

# WORLD INSURANCE REPORT 2018





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# PREFACE—*World Insurance Report 2018: The state of the industry*

The insurance industry has reached an evolutionary crossroads.

Will artificial intelligence and robotics drive the industry toward on-demand, micro-duration coverage for a risk pool of one? Or, will blockchain spur decentralized, autonomous insurance models? Is traditional risk transfer about to become old school as the Internet of Things morphs insurers into risk preventers?

There is no doubt, insurers have much to consider. What is apparent, though, is that the path to business longevity will be paved with strategic and agile responsiveness. Within an increasingly dynamic environment filled with time-strapped customers seeking hyper-convenient benefits, it is agility—built on a scalable digital foundation—that will equip insurers to meet the future with confidence.

As in years past, the *World Insurance Report 2018 (WIR)* draws on recent Capgemini Voice of the Customer (VoC) survey results and extensive interviews with a cross section of the entire Insurance ecosystem. The VoC survey results help gauge customer perceptions about the industry and the report identified that when it comes to delivering exceptional customer experience, insurers have a wide-open opportunity to catch up with retail (consumer products) and banking trendsetters. Financial services customers reported significantly less positive insurance experience and satisfaction within essential service parameters as compared with banks, likely because there are fewer customer touchpoints in insurance. However, that paradigm can quickly change as technology-driven value-added services allow insurers to engage more meaningfully and frequently with customers through individualized, memorable, and digitally-enabled products and services. The time is right as customers say they are open to receiving preemptive, personalized offers from insurers. In fact, our survey revealed that such proactive engagement (push messaging) could positively affect customer experience.

The stakes are high these days—and loyalty-building customer engagement is essential—as powerful BigTechs<sup>1</sup> dip their toes in insurance waters, while simultaneously focused on their 'day job' of shaping and filtering consumer demands. These tech giants are scouting new revenue outposts and building capabilities in related fields. Frankly, it was no surprise that our survey respondents seemed comfortable with the thought of buying insurance from BigTech firms.

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01 BigTechs are large, multinational technology firms such as Google, Amazon, Facebook, Apple, and Alibaba, etc.

With a focus on future readiness through digital agility, *WIR 2018* explores ways in which insurers can deftly respond to market shifts and growing customer expectations. But, how does an insurer become digitally agile? The first step is acknowledging that effective response to market dynamics has become nearly impossible without digital technology. Next, is the adoption of a holistic growth strategy—such as the Digital Agility Framework outlined in our report—which is based on a mechanism that captures real-time customer data and quickly converts it into actionable insights with seamless digital execution.

Digital agility is fostered by a commitment to building InsurTech<sup>2</sup> capabilities and win-win partnerships with InsurTech firms while transitioning from legacy infrastructure to more cloud-native solutions that improve speed, scalability, and margins. Ultimately, digital agility will empower insurers to build operating models that dynamically integrate with new data sources, technologies, and ecosystem players. Tomorrow's digitally-integrated insurance ecosystem will support flexible operations and a seamless flow of information and services. For customers, that means a well-orchestrated, personalized, convenient insurance experience—and more brand loyalty.

As industry definitions across sectors are revised, the prognosis for survival within an impervious insurance silo is low. Now, more than ever, strategically leveraged channels and carefully chosen partnerships are critical to building an enduring value-creation model. Digital agility and an integrated ecosystem are requisite twin levers to enhance customer experience, drive operational efficiencies, and foster long-term business viability. They must be enthusiastically woven into the fabric of the insurance industry.

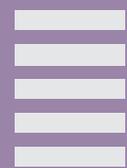
**Anirban Bose**

Financial Services Strategic Business  
Unit CEO & Group Executive Board  
Member, Capgemini

**Vincent Bastid**

Secretary General, Efma

<sup>02</sup> In the context of this report, "InsurTech" refers to technology-based capabilities that have specific application in insurance, whereas "InsurTech firms" refer to firms with offerings based on InsurTech capabilities, that are generally less than five years old and have a relatively small but growing customer base.



# Assessing future readiness in unpredictable times

Technology is eliminating long-time industry barriers, enabling a range of new insurance players, models, and innovations to nibble away at business-as-usual. Although some proof-of-concept advances have yet to be fully developed (such as those leveraging blockchain, artificial intelligence, and the internet of things), their seismic implications for the future of insurance are being felt around the world. What's more, high-impact initiatives outside the industry (e.g., driverless cars and biometrics) are stirring uncertainty, as well as innovation. Insurers, traditionally risk assessors, must now consider competitive risks within their own industry. But how? As already realized in other sectors, digital adoption and agility will help insurers to strategically assess, reinvent, and adapt speedily to changing market forces.

The *World Insurance Report 2018* offers readers a future-readiness context based on the insights of over 10,000 customers and more than 130 global industry leaders and subject matter experts.

## How can you use the *WIR*?

Insurers can use this report to prepare a range of empowering strategies such as:

- **Gauging relative current and potential customer experience positioning**  
Customer experience continues to be a significant opportunity area for insurers as the industry plays catch-up with retail (consumer products) and banking in meeting customer expectations within essential service parameters.
- **Identifying future competitors, threats**  
As incumbents and InsurTech firms increasingly acknowledge each other's partnership value, new competition is emerging in the form of industry outsiders exhibiting interest in financial services and insurance—and customers who say they might buy insurance from a familiar tech giant.
- **Exploring why and how to enhance digital agility**  
Market forces, such as evolving customer preferences, the changing nature of risks, rising margin pressures, and the emergence of new insurance models, mandate insurers to become digitally agile. Insurers should follow a holistic approach to digital agility through synergistic application of digital capabilities at all layers of their business.
- **Building resilient operating models**  
As numerous prospects unfold, digital agility will play a critical role in enabling insurers to build resilient if not future-proof operating models. Long-term business sustainability will be reliant upon a digitally agile and integrated ecosystem that is adaptive to real-time information and can generate immediate, actionable insights.

# Executive Summary

## Accelerating digital adoption to meet new challenges

When it comes to delivering superior customer experience, the insurance industry places third behind retail (consumer products) and banking.

- A cross-industry customer experience assessment reveals that while insurance is performing better than average, increased customer engagement efforts may lead to parity with front runners such as retail.
- Within financial services, insurance trails banking across various parameters (overall customer experience, customer satisfaction, and being proactive).
- While 32.6% of Gen Y and 34.8% of tech-savvy customers had a positive experience with their bank, only 25.7% of Gen Y and 28.6% of tech-savvy customers said their insurance experience was positive.<sup>3</sup>

In short, insurers must adopt emerging technology quickly to leverage its customer-experience-enhancing benefits and expand their business scope by breaking traditional customer-interaction limitations.

- Thanks to wider acceptance among all customer segments, digital channels are catching up with traditional channels.
- More than 55% of Gen Y and tech-savvy customers cited the internet/website as an important insurance-transaction channel.
- Digital channels can enhance the number of customer touchpoints through proactive value-added services that strongly correlate to positive customer experience.
- Moreover, value-added services are an area that is being increasingly targeted by new entrants to attract and acquire customers.

As digitally-agile, multinational BigTechs gradually enter the Financial Services' space, insurers must prepare to counter the challenge.

- Certain advantages of BigTech firms make it possible for them to enter the insurance industry with new tech-based disruptive models.
- Moreover, customers say they would consider purchasing insurance products from BigTech firms, with 29.5% of global customers citing willingness to buy insurance from BigTech firms.
- Tech-savvy and Gen Y segments are notably more likely to make the switch.

Now, more than ever, it is critical for insurers to accelerate digital adoption and become digitally agile to ensure long-term business sustainability.

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03 In the context of this report:

- (1) *Gen Y* customers are categorized as individuals aged 18 to 34, while *Non-Gen Y* represent customers aged 35 and older; these groups are Mutually Exclusive and Collectively Exhaustive (MECE).
- (2) Customers that use online and mobile channels frequently to conduct transactions such as purchasing electronics, clothes, food and groceries, paying bills, etc. are categorized as *Tech-Savvy*; *Tech-Savvy* and *Non-Tech-Savvy* customer segments are MECE.
- (3) *Gen Y* and *Non-Gen Y*, and *Tech-Savvy* and *Non-Tech-Savvy* customer segments are not MECE.

## Digital agility — key to long-term success

As customer expectations and market dynamics rapidly evolve, digital agility has become a significant long-term success factor for insurers.

- Several environmental, technological, and organizational factors are disrupting the industry and pushing insurers to become more nimble, innovative, and responsive.
- Evolving customer preferences are spurring the need for enhanced digital agility, according to insurers across sub-sectors (life, health, and P&C), with more than 80% rating changing customer preferences as very important.
- Although insurers have begun to adopt emerging technologies and innovate across the value chain, a sustainable, holistic approach to digital innovation will rely on investment in synergistic InsurTech capabilities.

Digital agility will be enhanced by a synergistic mechanism that captures real-time customer data and quickly converts it into actionable insights with seamless digital execution.

- Most insurers have just begun to invest in digital tools to capture real-time data; and in terms of implementation, social media is the most preferred platform.
- Insurers are focusing primarily on big data analytics to process and analyze real-time customer data, followed by predictive analytics, and emerging risk modeling.
- Digital automation has sparked the most interest as compared with other InsurTech capabilities; with robotic process automation (RPA) topping the list of digital technologies being implemented.

InsurTech collaboration and a cloud-native approach will be vital enablers as insurers efficiently develop preferred, synergistic InsurTech capabilities.

- Collaboration between incumbents and InsurTech firms is essential to the efficient and cost-effective development of digital capabilities.
- Adoption of a cloud-native approach will allow insurers to be more agile and enable scalability and cost efficiency within digitally-agile operating models.

## The path forward: building future-ready operating models

Digital agility is essential to meet today's market forces effectively, while building resilient, flexible operating models that ensure readiness for the future.

- It is critical that insurers build future-ready operating models to ensure continued competitiveness in several possible scenarios.
- Digital agility lays the groundwork for future-ready operating models with a fully digitalized and integrated ecosystem that is adaptive to real-time information, generates real-time and actionable insights, and supports informed and quick decision-making.
- In the future, insurance operating models must resourcefully cater to customers' evolving preferences while driving operational efficiencies critical to insurers' long-term business health.



# Accelerating digital adoption to meet new challenges

- Playing catch-up with other industries, sectors
- Digital to break traditional customer interaction limitations
- New challenges ahead as BigTechs make advances



# Playing catch-up with other industries, sectors

When compared with other industries on average-based, cross-industry customer experience scores, insurance ranked third. With a score of 72.3, the insurance industry trailed retail (consumer products) and banking, which garnered ratings of 75.7 and 74.5, respectively. (Figure 1.1)

However, when analyzing the percentage of those who reported a positive experience (respondents with an industry-specific customer experience score above a pre-determined threshold), the difference between the insurance and banking industries was significant. Customers across all demographic segments reported a lower positive experience with their insurer than with their bank, with the steepest difference among Gen Y customers. While 32.6% of Gen Y customers said they had a positive experience with their bank, only 25.7% of Gen Y customers reported a positive experience with their insurer. (Figure 1.2)

The implication is that while the insurance industry offers customers a good experience on average, there remains opportunity to improve and to earn excellent customer experience scores.

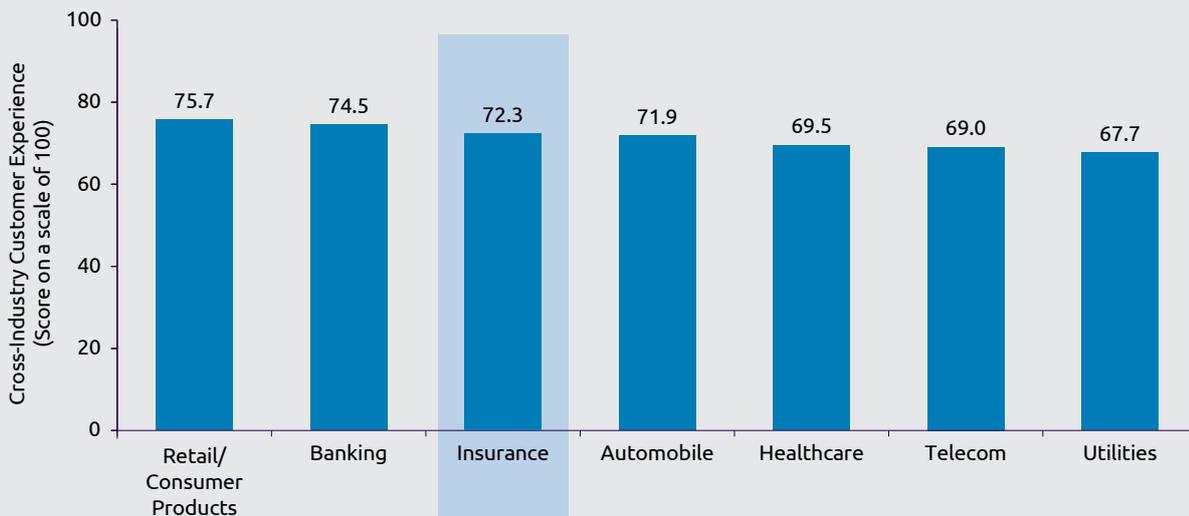
*“Historically, insurance companies have been product siloed as opposed to customer focused. Our imperative is to shift the model and drive a consumer-focused business.”*

—Chris Smith, EVP and Head of Global Operations at MetLife

Banks’ relatively higher positive experience scores likely suggest they are ahead of insurers in implementing emerging technologies that have the potential to drive better customer experience. Banks typically have frequent—and many more—customer touchpoints than insurers, and the quest to meaningfully enhance these touchpoints has spurred technology adoption.

