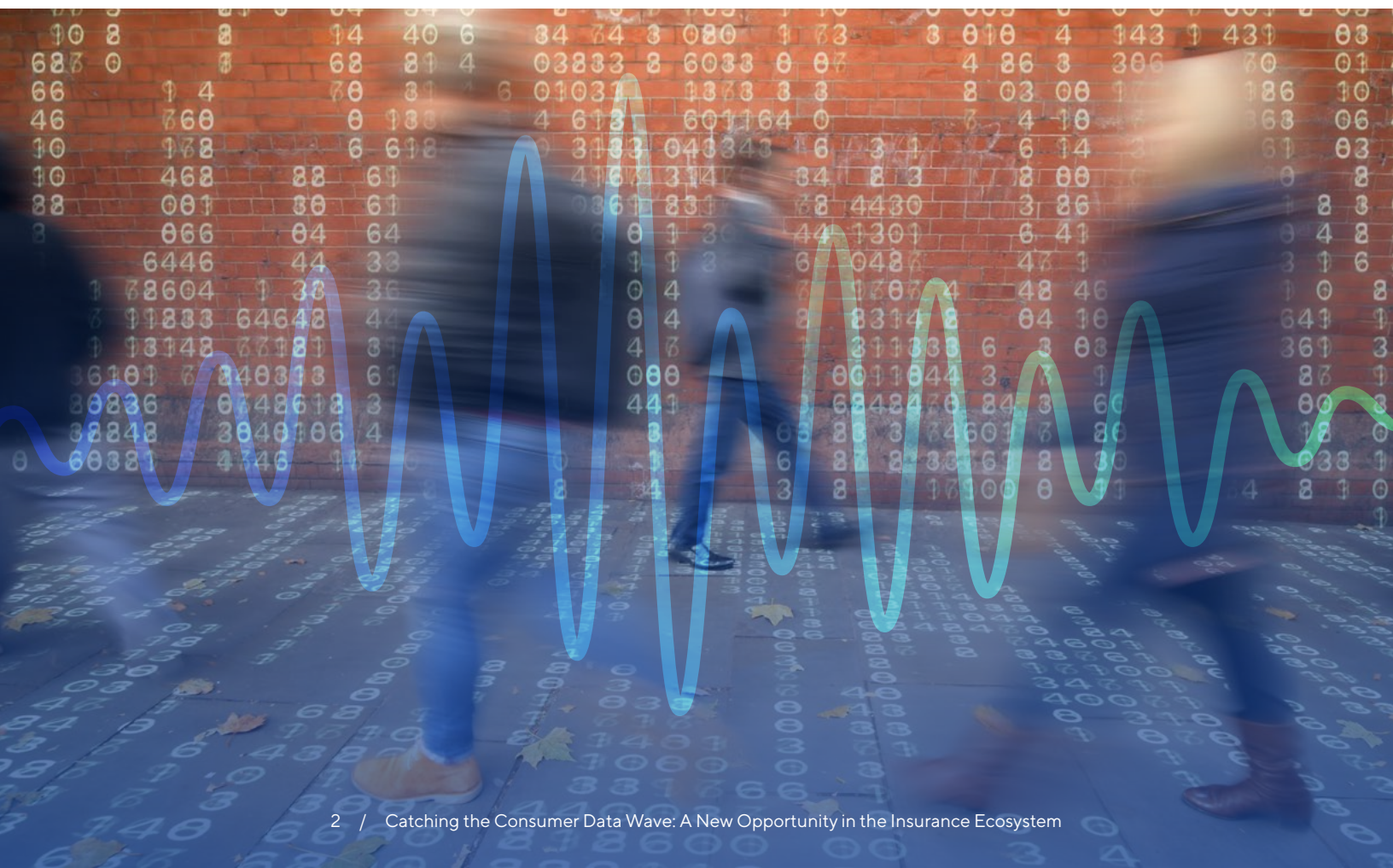
insurance industry is at the cusp of disruption, driven by a combination of nimble start-ups using emerging technologies and new data sources to serve evolving customer preferences. This is pressuring insurers to change how they approach product design, pricing and distribution in ways that leverage all available data.

Yet, most insurers are unprepared to access and use this data to offer personalization, based on individual risk assessments or anonymized profiles, and support customers through their various insurance needs and policy lifecycle. Moreover, insurers are not equipped to receive and analyze incoming data flows from myriad digital platforms. Likewise, device manufacturers are ill-equipped to share user data directly with the myriad of insurers across geographies.

This predicament presents an opportunity for a new player in the insurance ecosystem: the data intermediary. With a focus on the Asia-Pacific region, in this white paper we examine the underlying forces causing this data dilemma and the need for an investment in creating a common data-warehousing platform ideally positioned between the data receiver, such as a wearables manufacturer, and the insurer. We posit that a distributor-driven platform should analyze the data

and share insights to help all stakeholders across the ecosystem enhance their services and offers, thus providing new growth opportunities.

Insurers would benefit in many ways as they improve the risk profiles of customers, delight them in new ways, enhance product innovation and reap economic advantages through more targeted spending and claims efficiency. This new ecosystem would create growth opportunities industry-wide as it accelerates the insurer's journey toward real-time underwriting and loyal customer renewals. Such a distributor-driven ecosystem would require effective collaboration among insurers, policy makers, regulators and cybersecurity experts to ensure a robust framework — one that benefits customers and protects data privacy rights. We also explore the possible challenges, focusing on the evolving regulatory landscape in particular, and envision a way forward for the industry.