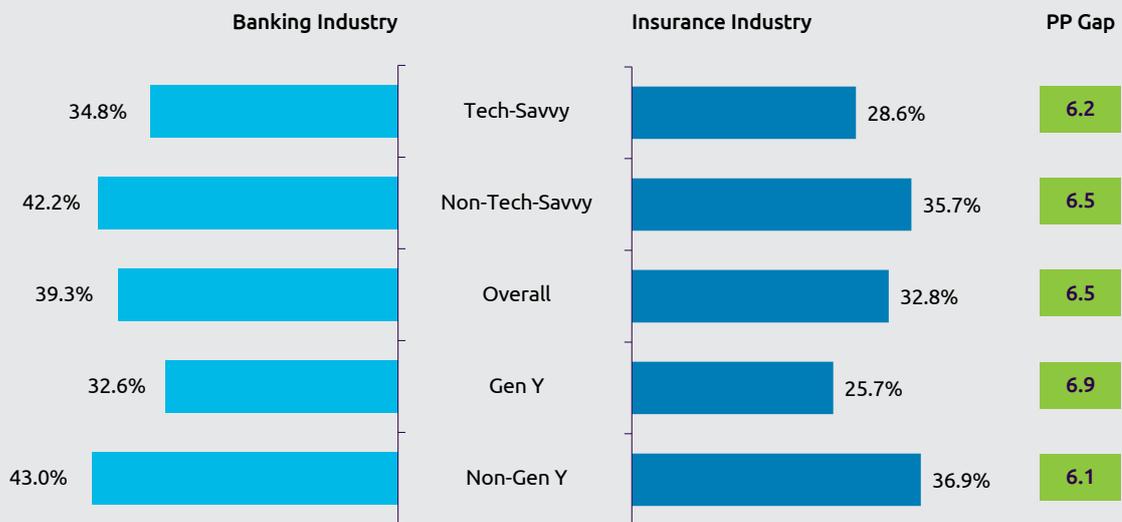
It is now clear, that insurers must accelerate their own adoption of technology to simplify transactions, to keep customers regularly updated, and to develop new avenues for significant engagement.

Figure 1.1 Cross-Industry Customer Experience Assessment, 2018



Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

Figure 1.2 Customers with Positive Experience, by Industry and Demographic Segment (%), 2018



- Note:
- (1) PP represents Percentage Point
  - (2) *Gen Y* customers are categorized as individuals aged 18 to 34, while *Non-Gen Y* represent customers aged 35 and older; these groups are mutually exclusive and collectively exhaustive (MECE)
  - (3) Customers that use online and mobile channels frequently to conduct transactions such as purchasing electronics, clothes, food and groceries, paying bills, etc. are categorized as *Tech-Savvy*; *Tech-Savvy* and *Non-Tech-Savvy* customer segments are MECE
  - (4) *Gen Y* and *Non-Gen Y*, and *Tech-Savvy* and *Non-Tech-Savvy* customer segments are not MECE

Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

Insurance customer satisfaction is also noticeably lower than banking for service essentials such as ease of use as well as features on mobile app. (Figure 1.3)

Although more than a third (36.1%) of customers polled said they were highly satisfied with the ease of use of transactions in insurance, their vote of confidence paled when compared to banking, where 47.2% of customers claimed to be highly satisfied with transactional ease of use.

Moreover, when it came to both personalization and the availability of mobile app features, insurance customers were not particularly pleased. Only 21% of the polled customers were highly satisfied with the features available on insurance mobile apps. However, further analysis showed that while 28.3% of tech-savvy customers said they were highly satisfied

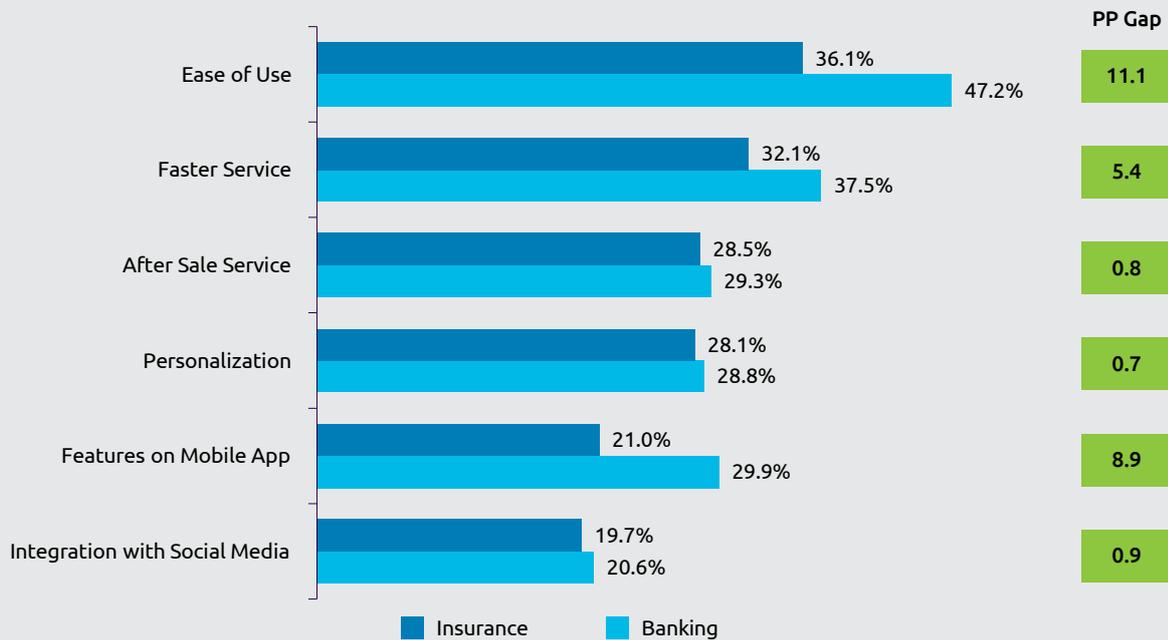
with the array of features and services available on their mobile insurance app, only 16.3% of non-tech-savvy users were similarly satisfied. The implication is that though some features are available on the mobile app, they may not be intuitive enough for non-tech-savvy customers.

***“Customers are increasingly making their purchase decisions based on user friendliness and look and feel of the application. The technical aspects of a product are becoming less relevant.”***

**–Benny De Wyngaert, Managing Director,  
Life Insurance & Bank Channel, AG Insurance**

Insurers may be able to beef up customer satisfaction by tapping into technologies that bolster ease of use, faster service, and personalization.

**Figure 1.3 Customer Satisfaction, by Industry and Service Parameter (%), 2018**



Note: PP represents Percentage Point

Question: On a scale of 1 to 7 (7 being Extremely Satisfied and 1 being Extremely Dissatisfied), how would you rate the following entities: (a) your primary bank and (b) your primary insurer, in terms of your experience on the listed factors; Ratings 6 and 7 are shown in the chart

Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

## Customer experience varies by region

Insurance customers in North America reported the highest positive experience globally, across all demographics. (Figure 1.4)

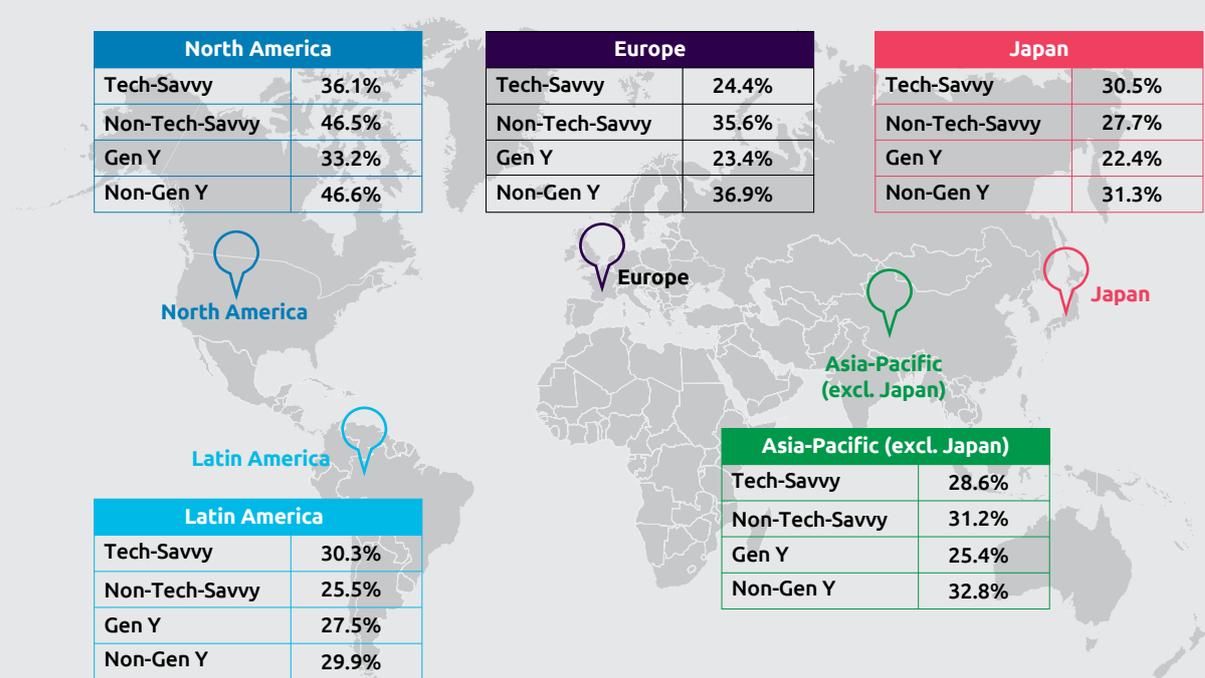
However, North American and European customers cited distinct experiences across different demographics. A relatively low percentage of tech-savvy and Gen Y customers said they are happy with their insurance experience when compared with others insured in their region. This could possibly be because older-generation customers may prefer expert insurance guidance and are satisfied with traditional advisory channels. Furthermore, large U.S.

and European insurers may be bogged down by legacy and siloed systems, which are hindering deployment of seamless, digital customer experiences.

In Asia Pacific and Latin America, however, customers—across demographics—report lackluster positive experience. This phenomenon may be the result of rising per-capita income and under-penetrated insurance markets in emerging-markets of APAC and Latin America, which have afforded insurers ample organic growth opportunities. Because business is robust, insurers may be less focused on customer experience.

Unfettered by legacy restraints, insurers must tap into new technologies to efficiently safeguard positive experiences across all customer segments.

Figure 1.4 Customers with Positive Experience, by Region and Demographic Segment (%), 2018



- Note:
- (1) *Gen Y* customers are categorized as individuals aged 18 to 34, while *Non-Gen Y* represent customers aged 35 and older; these groups are mutually exclusive and collectively exhaustive (MECE)
  - (2) Customers that use online and mobile channels frequently to conduct transactions such as purchasing electronics, clothes, food and groceries, paying bills, etc. are categorized as *Tech-Savvy*, *Tech-Savvy* and *Non-Tech-Savvy* customer segments are MECE
  - (3) *Gen Y* and *Non-Gen Y*, and *Tech-Savvy* and *Non-Tech-Savvy* customer segments are not MECE

Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

# Digital to break traditional customer interaction limitations

Customers across all segments now accept digital communication channels, and the playing field with traditional channels is leveling. In fact, self-service through the internet/website is on a par with customer care/phone and is now cited by customers as one of the most important channels. More than half of surveyed customers placed high importance on the internet/website for conducting insurance transactions. Additionally, more than 40% of insurance customers said a mobile app is an important channel. (Figure 1.5) As the mobile channel is strongly positioned to provide the convenience, agility, and personalization which is demanded by customers<sup>4</sup> and as customers increasingly use this channel in other aspects of their lives, mobile apps are finding greater popularity among both insurers and customers. The digital-channel preferences of Gen Y and tech-savvy customers are particularly relevant because they likely represent the expectations of future insureds.

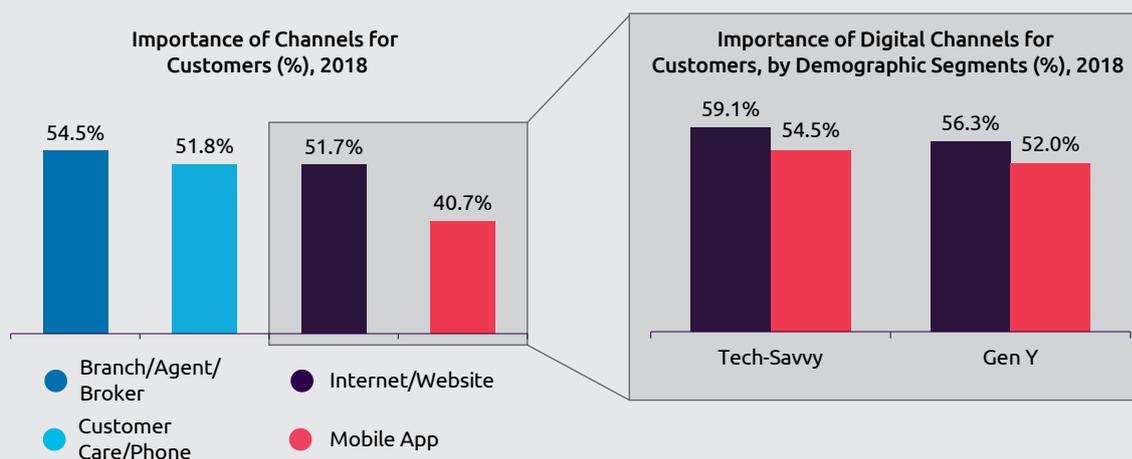
*“Customers expect fully digital companies. Other industries have strong digital capabilities and new competencies and may disrupt the insurance industry.”*

–Tor Håkon Ballo, Director of Product and Price, Eika Forsikring

Traditional channels such as branch/agent/broker and customer care/phone are also among the preferred channels for tech-savvy and Gen Y customers, which indicates that although these customer segments value digital channels, they also seek an omnichannel experience.

Insurers have begun to recognize the importance of digital channels and are using them to address service gaps. For instance, the TravelSmart™ App from Allianz Global Assistance provides travelers with real-time flight information, important medical resources, international emergency numbers, access to travel insurance information, and one-touch dialing to reach travel assistance and customer service.<sup>5</sup>

Figure 1.5 Importance of Channels for Customers (%), 2018



- Note:
- (1) Gen Y customers are categorized as individuals aged 18 to 34
  - (2) Customers that use online and mobile channels frequently to conduct transactions such as purchasing electronics, clothes, food and groceries, paying bills, etc. are categorized as Tech-Savvy
  - (3) Gen Y and Tech-Savvy customer segments are not mutually exclusive and collectively exhaustive (MECE)

Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

04 World Insurance Report 2017, <https://www.capgemini.com/service/world-insurance-report-2017/>, accessed April 2018.

05 Allianz Global Assistance press release, “Allianz Global Assistance Releases Upgraded TravelSmart Mobile App,” December 11, 2017, <https://www.prnewswire.com/news-releases/allianz-global-assistance-releases-upgraded-travelsmart-mobile-app-300568876.html>, accessed February 2018.

FWD Insurance Singapore and Singapore-based DBS Bank partnered earlier this year to launch an electronic claims payments system that cuts pay-out time from five days to one day upon approval of the claim.<sup>6</sup>

U.S.-based MetLife Auto & Home deployed Guidewire's core insurance suite in the cloud for customers using its MyDirect portal, which enables the insurer to offer a fully digital experience for all policy services across all customer lifecycle stages.<sup>7</sup> Additionally, U.S.-based pay-per-mile insurer Metromile recently launched Direct Repair, Car Rental, and Claim Payments programs that leverage its artificial intelligence (AI)-based claims system so that time-strapped customers can easily identify, manage, and pay auto repair and car rental providers within Metromile's preferred network.<sup>8</sup>

## Value-added services remove traditional insurance limitations

Digital adoption is key to improving customer experience features such as agility, personalization, and simplicity. However, digital adoption also expands the scope of insurance by creating more customer touchpoints, thereby dissolving traditional limitations in terms of customer interactions. A business imperative for insurers today is the development of value-added services that can be integrated into the day-to-day lives of customers. New digital technologies enable firms to offer innovative value-added services that not only increase the number of customer touchpoints but also benefit the insurer's financial metrics.

### Impact on Customer Touchpoints

Emerging technologies such as connected devices and advanced analytics make it possible for insurers to connect with customers and derive better insights

on an individual basis. Through smartphones and connected technologies (e.g., home sensors and wearables), insurers can retrieve real-time customer risk-exposure data and, then, respond at the first sign of danger, thus acting as a risk-management partner for customers.

As customer touchpoints increase, insurers are no longer limited to engaging only during customer lifecycle stages such as policy application and claims.

*"It is important to be relevant to the customer through timely engagement – it is not good enough to contact customers a week after the need is there or not contact at all."*

–Christian Stene Knudsen, Chief of Portals, Integrations and Document Production –Department of Innovation, Development and Technology, SpareBank 1 Forsikring

### Impact on Insurer's Business

By providing truly differentiated services—and connecting more frequently and more personally—insurers can improve customer acquisition and retention while exploring new revenue streams. Proactive risk mitigation and timely interventions can reduce claim costs, which could lead to more profits. Value-added services enhance customer experience via more frequent and meaningful engagements and can help insurers to retain existing customers and attract qualified leads.

*"Today, the technology or the means of engaging more with customers is available so insurance companies are able to create more touchpoints and more opportunities to engage with the customer — each engagement then throws open more opportunities to sell, service and to retain better because of a positive experience."*

–Dipak Sahoo, Head of Technology-Asia/ Regional Chief Information Officer at Generali Asia

06 *Insurance Business Asia*, "FWD, DBS Bank launch electronic claims system," Gabriel Olano, February 09, 2018, <https://www.insurancebusinessmag.com/asia/news/breaking-news/fwd-dbs-bank-launch-electronic-claims-system-91688.aspx>, accessed February 2018

07 *Digital Insurance*, "MetLife deploys Guidewire's core suite in the cloud," Danni Santana, October 10, 2017, <https://www.digin.com/news/metlife-deploys-guidewires-core-system-suite-in-the-cloud>, accessed February 2018.

08 Metromile press release, "Metromile Revolutionizes The Claims Experience With Automated Direct Repair, Rental Car And Claim Payments Programs," December 06, 2017, <https://www.prnewswire.com/news-releases/metromile-revolutionizes-the-claims-experience-with-automated-direct-repair-rental-car-and-claim-payments-programs-300567614.html>, accessed February 2018.

## Customers receptive to proactive offers

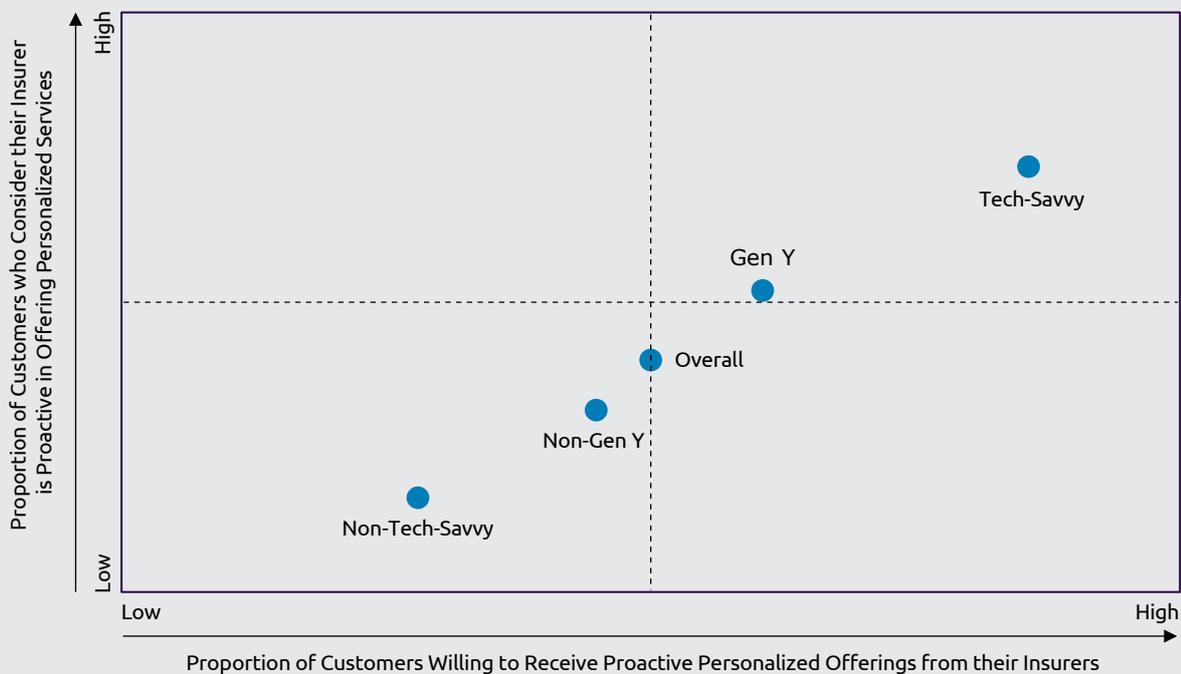
Although customers appear willing to consider proactive insurance offers, firms may not be meeting their full expectations. (Figure 1.6)

### Are insurers leaving money on the table?

Customers said they were willing to receive proactive, personalized insurance offerings, with 45.7% of tech-savvy customers and 38% of Gen Y customers open

to such proposals. While the numbers suggest that insurers are providing some personalized services, gaps remain, particularly when it comes to non-tech-savvy and non-Gen Y customers. Among these segments, there appears to be misalignment between the willingness of customers and the proactiveness of insurers, which implies that insurers may not be leveraging all channels to uncover prospective customer needs. The result? Potentially untapped business.

Figure 1.6 Customers' Point of View on Personalized Proactive Offerings by Insurers, 2018



- Note:
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Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

A firm’s proactive outreach with personalized services is important as it correlates directly with positive customer experience. Customers who believe their primary insurers are actively reaching out with life-stage event-based offerings report significantly higher positive experiences. (Figure 1.7)

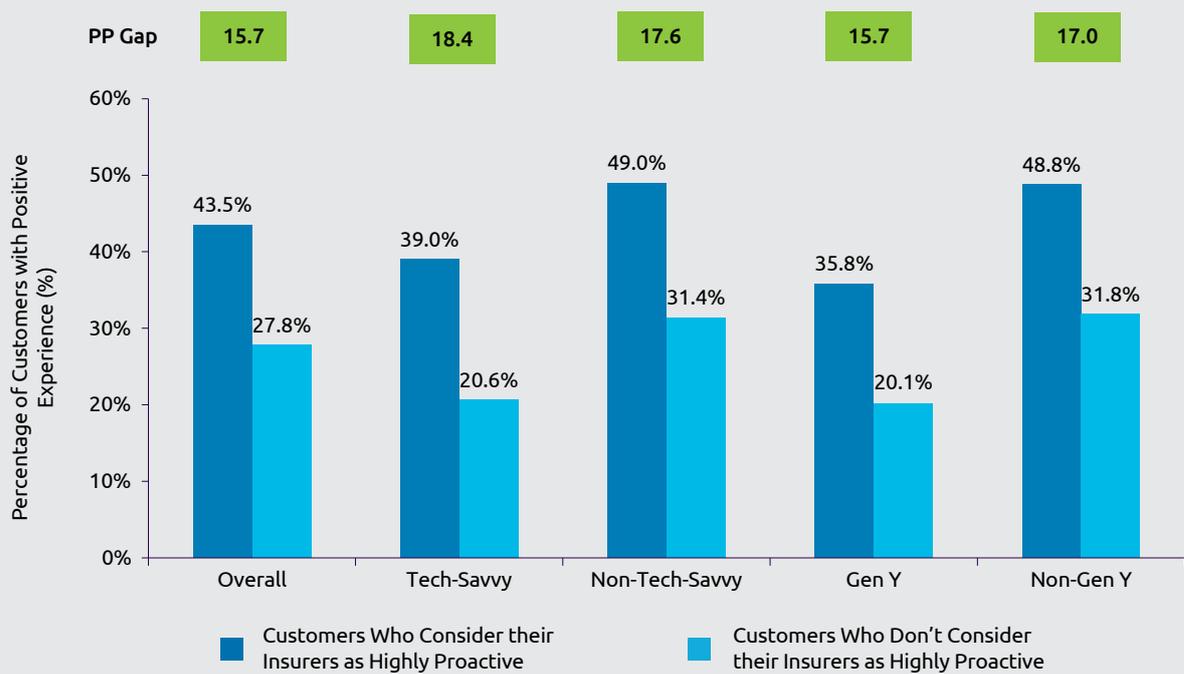
It is interesting to note that although non-tech-savvy and non-Gen Y customers reported relatively low willingness to receive proactive, personalized offerings, around half of these customers said they have a positive experience with their insurers when their insurers reach-out with proactive offers.