Four forces driving the data dilemma

Throughout the Asia-Pacific region, the insurance industry faces data headwinds – all brought on by changes in consumer behavior and technology adoption. The four forces most significant to insurers are:

- I Explosion of digital data:** Data monetization will become a major source of revenue for insurers, as the world creates 175 trillion gigabytes (175 zettabytes) by 2025, up from 33 zettabytes in 2018, according to IDC.¹
- I Increased wearables adoption:** Consumers are increasingly adopting gadgets and connected devices to monitor activity and behaviors. In emerging markets, inclusive of Asia-Pacific (excluding Japan), the wearables market grew 14% in 2018,² as basic wristbands remain in high demand and smartwatches gain traction across the region.
- I Expected personalization:** Today's consumers receive personalized offers and customized

solutions across many product categories, and insurance shouldn't be an exception. Insurance customers lack a variety of policy options that account for their lifestyle choices, general health, and social and financial behaviors. This is where technology can play a leading role. Southeast Asia is fast embracing digital innovation spurred by the Internet of Things (IoT) and smartphone adoption. China is home to many dynamic digital innovators and a leading investor in emerging technologies.³ Singapore has its Smart Nation initiative.⁴ Malaysia launched the world's first digital free-trade zone.⁵ Thailand has outlined its Thailand 4.0 vision that aims for greater economic prosperity through innovation, technology and creativity.⁶ All combined, this region presents fertile ground to create a new insurance ecosystem to capture, mine and act on this massive data trove to offer a deeper view of consumers as they gravitate to online insurance and request more personalization.

Drivers for data monetization

CUSTOMER PERSONALIZATION

Customers expect a personalized insurance product that reflects health, social and usage behaviors.

WEARABLES UPTAKE

In APAC, the wearables market grew 14% in 2018, and global shipments are expected to exceed 450 million in 2020.

INSURERS GO DIGITAL

Insurers leverage massive data for advanced analytics and machine learning.

DIGITAL DATA EXPLOSION

Data monetization becomes a key revenue driver, as the world creates 175 trillion gigabytes by 2025.



Figure 1

I Insurers go digital: In China, online insurance sales of life and non-life products are expected to hit \$145 billion by 2021⁷ – up from \$45 billion in 2016. Online insurers and conglomerates, such as Baidu, Alibaba and Tencent, are investing in technology, joint ventures and acquisitions to strategically expand their insurance industry footprint. Insurers recognize the need to take advantage of this wealth of data to support personalized services based on real-time customer profile/behavior/habits to launch new and innovative product segments, such as on-demand insurance that targets next-gen customers, and to satisfy customer desires for faster, more proactive communication and service.

The predicament created by these forces presents a timely opportunity for a new breed of data intermediaries that can help insurers by collecting and analyzing data spread across the insurance ecosystem and ferreting out intelligent insights to offer as a service. By leveraging technology across the value chain and partnering with organizations such as automobile companies, smart home appliance manufacturers and gadget/wearable manufacturers, insurers can create a more data-driven industry ecosystem that enables real-time underwriting, customized policies, smarter distribution, better service and faster claims resolution while also optimizing costs. Similar to the way the cab-hailing industry has transformed through intelligent use of customer data, a data intermediary with actionable insights based on various data sources has the potential to redefine the insurance landscape.