Customers who considered their insurers to be highly proactive reported a 17 PP higher positive experience as compared to those who did not, in the case of non-Gen Y customers. The difference expanded to 17.6 PP for non-tech-savvy customers.

Tech-savvy customers exhibited the widest gap, 18.4 PP, indicating lower positive experiences among those who did not perceive their insurers to be highly proactive.

Clearly, when it comes to attracting and retaining upcoming Gen Y and tech-savvy segments, proactive value-added services will be a critical addition to incumbent product portfolios. This is so not only for improving customer experience but also because value-added services are increasingly being targeted by new entrants.

**Figure 1.7 Impact of Insurers’ Proactiveness on Customer Positive Experience, by Demographic Segment (%), 2018**



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Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

# New challenges ahead as BigTechs make advances

## BigTechs test insurance waters

BigTech firms—large, multinational technology organizations such as Google, Amazon, Facebook, Apple, and Alibaba—have been eyeing the financial services sector for years and are taking slow, deliberate steps toward establishing their presence. They are testing insurance waters and building capabilities in related areas such as healthcare and IoT (connected homes, connected cars).

For example, Amazon Protect made its debut in the UK in 2016 to offer protection against accidental damage, breakdown, and theft of Amazon purchases ranging from washing machines and mobile phones to kitchen appliances and tablets.<sup>9</sup>

Now, Amazon is exploring the healthcare segment by collaborating with Berkshire Hathaway and JPMorgan to create a healthcare company to serve its employees in the United States.<sup>10</sup>

While exploring multiple opportunities, Apple is making progress in digital health through a collaboration that provides Apple watches to Aetna customers.<sup>11</sup> Apple is also partnering with Cisco, Aon, and Allianz on a cyber-risk management solution to protect middle market and other enterprises from malware and ransomware.<sup>12</sup>

Alphabet, Google's holding firm, has already staked its position in the insurance technology space by investing in or partnering with InsurTech firms such as Collective Health, Oscar, and Lemonade.<sup>13</sup> Alphabet may also

enter the health insurance market via its subsidiary Verily, a research organization devoted to the study of life sciences.<sup>14</sup>

*“Platform-based insurance from digital players like Amazon, who are also vying for insurance market share and competing for core-competencies in customer data and analytics, is a challenge for insurers.”*

-Hideaki Saito, President & CEO, AXA Direct Life Insurance Co. Ltd.

## Time to gear up for disruption

No longer is there any doubt. The heat is on incumbent insurers to enthusiastically prepare for challenges from digitally-agile players. BigTech firms have inherent advantages that make their entry into the insurance space possible with new tech-based disruptive models. Innovation is wired into the cultural DNA of BigTech firms, and they often shape the way business is done by catering to customers' needs in disruptive ways. They have amassed rich personal and behavioral data of customers and using their competencies in analytics and automation, these BigTech firms can reach their customers in a highly-personalized manner. Often, they build up ecosystems that not only cater to a plethora of their customers' needs but also help lock customers in for new services.

In recent years, customers have become more open to purchasing insurance products from BigTech firms. (Figure 1.8) Globally, 29.5% of customers polled said they would consider buying at least one insurance product from a BigTech firm if such offerings were available.

09 *CB Insights*, “A Look At Amazon Protect: Amazon’s Warranty Insurance Brand Expands In Europe,” September 21, 2017, <https://www.cbinsights.com/research/amazon-protect-product-insurance>, accessed February 2018.

10 *Life Insurance International*, “Amazon enters US healthcare market,” GlobalData Financial Services, January 31, 2018, <https://www.verdict.co.uk/life-insurance-international/comment/amazon-enters-us-healthcare-market>, accessed February 2018.

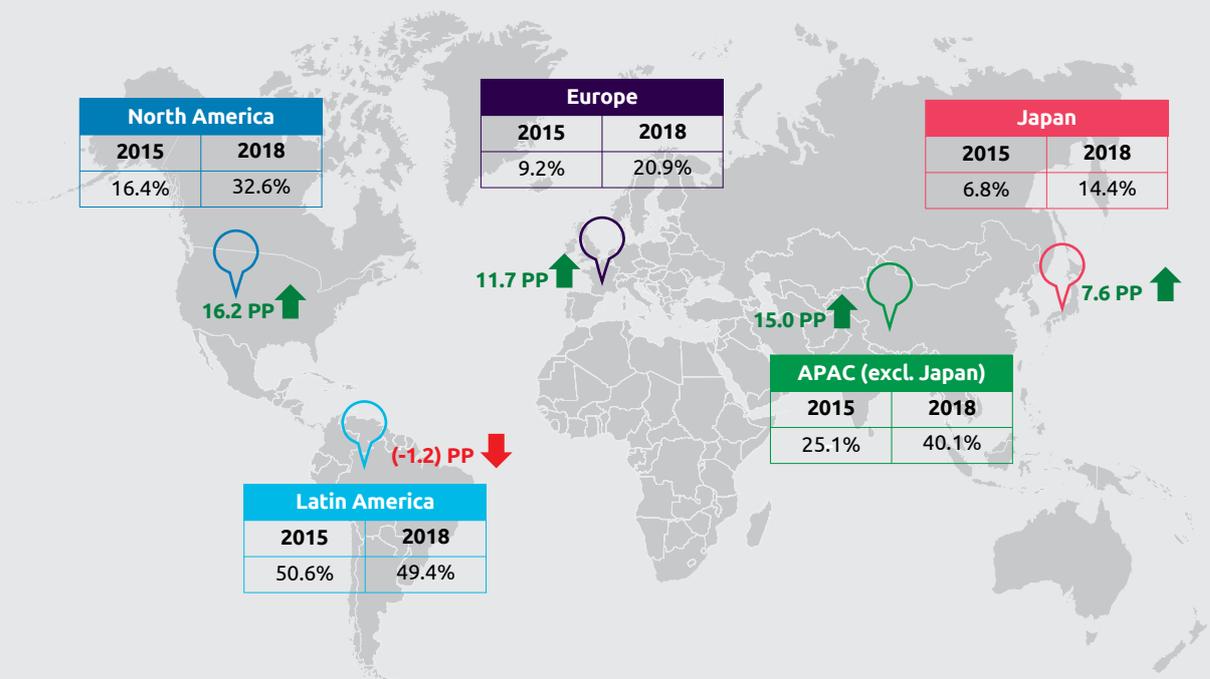
11 *Fortune*, “How You Might Be Eligible for a Free Apple Watch From Your Health Insurer,” Aaron Pressman, November 8, 2017, <http://fortune.com/2017/11/08/free-apple-watch-aetna>, accessed February 2018.

12 *Business Insurance*, “Cisco, Apple, Aon, Allianz collaborate on cyber coverage,” Matthew Lerner, February 05, 2018, <http://www.businessinsurance.com/article/20180205/NEWS06/912318975/Cisco.-Apple.-Aon.-Allianz-collaborate-on-cyber-coverage>, accessed February 2018.

13 *CB Insights*, “Google’s Investments And Partnerships In Insurance Tech,” December 07, 2016, <https://www.cbinsights.com/research/google-insurance-tech-investments>, accessed February 2018.

14 *FierceHealthcare*, “Google affiliate Verily may enter health insurance market,” Paige Minemyer, February 28, 2018, <https://www.fiercehealthcare.com/payer/verily-google-payer-population-health-care-management>, accessed March 2018.

Figure 1.8 Customer Willingness to Purchase Insurance from BigTech Firms (%), 2015, 2018

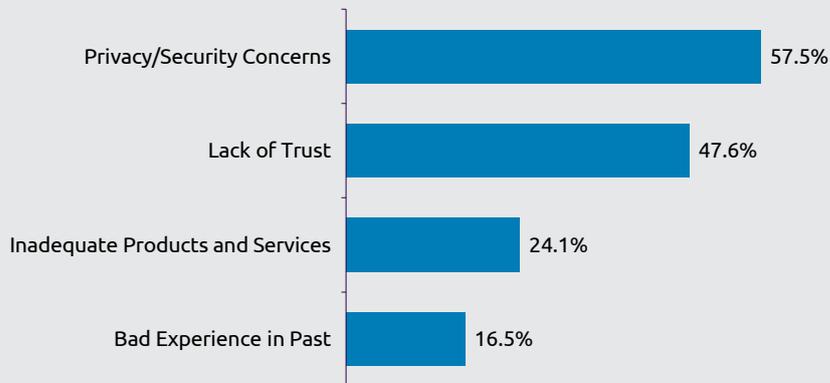


Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

While enormous regional variations exist, the report findings suggest that customers in developing regions are generally more willing to purchase insurance products from technology firms. The percentage of such customers is 49.4% in Latin America and 40.1% in APAC (excl. Japan). A relatively lower bar in customer experience in these regions may be at the root of this trend. Japan cited the smallest percentage of customers willing to make the switch to technology firms—possibly the result of an aging population that highly regards long-term relationships and loyalty. Notably, within the past three years, BigTech firms have significantly increased their customer mindshare in all regions except Latin America.

As prominent BigTech firms gradually expand their portfolios of offerings, customers are becoming comfortable with the idea of purchasing non-traditional services from them. Also, despite concerns about privacy, customers are willing to share their data with BigTech firms for personalized services and enhanced experience. In fact, young and tech-savvy customers are not averse to sharing personal data for a tailored experience, which reaffirms that the insurance industry is ripe for value-added services. (Figures 1.9 and 1.10)

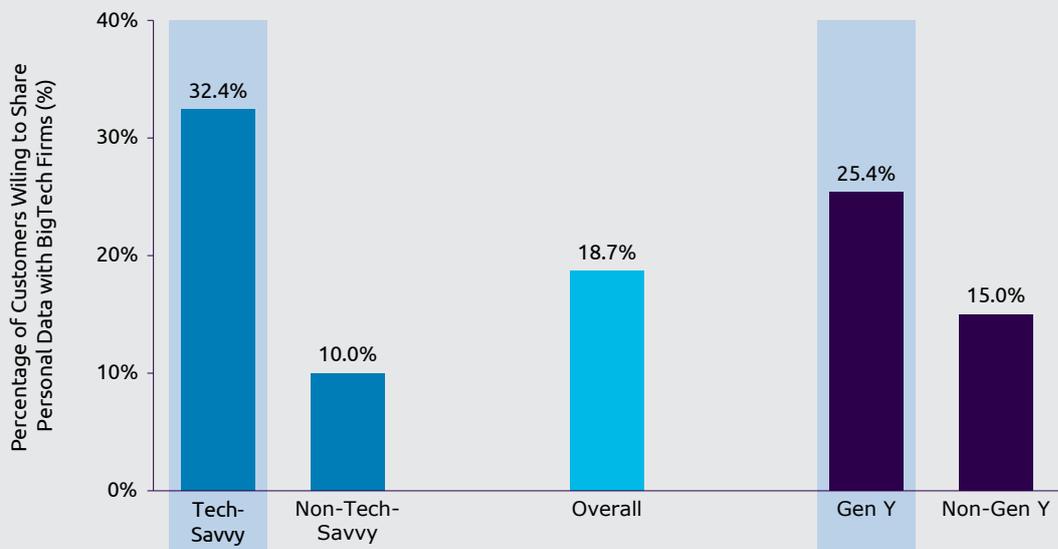
**Figure 1.9 Customers’ Top Concerns with Technology Firms, 2018**



Question: What are the concerns that might deter you from availing financial services and products from internet/ technology firms such as Google, Apple, Amazon, Facebook, Alibaba, etc? (Please select all the applicable reasons)

Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

**Figure 1.10 Customer Willingness to Share Data with BigTech firms for Personalized Services, by Demographic Segment (%), 2018**



Question: On a scale of 1 to 7 (where 1 is Not at All Comfortable and 7 is Very Comfortable), for personalized and better service and enhanced experience, how comfortable are you in sharing your personal data with your primary insurance company; Ratings 6 and 7 are shown in the chart

- Note:
- (1) *Gen Y* customers are categorized as individuals aged 18 to 34, while *Non-Gen Y* represent customers aged 35 and older; these groups are mutually exclusive and collectively exhaustive (MECE)
  - (2) Customers that use online and mobile channels frequently to conduct transactions such as purchasing electronics, clothes, food and groceries, paying bills, etc. are categorized as *Tech-Savvy*; *Tech-Savvy* and *Non-Tech-Savvy* customer segments are MECE
  - (3) *Gen Y* and *Non-Gen Y*, and *Tech-Savvy* and *Non-Tech-Savvy* customer segments are not MECE

Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018

If BigTech firms enter the insurance industry, Gen Y and tech-savvy customer segments are particularly primed to switch loyalties because they cite lower positive experiences, say they are more likely to change their insurance provider within 12 months and are more open to purchasing insurance products from tech firms. (Figure 1.11)

*“Customers are frequently going through some form of digital experience as part of their daily lives, which has increased their expectations of the digital experience we offer. They are benchmarking the digital experience provided by insurance firms with players from other industries such as Facebook, Amazon, WeChat, etc.”*

–Stephen Barnham, Chief Information Officer, MetLife Asia

Within this scenario, it will be critical for insurers to competitively embrace digital adoption to more strategically and agilely augment customer experience.

The insurance industry is grappling with rapid evolution on multiple fronts, including:

**Customer Experience:** Expectations are in flux as blurring industry borders influence customers’ preferences based on their experiences in other industries.

**Disruptive Technology:** New technologies are shaping customers’ channel preferences and options.

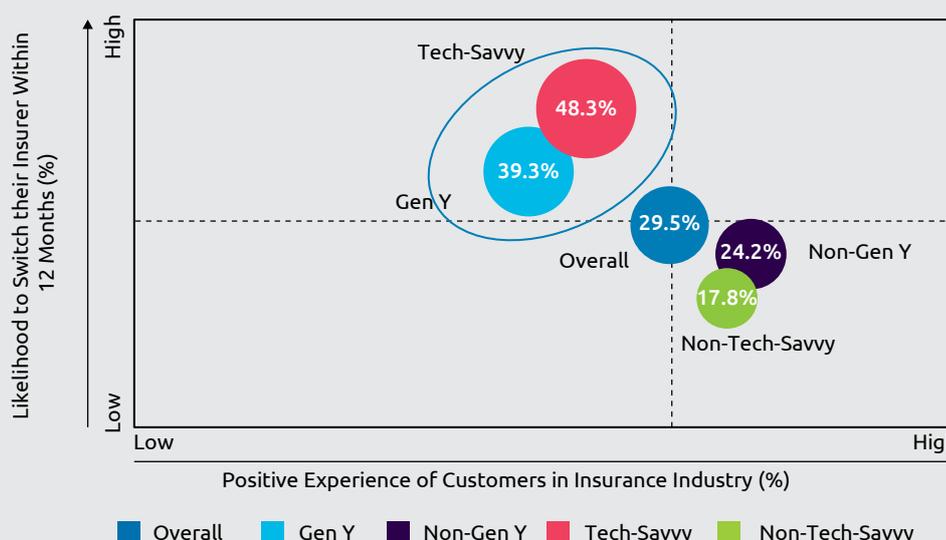
**Potential BigTech Competition:** As BigTech firms capture the mindshare of new and critical customer segments they are likely to mount a vigorous challenge to incumbents if they decide to enter the battle for insurance customers aggressively.

It goes without saying that insurers must be digitally agile to keep up with today’s sweeping changes while meeting new customer expectations that will profoundly affect long-term survivability. It’s no wonder that insurers across the globe are pondering how to grow sales, maintain the bottom line, fend off challengers, and compete in a dynamic industry.

*“Customers don’t have different expectations for different industries. If they can get a level of experience from Amazon, they expect the same from insurance. Insurance firms have to be digitally agile to meet those expectations.”*

– Joseph Hayes, Chief Information Officer - Group Insurance, Prudential Financial Inc.

**Figure 1.11 Customer Propensity to Purchase Insurance Products from Technology Firms, by Demographic Segment (%), 2018**



- Note:
- (1) The size of bubbles indicates percentage of customers open to purchasing insurance products from a technology firm
  - (2) Gen Y customers are categorized as individuals aged 18 to 34, while Non-Gen Y represent customers aged 35 and older; these groups are mutually exclusive and collectively exhaustive (MECE)
  - (3) Customers that use online and mobile channels frequently to conduct transactions such as purchasing electronics, clothes, food and groceries, paying bills, etc. are categorized as Tech-Savvy; Tech-Savvy and Non-Tech-Savvy customer segments are MECE
  - (4) Gen Y and Non-Gen Y, and Tech-Savvy and Non-Tech-Savvy customer segments are not MECE

Source: Capgemini Financial Services Analysis, 2018; Capgemini Voice of the Customer Survey, 2018



# Digital agility—a key to long-term success

- Disruptive market forces drive the digital agility quest
- All-inclusive digital agility
- Building InsurTech capabilities through collaboration and a cloud-native approach

# Disruptive market forces drive the digital agility quest

Disruption from environmental, technological, and organizational factors is driving the operating model transformation imperative for insurers today. Insurers face disruption on many fronts including:

**Evolving customer preferences.** Superior customer experiences, now commonplace from other industries and InsurTech firms, have significantly upped the expectations of consumers, who now demand better and faster services. More than 80% of insurers across sub-sectors said evolving customer preferences were the most important factor driving the need for digital agility. (Figure 2.1)

**Margin pressure encourages efficiency improvement.** Competitive pricing due to increased competition and lower interest income are affecting the bottom line of insurers looking to improve operational efficiency. Rising pressure on margins was found to be the second most important digital-agility driver, with more than 50% of insurers across sub-sectors rating it as highly important.

**Emergence of new business models.** The rise and rapid growth of marketplace models, a sharing economy, and peer-to-peer business models require

more agility to revamp the existing processes; and was cited by P&C and health insurers as one of the top three drivers of digital agility.

*“Combination of technology, digital, and connectivity will change the existing business models.”*

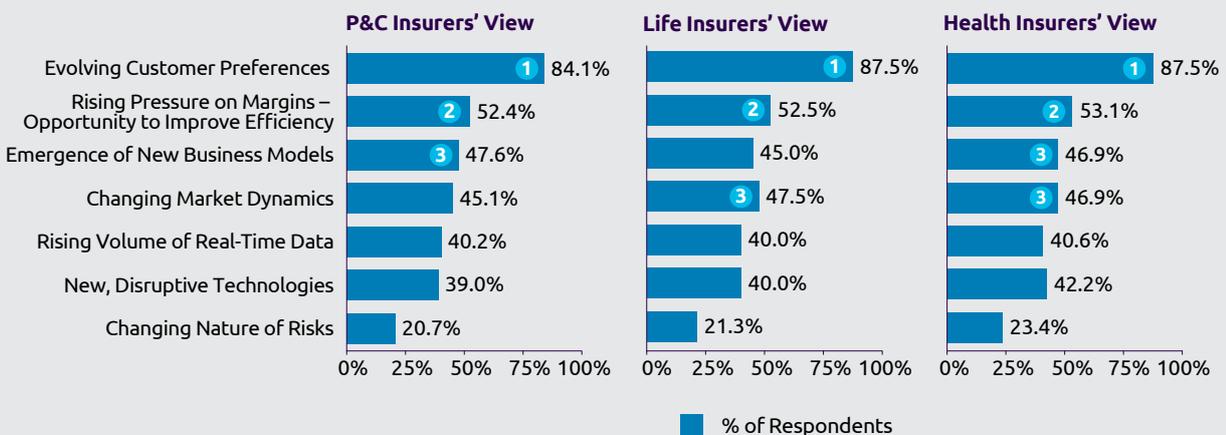
-Frank Fripon, Directeur Strategie, KBC Verzekeringen

**Changing market dynamics.** Low-interest rates, soft pricing conditions, technology advancements, and the entry of new players such as InsurTech firms are all affecting market dynamics, which life insurers say is one of their top three drivers of digital agility.

**Growing real-time data volume.** The availability of data is growing at a faster pace than ever before due to advent of online digital sources and connected devices. Moreover, today’s customers are more willing to share their data for added benefits.

**New, disruptive technologies.** Technology is disrupting every process across the insurance value-chain with some facilitating new business model development and implementation.

Figure 2.1 Key Factors Driving the Need to Enhance Digital Agility: Insurers’ View (%), 2018



Question: In your opinion, how important are the following factors in terms of driving the need for Insurance Companies to enhance their digital agility (Please rate on a scale of 1-7 where 1= Not at all Important and 7= Very Important); Only ratings 6 and 7 are shown in the chart

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

**Changing nature of risk.** Political, technological, and environmental shifts across the globe are changing the nature of risk. Cyber threats have become a more significant concern.

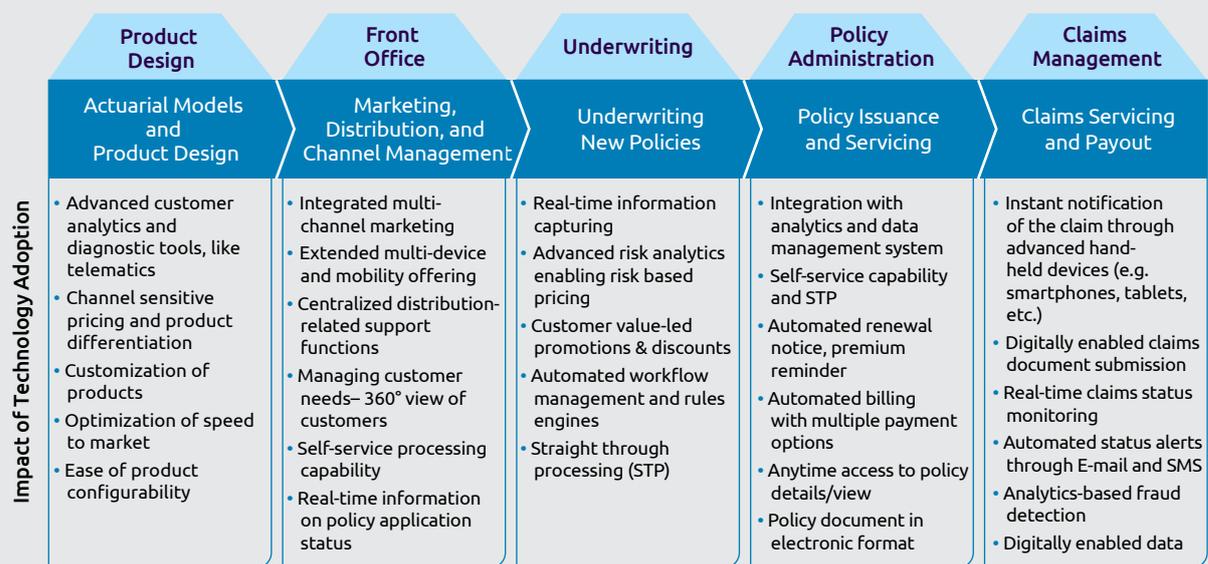
Therefore, to sustain long-term business success, insurance firms must rapidly enhance their agility to adopt/develop new business models and cater to evolving customer preferences.

*“Connectivity, mobility, and access to information have transformed all that we do, providing us with a unique opportunity to bring about a paradigm change in the way we conduct our business.”*

–Frederic de Courtois, CEO – Global Business Lines & International, Groupe Generali

Insurers are already adopting technology and innovating across the value chain to enhance customer experience and improve operational efficiency. (Figure 2.2)

**Figure 2.2 Impact of Technology Adoption Across Value Chain**



Source: Capgemini Financial Services Analysis, 2018

# All-inclusive digital agility

From product design customization and front office integration to STP underwriting, automated billing and real-time claims monitoring, the impact of digital technology is being felt across the insurance value chain. But to get the most from modernization, insurers must think about the interconnected big picture and develop a holistic approach linked and strengthened through synergistic InsurTech capabilities, versus piecemeal technology adoption. A holistic approach cooperatively captures real-time data and generates actionable insights that can be executed digitally for prime efficiency. (Figure 2.3)

Conversely, a narrow, siloed approach to data and analytics achieves only short-term gains rather than strategic transformation for long-term business sustainability.

Insurers must develop InsurTech capabilities at all operational layers—real-time data capture at the customer interface supported by advanced analytics tools—to enable real-time insights and digital execution to allow streamlined operations. By automating and integrating the processes with digital automation and transformation, insurers will become more highly responsive and prepared to execute immediately.

*“Becoming digitally agile can help insurers come out of the large-scale project culture. Projects will become significantly faster and more dynamic.”*

—Rolf Schünemann, CEO, BCA AG

Collaboration with InsurTech firms and a cloud-native approach can help insurance firms to quickly and cost-effectively implement these new, high-impact capabilities.