Customer journey map: current state

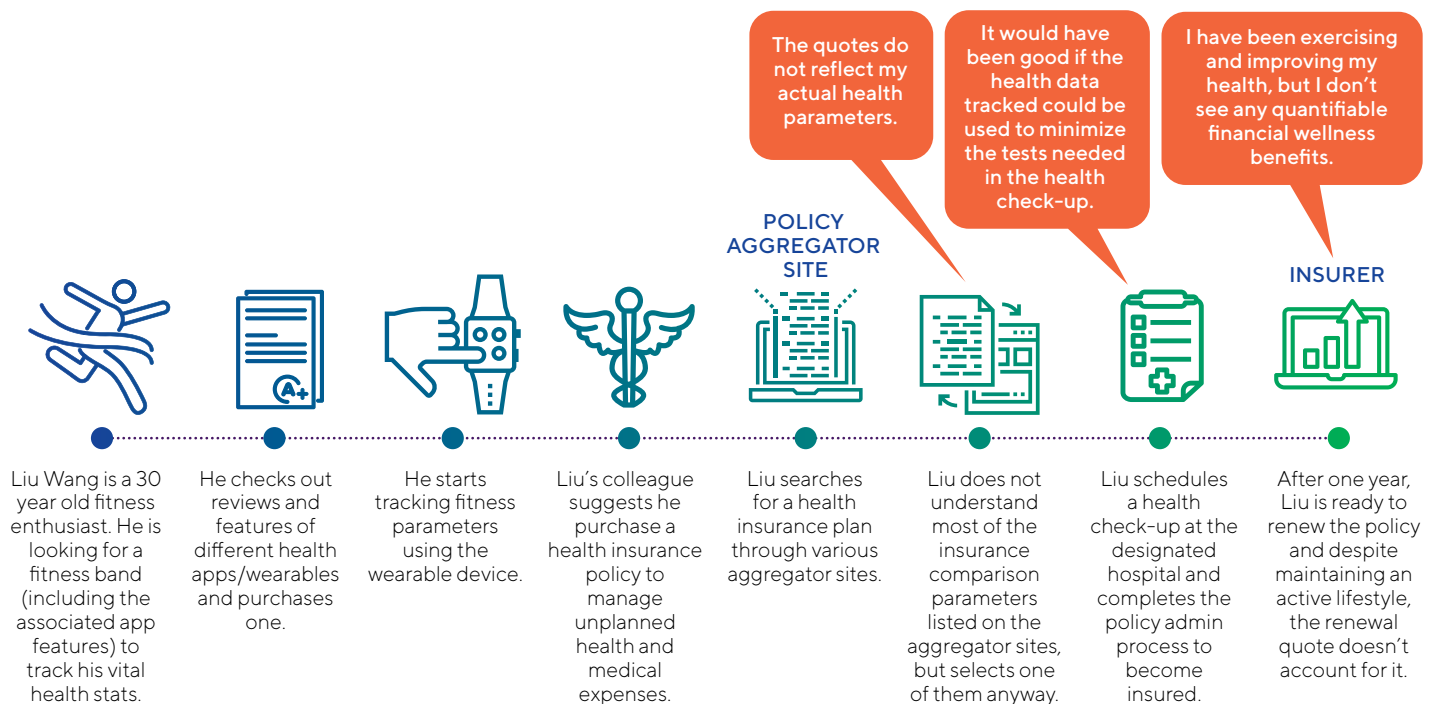


Figure 2

Who should act as data intermediary?

The insurance industry ecosystem includes many types of players, but only the most qualified candidates should assume the role of data intermediary. Many insurers are keen to use insights from the data provided by external digital platforms but would rather not invest in the skills and resources to create an in-house system that would process all the consumer data residing in various systems and data marts outside their business.⁸ In addition, some large insurers, due to their inherent size and legacy systems, might find it difficult to adopt emerging technologies and new processes.⁹ Nonetheless, insurers aspire to innovate around wearables data, as a few companies are running tests by providing a subset of customers with wearables. However, they recognize that the sample data is not representative of all customers and a broader rollout would likely be cost-prohibitive.

While any entity that has wide access to data can provide a data intermediary service, we believe that a distribution system that intermediates between the customer and insurer, such as a large brokerage firm or a national distribution channels, and has access to various data sources can more readily step into the data intermediary role.

Distributors interested in assuming this role should exploit the opportunity by enhancing their digital capabilities to meet the evolving needs of customers. This sentiment is shared by customers and insurers alike, who want brokers to invest in digital platforms, more clearly demonstrate the many ways they add value, and offer more analytics, marketing and sales services.¹⁰ Distributors can leverage the available treasure trove of data to foray into new areas such as market research, playing the role of a data and intelligence provider to insurers and other consulting firms.

The distributor's edge

★ Rating

	Insurer	Distributor	IoT/Wearable Manufacturer
People Alignment	Investment in people with niche skill sets to manage this platform (e.g., data scientist) will not be optimal from a financial standpoint. ★★	Distributors have a broader view of the market and the right kind of relationship with multiple insurers that can be leveraged to create a strong workforce. ★★★	Wearable/IoT device manufacturers will suffer from lack of alignment with their strategic objective of providing the wellness benefit viz. playing the role of a data provider. ★★
Prospect Reach	Insurer will have access to a smaller group of customers who are prospective insureds or online visitors. ★★	Distributors are well connected with the insurers and have the confidence of customers as their trusted partner, which will enable economies of scale. ★★★★★	Wearable/IoT device manufacturers are not a part of the insurance value chain, and collecting data from other wearable manufacturers would be a challenge. ★★
Technology	Insurers' systems are driven by legacy technologies, and moving from legacy to next-gen technologies requires a sizeable investment. ★★	Distributors have the potential to invest in a new platform that manages the data inflow from various customers and provides meaningful insights to insurers. ★★★★★	Not applicable. (Lack of alignment with their strategic goals.) ★

Figure 3

Access to data, however, isn't enough. Distributors will need to apply analytics and artificial intelligence to provide insurers and customers with more timely and relevant information and insights.

Emerging examples of progress

Access to data, however, isn't enough. Distributors will need to apply analytics and artificial intelligence to provide insurers and customers with more timely and relevant information and insights. Digital insurer ZhongAn in China is addressing this need through its Intelligent Open Platform for insurers. ZhongAn, a digital venture of insurer PingAn and online giants Tencent and Alibaba, identified an opportunity to aggregate and analyze data on medical insurance directories, drug databases and hospital networks. The resulting SaaS platform¹¹ offers access to medical records, an insurance repository and risk management services. Developed initially for Chinese property and casualty insurer Axa Tianping, the ZhongAn platform is now being used by more than 10 insurers, demonstrating strong market demand

for such services. This platform, while beneficial, doesn't yet cover personalized consumer data, such as health and social, and traditional large insurers generally don't have the digital capability or agility to aggregate such data at large scale.

Another example of progress is Wukongbao,¹² a provider of online business products and services, which provides a data-mining API that connects to more than 5,000 third-party platforms, including travel, auto and health apps. It identifies user-behavior patterns insurers can use to tailor and market insurance policies.