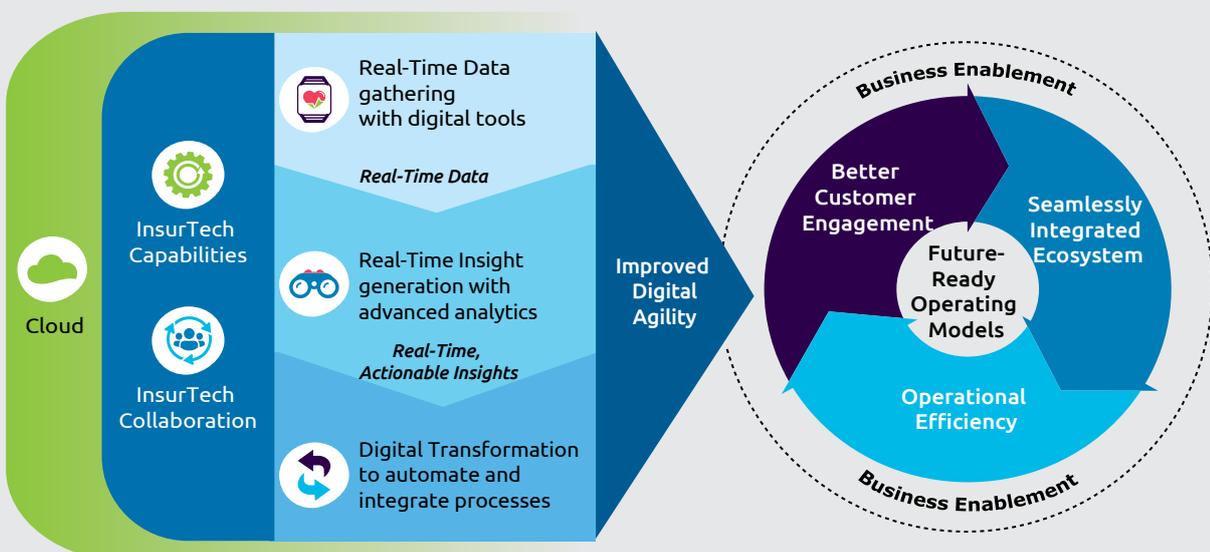
## Real-time data gathering with digital tools

Capturing real-time data through sensor-based connected devices and social media can help build a rich database of customer information.

**Telematics** are widely used by auto insurers to collect insights on customers’ driving behavior such as acceleration, braking, rush-hour driving, or turning corners aggressively. The data can be leveraged to provide usage-based insurance services. Moreover, insurance firms are providing value-added services to improve customers’ driving behavior.

More than 35% of the insurers interviewed as part of the *World Insurance Report 2018* said their firm had deployed telematics, and around another 29% they had developed proofs of concept (PoC). (Figure 2.4)

Figure 2.3 Digital Agility – A Key to Long-Term Success



Source: Capgemini Financial Services Analysis, 2018

State Farm Canada offers customers a smartphone-enabled, usage-based telematics program that encourages them to learn about their driving habits and earn discounts for safe driving behavior.<sup>15</sup>

**Social media** posts can be used to create a customer preferences database to develop targeted offerings and personalized insurance services. Text mining of social media posts can also help in fraud detection. Compared with other data-capture methods, social media is cost-effective, but data accuracy and processing complexity may pose challenges.

More than 33% of insurance firm executives interviewed said they had deployed systems to capture real-time data from social media, and it had more full-scale implementations compared with other sensor-based devices.

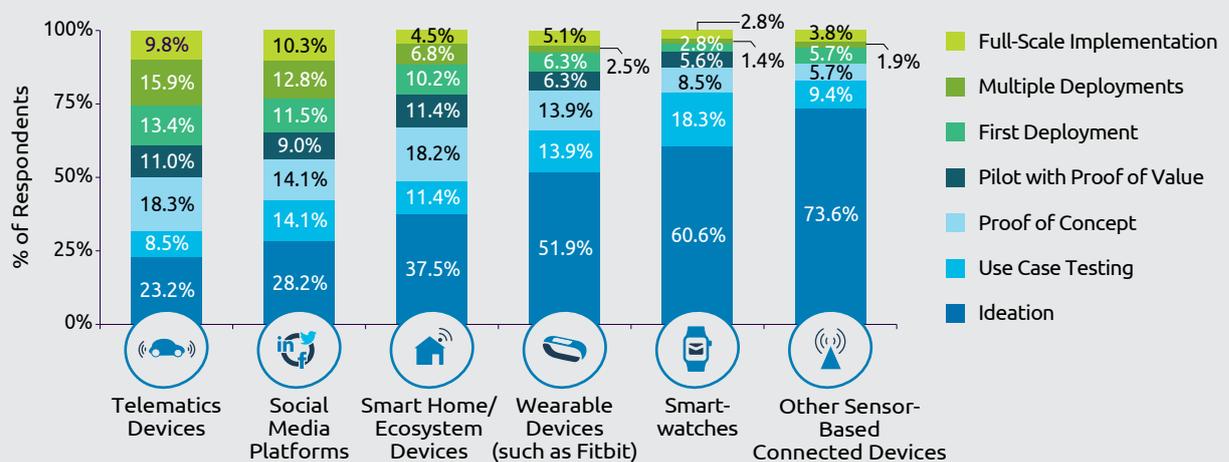
California-based InsurTech firm Carpe Data has fully-automated systems that leverage social media to detect claims fraud. Allstate Insurance partnered with Carpe Data to generate insights to help in risk assessment and decision making. In a 2017 example, a third-party claimant said they could not work because of accident injuries. Carpe Data’s analysis of public

social media accounts found a rock-climbing video of the claimant as well as horseback-riding photos, which enabled Allstate to identify the fraudulent nature of the claim quickly.<sup>16</sup>

**Smart home ecosystems** are used to collect data such as temperature and humidity. Because significant variations could signal an accident, the sensors can be used to prevent an accident or provide timely alerts that can reduce the severity of the incident. In addition to reduced accident occurrences and claims’ severity, smart homes’ data can be used to assess risk exposure and hazards and to improve pricing accuracy with granular segmentation. Increasingly, smart home ecosystems are being adopted with more than 20% of insurers claiming deployment.

Netherlands-based financial services company Achmea introduced its alarm and security platform *Homies* last year to lower the number of burglaries and fire fatalities in underserved community housing projects. The Homies intelligent burglary sensor connects enrolled residents via messaging apps such as *WhatsApp* and Facebook *Messenger* to foster a culture of trust and security among Achmea clients.<sup>17</sup>

**Figure 2.4 Tools for Real-Time Customer-Data Capture: Stage of Adoption (%), 2018**



Note: The percentages in the chart may not add up to exactly 100% due to rounding off

Question: On a scale of 1-7, please describe at what stage your organization is in using the following IoT or sensor-based connected devices/social media in an initiative to capture real-time customer-data; where 1 = Ideation, 2= Use Case Testing, 3= Proof of Concept, 4= Pilot with Proof of Value, 5 = First Deployment, 6 = Multiple Deployments and 7 = Full-Scale Implementation

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

15 State Farm website, <https://www.statefarm.ca/insurance/auto/discounts/telematics>, accessed March 2018.

16 Allstate Insurance press release: PRNewswire, “Allstate Finds Fraud Faster with Innovative Data Company,” November 28, 2017, <https://www.prnewswire.com/news-releases/allstate-finds-fraud-faster-with-innovative-data-company-300562421.html>, accessed March 2018.

17 Achmea website, “Innovation at Achmea,” Albert Spijkman, May 26, 2015, <https://www.achmea.nl/SiteCollectionDocuments/Innovation.pdf>, accessed March 2018.

**Wearables** such as Fitbit track physical activity—walking, running, step climbing, sleep patterns, heart rate, etc. Captured data can be leveraged to conduct micro-segmentation and to provide discounted premiums to customers who exhibit a healthy lifestyle as well as personalized offerings. Through UnitedHealthcare’s *Motion*™ program, in partnership with Fitbit and Qualcomm, users can earn up to USD 1,500 in credits by meeting their fitness goals, which are tracked by Fitbit’s Charge 2. The program is powered by QualcommLife’s 2net remote-care cloud-based platform.<sup>18</sup>

**Smartwatches** capture insureds’ health and fitness information. Although watches are costlier than wearable devices, their stay-in-touch smartphone features are increasingly attracting consumers. To remind customers to take essential medications on time and to prompt them to refill prescriptions, Aetna is planning to give more than 500,000 Apple Watch devices to its customers this year, broadening a pilot program that gave the devices to its own employees in 2016.<sup>19</sup>

*“New insurance products with the real-time, data driven solutions can have a far-reaching impact on an insurer’s topline, bottom line, market share and risk management.”*

—Chris Smith, EVP and Head of Global Operations, MetLife

When it comes to smartwatches and wearables more than 65% of *WIR 2018* respondents said they are in ideation or use-case testing stages. And, new on the wearables’ horizon are devices that users do not consciously attach, such as contactless wearables, wearable fabrics, and implantable devices.

P&C and health insurers are relatively more active in capturing real-time data compared with life insurers. The focus of P&C insurers in implementing complete front- and back-end systems is higher (18.3%) than health insurers (12.5%). (Figure 2.5)

A greater proportion of life insurers (40%) and health insurers (42.2%) are currently in the phase of allocating budget and making investments to build real-time data capturing capability.

P&C insurers focus slightly more on telematics than social media. While more than 40% of P&C insurers have deployed telematics, only 31.6% have implemented systems to capture real-time data from social media platforms. (Figure 2.6)

Health insurers concentrate more on social media than other insurers, with 38.3% deploying systems to capture real-time data from social media platforms compared with 34.5% of life insurers and 31.6% of P&C insurers.

Costs to install the devices and transmit high-volume data are the most significant challenges to scaling real-time data-capturing systems.

**Installation and maintenance costs.** IoT devices and sensors for capturing real-time data are costly and will only become mainstream if customers are willing to pay for the devices. In that case, the sensors should provide additional customer value.

**High-volume data transmission.** The volume of data captured will increase exponentially with the hike in sensor-based device use. Therefore, insurers will require more real-time transmission bandwidth.

**Data privacy.** Customers will have a variety of opinions about sharing personal data, and some may consider data-sharing to be a privacy issue. Insurers must be sure to comply with regulations—such as the EU’s General Data Protection Regulation (GDPR)—while accessing and storing data.

**Data-capturing-system upgrades.** Apart from the cost and effort required to install real-time data capturing systems, insurers must also regularly update the data capture systems to make them compatible with new technologies and data-processing systems.

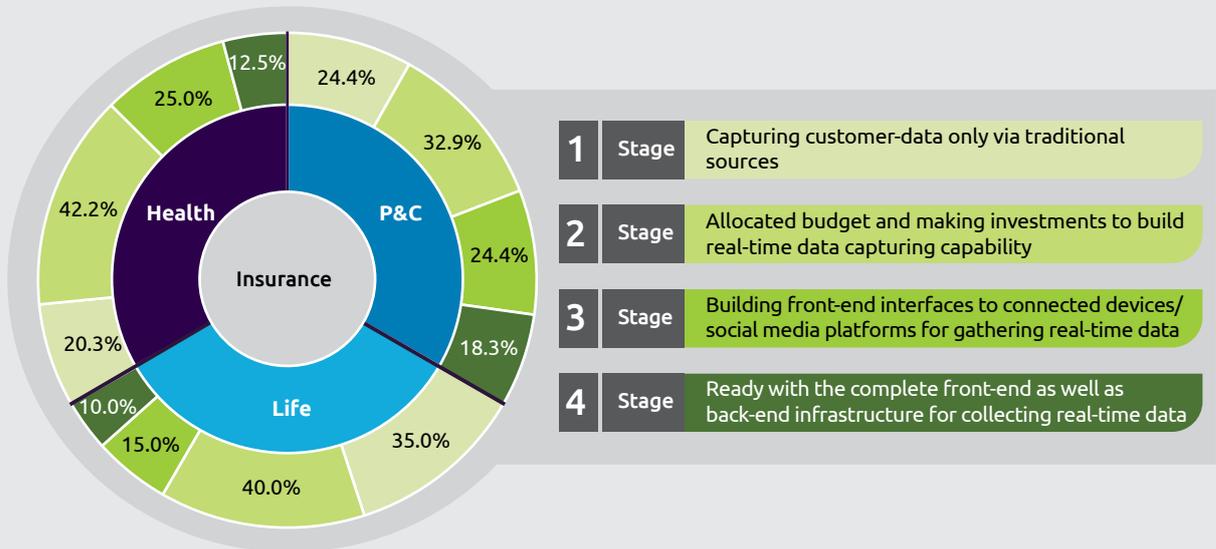
*“Defining the correct listening points, effective and efficient use of infrastructure and competency, and legal sensitivities around accessing and using customer data are some of the key challenges in capturing and managing real-time customer data.”*

—Trond Fladvad, Senior Vice President – Digital Business Development, Chief Insurance, Storebrand

18 CNBC, “UnitedHealthcare and Fitbit to pay users up to \$1,500 to use devices, Fitbit co-founder says,” Elizabeth Gurdus, January 5, 2017, <https://www.cnbc.com/2017/01/05/unitedhealthcare-and-fitbit-to-pay-users-up-to-1500-to-use-devices.html>, accessed March 2018.

19 *Fortune*, “How You Might Be Eligible for a Free Apple Watch From Your Health Insurer,” Aaron Pressman, November 8, 2017, <http://fortune.com/2017/11/08/free-apple-watch-aetna>, accessed March 2018.

Figure 2.5 Real-Time Customer-Data Capture: Insurer Readiness, by Sub-Sector (%), 2018

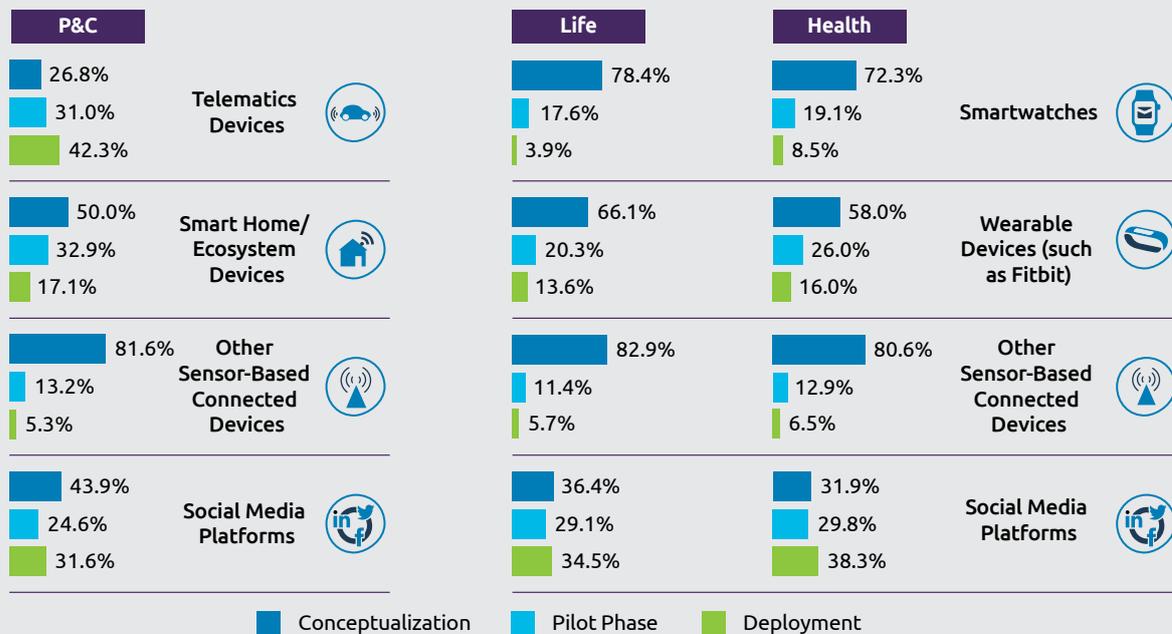


Note: The percentages in the chart may not add up to exactly 100% due to rounding off; The sections for 'Life', 'P&C' and 'Health' are for the purpose of representation only and do not indicate respective premium or other contribution of that sub-sector

Question: From the below options, please select the highest level of readiness as applicable to your firm's various lines of business when it comes to capturing real-time data

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

Figure 2.6 Real-Time Customer-Data Capture: Stage of Adoption, by Sub-Sector (%), 2018



Note: Conceptualization refers to Ideation and Use Case Testing; Pilot Phase refers to Proof of Concept and Pilot with Proof of Value and Deployment refers to First Deployment, Multiple Deployments, and Full-Scale Implementation; The percentages in the chart may not add up to exactly 100% due to rounding off

Question: On a scale of 1-7, please describe at what stage your organization is in using the following IoT or sensor-based connected devices/social media in an initiative to capture real-time customer-data; where 1 = Ideation, 2= Use Case Testing, 3= Proof of Concept, 4= Pilot with Proof of Value, 5 = First Deployment, 6 = Multiple Deployments and 7 = Full-Scale Implementation

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

# Munich Re Leverages Wearable Data Analytics for Healthy, Satisfied Customers, and Positive Business Results

As one of the world's leading reinsurers with more than 42,000 employees, Munich Re Group offers reinsurance, primary insurance, and asset management services globally.<sup>20</sup>

**Background:** As consumers/patients increasingly use wearable devices to monitor their health, insurers benefit from these new streams of real-time data about their customers. Munich Re sought a process to collect wearable data to create value for customers as well as business. The insurer also wanted to become more pro-actively involved in the lives of its customers by offering personalized prevention tools.

**Solution:** To meet its customer service goals, Munich Re developed a cognitive computing approach with machine-learning algorithms that supports consumers using wearable devices. Two components make up the proactive initiative, Cognitive Health.

- *Health Check* leverages wearable data analytics to identify at-risk users who can benefit from follow-up activities, such as prevention and disease management.
- *Adherence Support* recognizes gestures to help users follow medicine schedules or control smoking.

Munich Re's Cognitive Health initiative offers customers healthy-living support above and beyond their physician-led medical care. Moreover, it helps the firm to predict and potentially avoid future claims. Wearable device analytics enable Munich Re to offer customers personalized services as part of, or in addition to, their insurance coverage.

**Implementation:** The first step was development of a machine-learning based adherence function. Physical gestures were woven into the solution through an iterative

process—data feed, gesture recognition, refinement—to increase recognition reliability, and the solution was then field-tested with consumers. In the next phase, a similar approach was used to develop an algorithm to identify a consumer's health risks based on wearables' data.

Munich Re executives together with staff from health intelligence specialists WearHealth championed the project with support from:

- The firm's Products and Innovation team to gain user perspective and to consider potential links to other products and projects
- IT for prototype development and infrastructure requirements
- Data science and machine learning SMEs to train and enhance the algorithm
- Medical experts for evaluation and guidance.

After prototypes tested positively, Munich Re integrated the Health Check and Adherence Support solutions within its already-active Connected Health & Wellness platform.

**Results:** Through its capability in preventive health management, the Cognitive Health solution can drive behavioral changes and improved well-being among customers. This, in turn, will also help improve customer satisfaction as consumers are supported in their endeavor to lead healthy lives. In terms of quantitative success metrics, the solution can help decrease discontinuation rate in underwriting processes as well as claims costs for the firm.

*Source: Capgemini Financial Services Analysis, 2018, Efma Database, accessed February 2018*

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20 Munich Re website, <https://www.munichre.com/beaufort-group/mr/portrait/index.html>, accessed April 2018

# AIA Vitality Program Revitalizes Customer Experience and Healthy Behaviors

AIA Singapore offers life insurance plans and investment, retirement, and wealth management products for individuals as well as group insurance — employee benefits for business. Founded in 1931, AIA Singapore is part of the AIA Group, which today is the largest independent publicly listed pan-Asian life insurance group in the world and the second largest life insurance company in the world by market capitalization.

**Innovation Drivers:** Company executives took note of Singapore's significantly large population of senior citizens as compared with working adults, highlighting the need for solutions to help senior citizens live independently, and sought ways to support good health habits. In addition, Singaporeans are living longer as well. However, they are also spending more years in poor health, affecting quality of life, and cost of healthcare, and other related expenses, such as domestic help etc. Singaporeans are living to an average age of 82, of which 8 years — approximately 10% of their life — is spent in ill health.<sup>21</sup> To go beyond the traditional life-insurance business model and revitalize the customer journey of insureds, AIA Singapore aimed to become a trusted and relevant partner by leveraging technological advances popular with Singaporeans.

**Solution:** In 2013, AIA Singapore launched AIA *Vitality*, a science-backed wellness program that works with customers to make quantifiable health improvements by rewarding them for the efforts they make each day. The program draws on behavioral economics, to support, guide, and incentivize participants to take active steps to improve their health. What's more, integration with AIA Singapore insurance products enables dynamic pricing of risk over time based on each customer's engagement and results.

AIA *Vitality* members sync their wearable fitness trackers to the AIA *Vitality* app or use their smartphone's health tracker to update the insurer on their activity levels. The mobile app acts as an innovative customer engagement tool that gives AIA direct control of the customer relationship. Health improvements are charted into the AIA *Vitality* Status

scorecard, a system through which participants earn bronze, silver, gold, or platinum grades by accumulating points for logging healthy activities.

The AIA *Vitality* program is linked to a range of fitness devices and partners to incentivize customers to continue regular fitness activities, make healthy food choices, and achieve health goals.<sup>22</sup>

AIA Singapore offers premium discounts and other benefits contingent upon the customer's *Vitality* Health Status throughout their insurance policy.

**Results:** Since its launch, the AIA *Vitality* program has encouraged a range of health behavior improvements among customer participants:

- The number of AIA *Vitality* members who exercise, increased more than seven times since a Weekly Challenge was initiated in January 2017.
- AIA *Vitality* members achieved close to 60-billion steps last year, which is equivalent to walking around Singapore nearly 200,000 times.
- Nearly 1.7 million rewards were awarded to AIA *Vitality* members who undertook healthy activities in 2017.

Since the AIA *Vitality* program began five years ago, membership has grown steadily at an average 40% each year.<sup>23</sup>

Moreover, less than two years after kicking off a corporate-focused *Vitality* program initiative, AIA Singapore executives are seeing positive results in terms of participants' activity levels and health status. In the coming years, they expect that customers' improved health will have an impact on claims, which will inform and shape premium decisions.<sup>24</sup>

The initiative's benefits are shared among the insurer (sustaining the business), policyholders (greater health and financial rewards) and the city-state of Singapore (a healthier, more productive workforce).

*Source: Capgemini Financial Services Analysis, 2018, WIR 2018 Executive Interviews*

21 *Today*, "Singaporeans living longer, but need to shorten years spent in ill health", Valerie Koh, September 9, 2017, <https://www.todayonline.com/singapore/one-segment-life-cut-short>, accessed March 2018.

22 AIA *Vitality* website, <https://www.aiavitality.com.sg/memberportal>, accessed March 2018.

23 *The Straits Times*, "Staying healthy can be a rewarding exercise," Lorna Tan, May 21, 2017 <http://www.straitstimes.com/singapore/health/every-step-counts-for-vitality-members>, accessed March 2018.

24 *The Business Times*, "The future of insurance" Yasmine Yahya, February 3, 2018, <http://www.businesstimes.com.sg/brunch/the-future-of-insurance>, accessed March 2018.

## Actionable insight generation with advanced analytics

Generating real-time, actionable insights through advanced analytics will be a key enabler for delivering innovative, timely, and personalized services. It will be critical for insurers to build real-time and predictive analytics capabilities to respond to market changes and new emerging risks quickly.

*“Advanced analytics tools can enable insurers to structure the best offer for a customer, which also delivers the best profit for the company.”*

—Michel Vanhaeren, Advisor of the Management Committee, Belfius Insurance

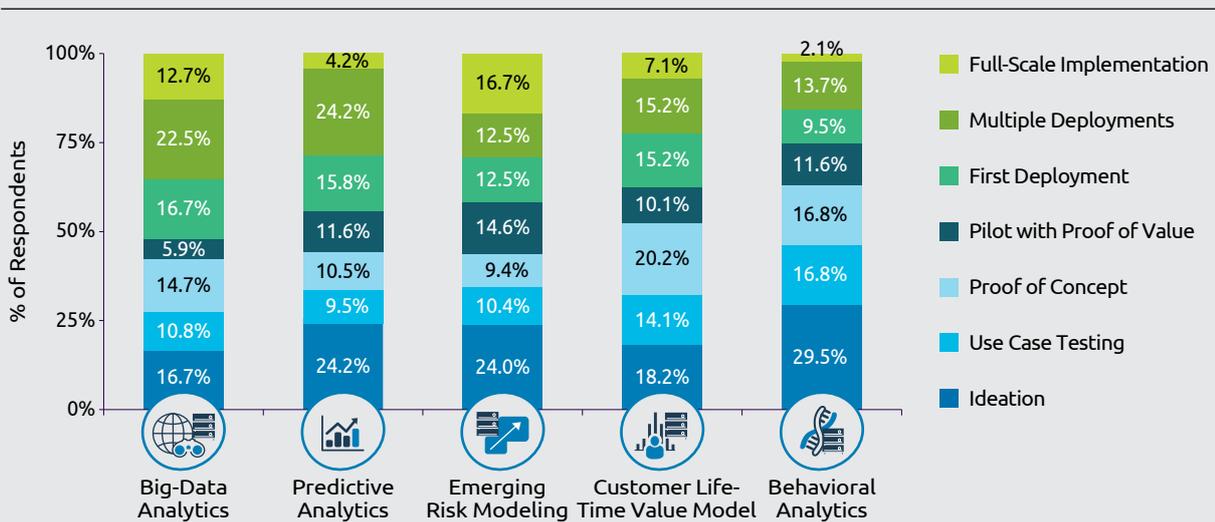
**Big data analytics:** Insurers now have access to various real-time data sources. As data volume and velocity rapidly increase, insurers must use big data analytics to derive meaningful insights from the data quickly. Among analytics technologies, more than half of insurers surveyed for the *World Insurance Report 2018* said they have deployed big data analytics (Figure 2.7)

For instance, Cigna Indonesia leverages big data to provide customer insights to marketers who then extend appropriate insurance offers to the right potential customers at the right time. By determining precise, personalized customer profiles based on big data and SAS capabilities, Cigna can design tailor-made campaigns and relatable offers that improve promotional response rates.<sup>25</sup>

**Predictive analytics:** By predicting future loss probability, insurers can improve pricing accuracy, which can be particularly useful in cases of new risks, where there is little historical data from which to base estimates.