The proposed ecosystem should be owned by a consumer-data intermediary that directly and indirectly benefits from the currency of this ecosystem (see Figure 4).

The insurance data ecosystem

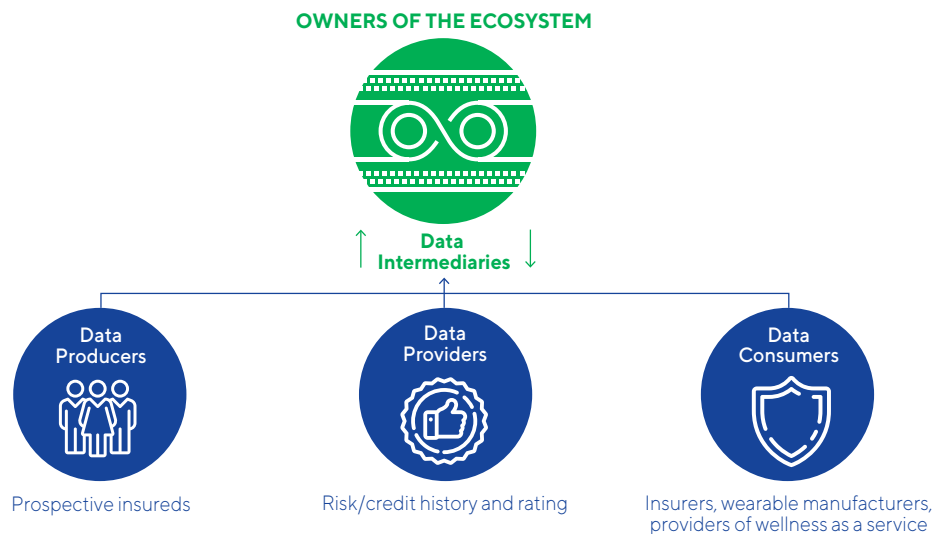


Figure 4

This new ecosystem would enable insurers to offer customers device-agnostic, customized products, rather than link offers to specific fitness band brands or telematics devices that might hinder interest and usage. Customers should be free to use their preferred device no matter what insurance policy they choose.

The data intermediary would securely handle data as it acts as a repository and distributor of on-demand services to insurers. This new ecosystem would enable insurers to offer customers device-agnostic, customized products, rather than link offers to specific fitness band brands or telematics devices that might hinder interest and usage. Customers should be free to use their preferred device no matter what insurance policy they choose. Global data service providers, such as

LexisNexis, Acxiom, and ISO Verisk Analytics, and insurers, such as Aviva,¹³ are starting to leverage this data to determine risk profiles rather than review medical tests. In China, insurer Allianz has launched Xinkaishi,¹⁴ a fetal listening and maternity app, to cross-sell health and life insurance to expectant mothers. AXA, Alibaba and Ant Financial Services have partnered to co-innovate and develop tailored insurance products for specific segments of Alibaba’s customer base.¹⁵

Role of distributor in proposed ecosystem

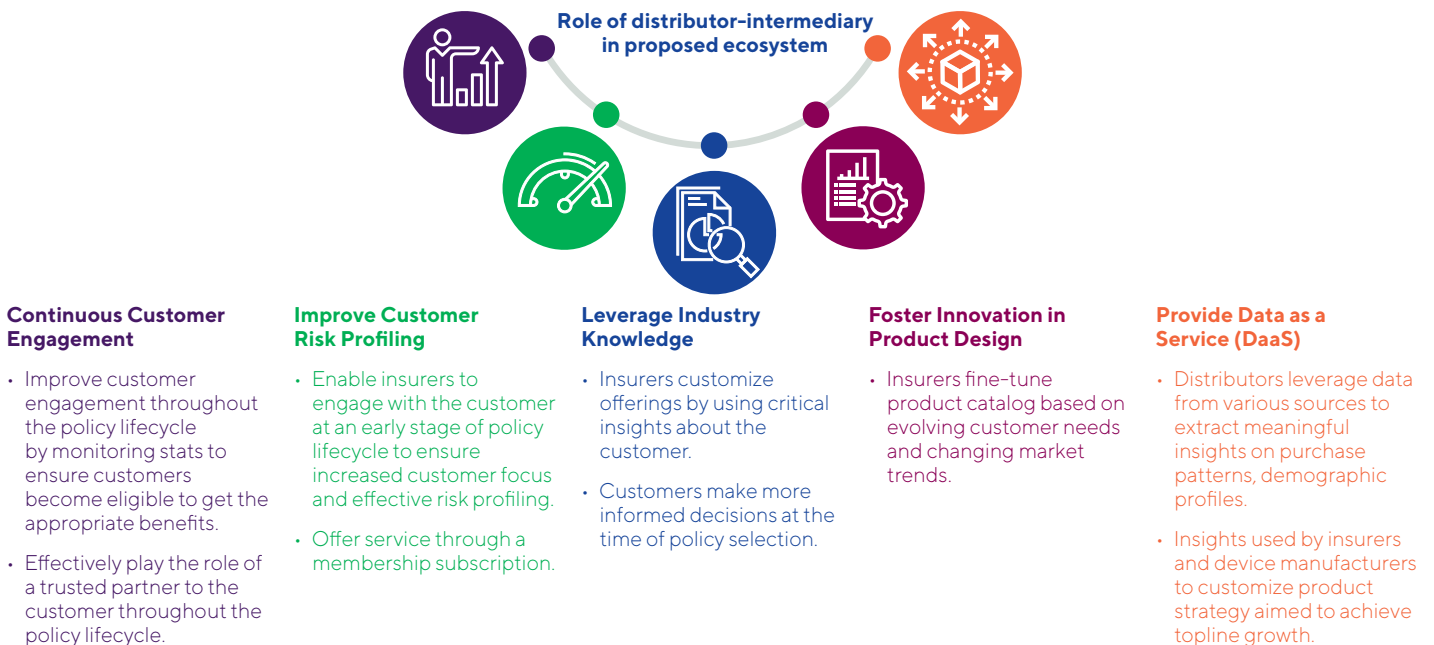


Figure 5

Future view

We believe the industry needs a further-consolidated view of broader data – such as customer behavior, social, financial and risk data – from various providers, a gap well suited for the data intermediary. This connected, digital, data-driven insurance ecosystem would then enable a seamless flow of a wider range of insight among the various parties. As a data gatekeeper, the intermediary would maintain this data-warehousing platform through which all user data would be shared with the various insurers.

We envision a mutually beneficial distributor-driven network that unites customers, distributors and insurers. Figure 6 illustrates a future scenario where distributors play a central role to create and manage the platform using healthtech data as an example.

Resetting a digital customer journey

With a data intermediary at the center of the ecosystem, a new customer journey will unfold, enabling insurers to offer the more personalized

Creating a distributor app ecosystem

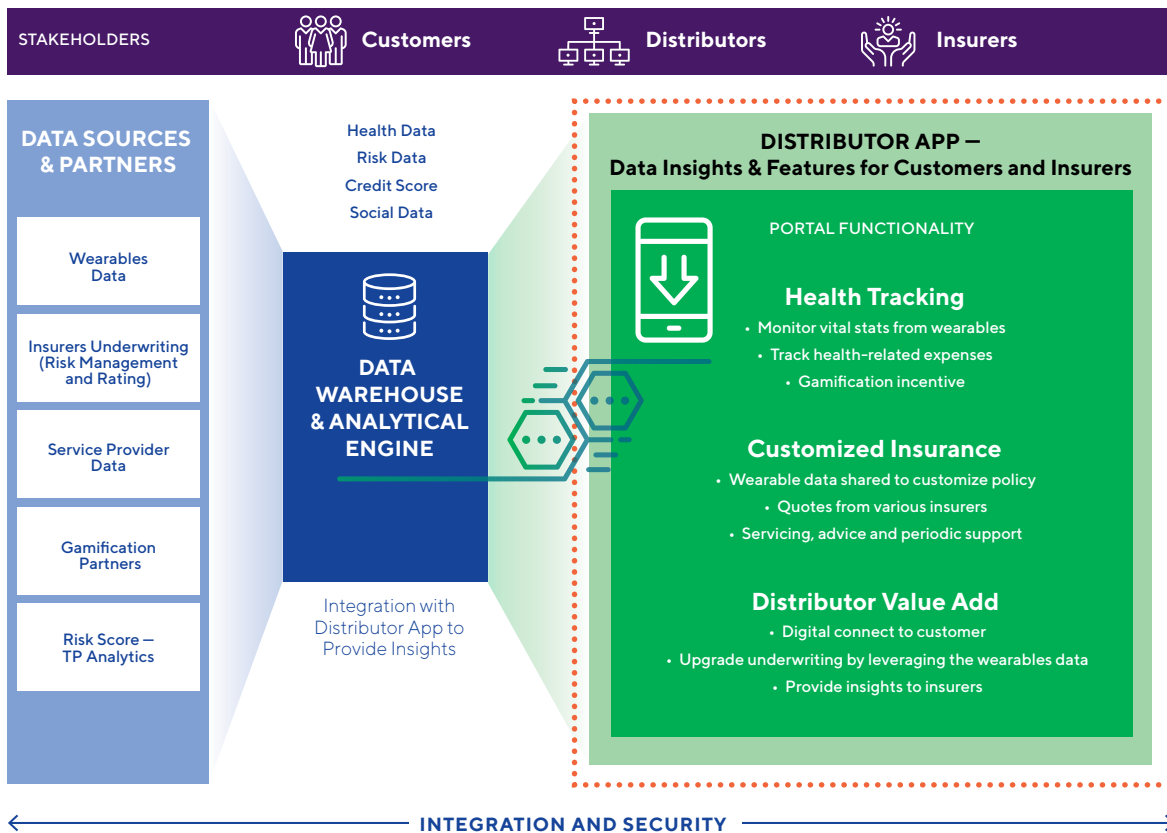


Figure 6

products customers desire. When shopping for a new insurance policy, today's customer navigates through an array of distribution channels, including agents, brokers, aggregator sites and direct sales. Because product searches cannot be tailored to distinctly personal needs, customers receive a myopic view of the vast array of products and features available. Further, insurers have limited access to customer data, rendering them unable to classify risk at a granular level to offer customized products and differential pricing. For example, insurers are unable to incentivize preferred-risk (healthy) customers over standard-risk customers.

In the future state, through a distributor app, insurers could access vital information to help them profile prospects based on current health status. Policy providers would improve risk management as they gain a better understanding of general health-profile trends. This access and knowledge could accelerate the coming of real-time underwriting. Throughout the customer journey, the distributor app would serve as a trusted advisor as it supports the insured as they traverse the policy lifecycle. Figure 7 shares a view of this future journey.

Customer journey map: future state

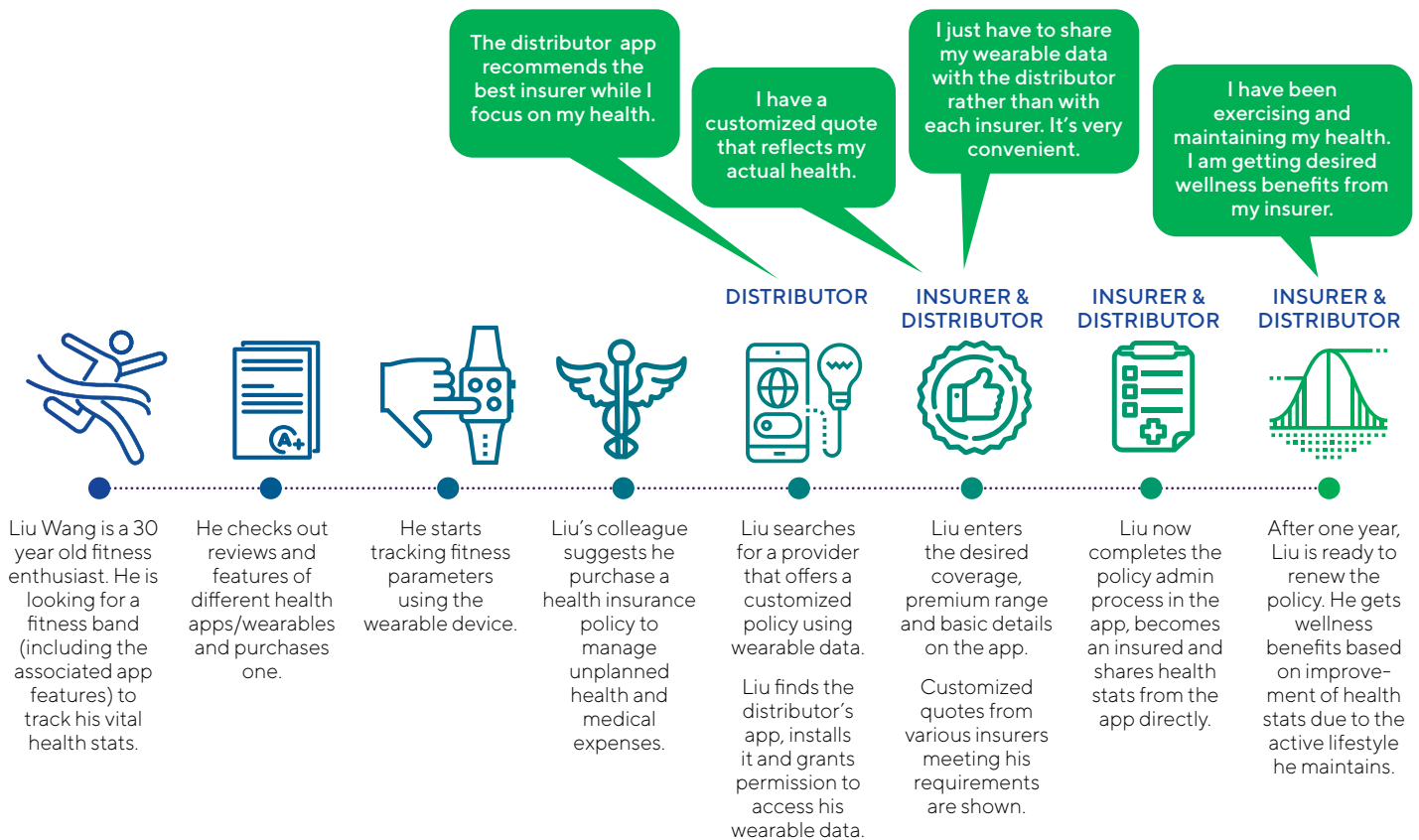


Figure 7

Benefits to insurers

Insurers have much to gain through this new ecosystem, as they create more targeted product offerings that accurately reflect coverage needs. As data insights increase, so advances the evolution of underwriting capabilities. Low performing products

can be dropped and more targeted advertising and marketing campaigns applied, which can increase profitability and improve the overall claims ratio. Here's how we envision insurers benefitting through the new ecosystem:

Customer experience

- Offer customized services based on wearables data.
- Allow for continuous monitoring.
- Provide wellness as a value-added service.
- Earn greater customer trust through higher transparency.

Risk profile

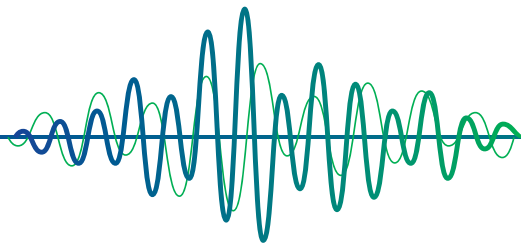
- Receive real-time data for greater consistency.
- Improve risk-assessment quality when profiling prospects.

Product design

- More effectively calibrate the underwriting system and accelerate the move to real-time underwriting.
- Customize the insurer roadmap based on evolving needs.

Bottom line

- Improve combined ratio and reduce claims losses through policies based on real-time data.
- Increase revenue through higher conversions due to targeting and customization.
- Improve claims efficiency with more preferred-class policyholders.
- Improve underwriting efficiency.
- Optimize advertising and market research spend.



Regulatory challenges

As the insurance industry embraces insurtech, the scenario presented in Figure 8 (page 11) shares a view of the many potential data security issues. Insurers, policy makers, regulators and cybersecurity experts must collaborate to build a robust governing framework – one that protects customers' data privacy rights.

Across the Asia-Pacific region, lawmakers are creating comprehensive data privacy laws similar to the EU's Global Data Privacy Regulations (GDPR), adopted in 2018. The Chinese Personal Information

Security Specification law dictates basic rules of consent, cross-border data transmission and secondary uses of personal data. It also provides an overarching framework for data collection, storage and transfer. Other regions have similar data protection laws, such as the Singapore Personal Data Protection Act of 2012 (PDPA) and the Taiwan Personal Data Protection Law.

Greater collaboration and transparency among government bodies, regulators, insurers, data processors and customers will ensure a mutually

Challenges to the ecosystem



REGULATORY CONSTRAINTS

- Insurers restricted from providing premium discounts based on aggregated data (e.g., healthtech) in some countries.
- Insurers must have customer consent to use data for analysis.



DATA PRIVACY

- Ensure anonymity of customer data for any research, such as trend analysis, and data mining activities.
- Ensure compliance to global data privacy regulations, such as GDPR and PDPA.
- Obtain customer consent to share personal data.



DATA MATURITY

- Consistently receive data from all customers and stakeholders.
- Accommodate insurers' need for massive data for maturity tables as a part of underwriting-engine calibration.
- Ensure data authenticity from connected devices.
- Progressive movement toward real-time underwriting.



DATA SECURITY

- Mask data of prospective insureds as it's shared with the insurers for quote generation.

Figure 8

beneficial ecosystem. Through anonymized data, processors can still gain valuable insights into customer traits and behaviors without violating regional data privacy laws.

As they abide by strict customer privacy laws, gadget manufacturers, data intermediaries and insurers will secure higher customer trust.

VitalityHealth, which includes partners such as Ping in China and AIA in Singapore and Australia, has demonstrated that, with transparent policies and pricing, customers will consent to providing their health data. With this data access, VitalityHealth reduced lapsed policies by 52% among their most active program participants.¹⁶

A call for industry action

The proposed ecosystem must account for how data would be managed and the integrity with which it is handled. With a distributor at the center properly playing its data management role, insurers should be willing to share their consent-granted customer data to enhance the richness of the insights. To ensure ecosystem success, insurers should enable the distributor to leverage the power of this aggregated customer data and bring greater value to all participants, especially customers. Distributors should explore the potential changes required to their business models, operations and technologies to serve in this new capacity.

The insurance industry is facing a major shift in market dynamics due to advancing customer expectations, the rise of connected devices and the emergence of insurtechs. These developments are forcing insurers to revamp their product propositions to stay relevant and compete with greater intelligence. The data eruption from digital platforms presents an ideal opportunity for the industry players to unite around a data intermediary approach to explore new ways to capture, act on and monetize this information, all for the sake of providing a better customer experience.

About the authors

Srinivasan Somasundaram

Senior Director, Insurance Practice, Cognizant Consulting

Srinivasan Somasundaram is a Senior Director within Cognizant Consulting's Insurance Practice. He has more than 20 years of experience in the life, annuity and pension sectors. Sriniv's experience includes program delivery, developing business propositions, go-to-market and large-deal support. He has worked on projects in the UK, U.S., South Africa and the Asia-Pacific region, with a focus on sales and distribution. Sriniv holds a post-graduate degree in management from Bharathithasan University. He can be reached at Srinivasan.Somasundaram@cognizant.com | <http://in.linkedin.com/pub/srinivasan-somasundaram/0/a5a/156>.

Prem Srinivas Sriram

Guidewire Product Consultant, Insurance Practice, Cognizant Consulting

Prem Srinivas Sriram is a Guidewire Product Consultant within Cognizant's Insurance Practice. He has nine years of experience in product, functional, solution and technical consulting for major property and casualty insurance clients across the U.S. and Europe. Prem has completed his PGPM from Great Lakes Institute of Management, Chennai, with certifications in AINS, AIC and CSPO. He can be reached at Prem.Srinivas@cognizant.com | www.linkedin.com/in/prem-srinivas-sriram-aic-ains-ais-cspo-32b5b218.

Santhosh Kumar S

Manager, Business Development Team, Insurance Practice, Cognizant Consulting

Santhosh Kumar S is a Manager with the Business Development Team within the Cognizant Insurance Practice. He has more than nine years of IT experience working on multiple opportunities for life and property and casualty insurers in the Asia-Pacific region, in the areas of business analysis, business process consulting and digital transformation. Santhosh has completed his PGPM from Great Lakes Institute of Management in Chennai, with certifications in FLMI and CSPO. He can be reached at Santhosh.Kumars3@cognizant.com | www.linkedin.com/in/santhosh-kumar-swayam-prakash-13ba5056/.

Vinay Alexander

Senior Consultant, Insurance Practice, Cognizant Consulting

Vinay Alexander is a Senior Consultant within Cognizant Consulting's Insurance Practice. A certified AINS professional, he has nine years of experience working with multiple property and casualty insurers and brokers across Europe and North America in IT product development, functional implementation, business analysis, business process consulting and digital transformation. Vinay received a PGPM in marketing and sales from Great Lakes Institute of Management, Chennai. He can be reached at Vinay.Alexander@cognizant.com | www.linkedin.com/in/vinay-alexander-830301bb/.

Manikandan Sankaran

Consultant, Insurance Practice, Cognizant Consulting

Manikandan Sankaran is a Consultant within Cognizant Consulting's Insurance Practice. He has more than four years of consulting experience across the insurance value chain working with insurers and brokers across the U.S., UK, Middle East and Asia-Pacific regions, with expertise in business analysis and digital transformation, and a passion for emerging technology. Manikandan holds a post-graduate degree in management from the Indian Institute of Management, Indore. He can be reached at Manikandan.Sankaran2@cognizant.com | www.linkedin.com/in/manikandan243.

Endnotes

- ¹ David Reinsel, John Gantz, John Rydning, "The Digitization of the World – From Edge to Core," IDC and Seagate, November 2018, www.seagate.com/files/www-content/our-story/trends/files/idc-seagate-data-age-whitepaper.pdf.
- ² "Worldwide Wearables Market Ticks Up 5.5% Due to Gains in Emerging Markets, Says IDC," Sept. 4, 2018, IDC press release, www.idc.com/getdoc.jsp?containerId=prUS44247418.
- ³ Kevin Wei Wang, Jonathan Woetzel, Jeongmin Seong, James Manyika, Michael Chui, Wendy Wong, "Digital China: Powering the economy to global competitiveness," McKinsey Global Institute, December 2017, www.mckinsey.com/featured-insights/china/digital-china-powering-the-economy-to-global-competitiveness.
- ⁴ "What Is Smart Nation – Initiatives," Smart Nation Singapore, www.smartnation.sg/what-is-smart-nation/initiatives.
- ⁵ Digital Free Trade Zone (DFTZ), Malaysia External Trade Development Corporation, www.matrade.gov.my/en/digital-free-trade-zone-dftz.
- ⁶ What Is Thailand 4.0?, <https://thaiembdc.org/thailand-4-0-2/>.
- ⁷ "How Tencent and Ant Financial Are Rushing Into China's Insurance Industry," CBInsights, Oct. 23, 2017, www.cbinsights.com/research/baidu-alibaba-tencent-insurance/.
- ⁸ Elinor Friedman, Andrew Harley, Klayton Southwood, "Insurance big data – float like a butterfly, sting like a bee," Willis Towers Watson, August 2016, www.towerswatson.com/en/Insights/Newsletters/Global/Emphasis/2016/emphasis-2016-2-insurance-big-data-can-improve-business.
- ⁹ Karl Flinders, "Insurers face same legacy system battle as retail banks," *Computer Weekly*, Nov. 1, 2016, www.computerweekly.com/news/450402096/Insurers-face-same-legacy-system-battle-as-retail-banks.
- ¹⁰ Trevor Lloyd-Jones, "With Digital Disruption Will Insurance Brokers Adapt or Die?" LexisNexis Insurance Insights, <http://blogs.lexisnexis.com/insurance-insights/2016/12/with-digital-disruption-will-insurance-brokers-adapt-or-die/>.
- ¹¹ "ZhongAn Technology Launches AI-Powered Data Platform for China's Insurance Industry," Fintech News Hong Kong, Aug. 14, 2018, <http://fintechnews.hk/6308/insurtech/zhongan-technology-saas-insurance-data/>.
- ¹² Ibid.
- ¹³ Finbarr Toesland, "Insurance moves from reactive to predictive," *Raconteur*, April 26, 2018, www.raconteur.net/risk-management/insurance-moves-reactive-predictive.
- ¹⁴ China In-Depth: China Insurtech Review – May 2017, *The Digital Insurer*, www.the-digital-insurer.com/china-in-depth-china-insurtech-review-may-2017/.
- ¹⁵ Hugh Terry, "AXA, Alibaba and Ant Financial – New ecosystem," *The Digital Insurer*, www.the-digital-insurer.com/dia/axa-alibaba-and-ant-financial-new-ecosystem-under-development/.
- ¹⁶ Matthew Nitkoski, "Defending China's Data," *China Business Review*, October 2, 2018, www.chinabusinessreview.com/defending-chinas-data/.

About Cognizant's Insurance Business Unit

Cognizant is a leading global services partner for the insurance industry. In fact, seven of the top 10 global insurers and 33 of the top 50 U.S. insurers benefit from our integrated services portfolio. We help our clients run better by driving greater efficiency and effectiveness, while simultaneously helping them run differently by innovating and transforming their businesses for the future. Cognizant redefines the way its clients operate – from increasing sales and marketing effectiveness, to driving process improvements and modernizing legacy systems, to sourcing business operations.

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 195 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us [@Cognizant](https://twitter.com/Cognizant).

Cognizant

World Headquarters

500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277

European Headquarters

1 Kingdom Street
Paddington Central
London W2 6BD England
Phone: +44 (0) 20 7297 7600
Fax: +44 (0) 20 7121 0102

India Operations Headquarters

#5/535 Old Mahabalipuram Road
Okkiyam Pettai, Thoraipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060