Around 44% of insurers say they have started deploying predictive analytics solutions. Digital startup Neptune Flood, a U.S. flood insurance provider, leverages predictive analytics to evaluate and price flood insurance. The firm promises flood insurance in three minutes with no elevation certificates needed, and premium savings to homeowners up to 25% less than National Flood Insurance Program (NFIP) rates.<sup>26</sup>

Figure 2.7 Tools for Real-Time, Actionable Insights: Stage of Adoption (%), 2018



Note: The percentages in the chart may not add up to exactly 100% due to rounding off

Question: On a scale of 1-7, please describe at what stage your organization is in using the following advanced analytics concepts to convert real-time data into actionable insight; where 1= Ideation, 2= Use Case Testing, 3= Proof of Concept, 4= Pilot with Proof of Value, 5= First Deployment, 6= Multiple Deployments and 7= Full-Scale Implementation

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

25 *The Digital Insurer*, “Cigna uses Big Data analytics for business decisions, Indonesia,” Hugh Terry, <https://www.the-digital-insurer.com/dia/cigna-uses-big-data-analytics-for-business-decisions-indonesia>, accessed March 2018.

26 *Insurance Journal*, “Startup Neptune Offering Digital Private Flood Product to Agents, Carriers in Nationwide Expansion,” Andrew G. Simpson, January 25, 2018, <https://www.insurancejournal.com/news/national/2018/01/25/478485.htm>, accessed March 2018.

*“The insurance industry is used to working with historical data—the most important challenge before them is to move from that model to a predictive one.”*

–Gilles Ferreol, Managing Director, CNP Partners

**Modeling emerging risk:** Technological innovations and new business models are spurring new risks that must be predicted before underwriting a policy. As the technology landscape rapidly changes, insurers must develop capabilities to predict risks that an innovation or new technology might introduce so they can create new products and refine existing policies. For instance, more than 20 specialists from Munich Re continuously monitor the risk landscape to identify new or changing risks. The team includes underwriters, lawyers, geologists, mathematicians, physicists, and doctors who track and propose risk-management measures.<sup>27</sup>

**Customer lifetime value model:** Through data and advanced analytics, insurers can build a robust customer lifetime value model that predicts the long-term value of a customer (future purchasing behavior and risk) while selling the policies to a customer in real-time. This capability enables insurers to focus on profitable customer segments. While 37.5% of insurers said they have deployed a customer lifetime value model, 30.3% have created proofs of concept (PoC).

Life.io offers a web-based platform designed to help life insurers enable policyholders to make better life decisions. The U.S. startup provides behavioral insights throughout the customer journey—from product ideation, development, and commercialization—to enhance customer satisfaction and maximize overall consumer lifetime value.<sup>28</sup>

**Behavioral analytics:** Understanding customer behavior can enable insurers to offer personalized products and target their marketing efforts. With insights about the actions of customers, insurers can strategically predict an individual’s potential for risk and price premiums accordingly.

More than 25% of insurance firms surveyed for the *WIR 2018* say they are deploying behavioral analytics, and around 28% are in the proof-of-concept stage.

AXA Malaysia offers auto insurance customers, AXA FlexiDrive, a usage-based rewards program. The insurer gathers insights on customers’ driving behavior via telematics while customers earn discounts on premiums for safe driving. Customers can also receive personalized driving tips as a value-added service.<sup>29</sup>

*“It is essential for insurance firms to move from a reporting- driven mentality based on historical data to an analytical approach based on behaviors and predictive analytics. Predictive and behavioral analytics is vital not only from a commercial and pricing point of view but also for back office processes.”*

–Paolo Pecchiari, Chief Operating Officer, Cattolica Assicurazioni

When it comes to readiness for real-time insights, P&C insurers are further ahead than life and health firms because of their higher focus on leveraging artificial intelligence and machine learning (ML) for analytics. Around 16.3% of P&C insurers said they use AI and ML for redefining traditional processes and operating models, followed by 13.9% of life, and 11.1 % of health insurers. (Figure 2.8)

P&C insurers are also more active in using advanced analytics to generate insights from real-time data at the individual customer level, with 20% doing so as compared to 14.8% of health insurers and 11.4% of life insurers who do so respectively.

Next to big data analytics (deployed by more than 50% of insurers across sub-sectors), more than 40% of insurers across sub-sectors said they are deploying emerging risk modeling, and an almost equal proportion are utilizing predictive analytics. (Figure 2.9)

*“Advanced analytics tools can enable insurers to get a more granular view of what’s happening in their customer base. It can enable them to act proactively (i.e. advising customers of an impending risk) and it also gives the insurers better insight into the risks that they are carrying.”*

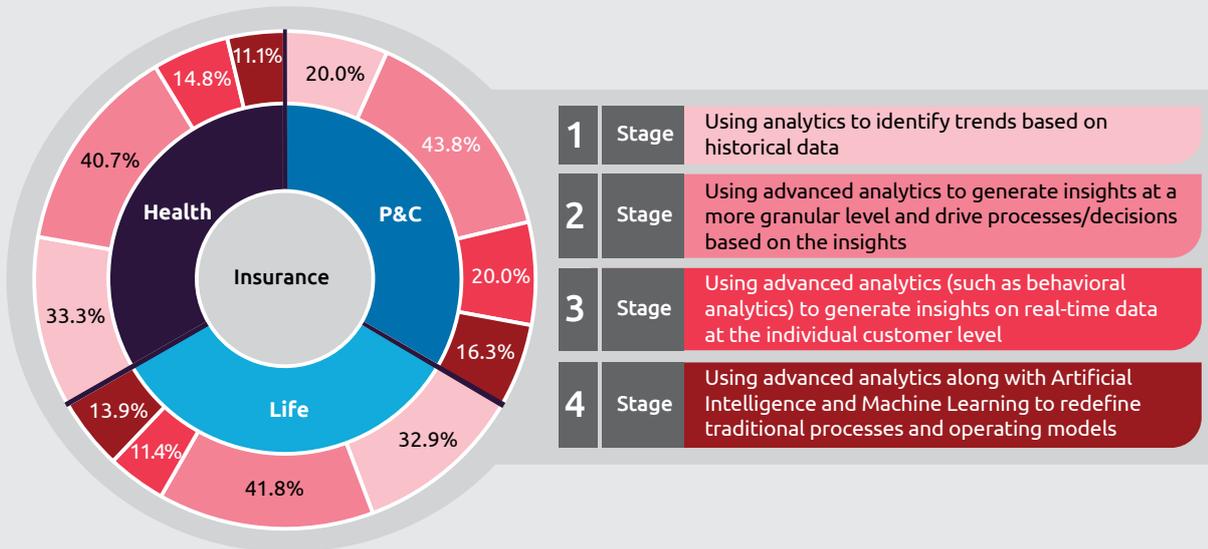
–Andrew Livesley, Group Chief Architect, JLT

27 Munich Re website, <https://www.munichre.com/en/group/focus/emerging-risks/methodology/index.html>, accessed March 2018.

28 Life.io website, <http://life.io>, accessed March 2018.

29 AXA website, <https://www.axa.com.my/axa-flexi-drive-faq-page>, accessed March 2018.

**Figure 2.8 Real-Time, Actionable Insights: Insurer Readiness, by Sub-Sector (%), 2018**

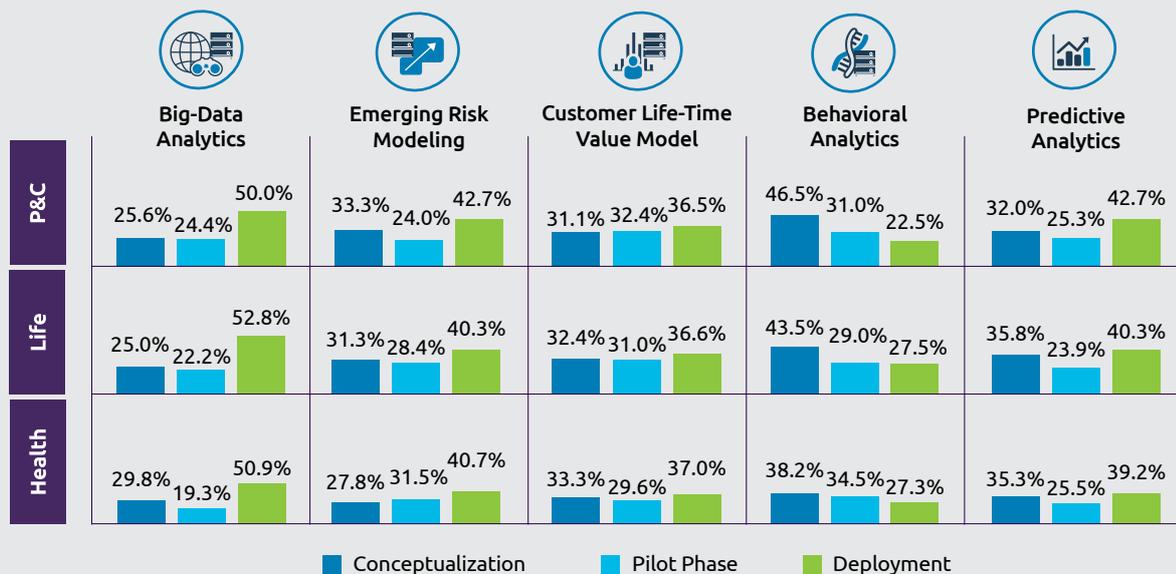


Note: The percentages in the chart may not add up to exactly 100% due to rounding off; The sections for 'Life', 'P&C' and 'Health' are for the purpose of representation only and do not indicate respective premium or other contribution of that sub-sector

Question: From the below options, please select the highest level of readiness as applicable to your firm's various lines of business when it comes to leveraging analytics for generating insights and drive processes/ decisions based on the insights

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

**Figure 2.9 Tools for Real-Time, Actionable Insights: Stage of Adoption, by Sub-Sector (%), 2018**



Note: Conceptualization refers to Ideation and Use Case Testing; Pilot Phase refers to Proof of Concept and Pilot with Proof of Value and Deployment refers to First Deployment, Multiple Deployments, and Full-Scale Implementation; The percentages in the chart may not add up to exactly 100% due to rounding off

Question: On a scale of 1-7, please describe at what stage your organization is in using the following advanced analytics concepts to convert real-time data into actionable insight; where 1= Ideation, 2= Use Case Testing, 3= Proof of Concept, 4= Pilot with Proof of Value, 5= First Deployment, 6= Multiple Deployments and 7= Full-Scale Implementation

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

Scalability and interoperability, and handling spikes in data volume are the most significant challenges in implementing real-time data processing systems.

**Scalability and interoperability.** Data from various sources come in multiple formats making it a challenge to integrate numerous data analysis systems and align them to feed inputs to a standard process.

**Handling data volume spikes.** Data processing systems should be able to handle sudden spikes in volume of data. Since maintaining data processing systems to cater peak demand may not be economically viable, insurers can use cloud to control this issue.

**Pre-processing data.** The data from connected devices may be unstructured, which needs pre-processing for analysis. This may increase the processing time and induce a latency in providing real-time insights.

**Lack of expert talent.** Insurers are facing a market with a shortage of qualified talent with domain and analytics expertise.

**Extracting actionable insights.** Insurers should be able to retrieve actionable insights from the data—and via the right algorithms, filter useful information from the noise. However, organizations today are not fully prepared for this. In a survey of organizations across industries, 60% said that their current analytics capabilities are not ready to take advantage of the data generated from IoT.<sup>30</sup>

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30 Capgemini website, “Unlocking the business value of IoT in operations”, March 28, 2018, <https://www.capgemini.com/2018/03/unlocking-the-business-value-of-iot-in-operations/>, accessed April 2018

# Humania Assurance Streamlines Life Insurance Purchase with Advanced Analytics and Automation

Quebec-based Humania Assurance offers group and individual insurance products to more than 200,000 individuals and to employees of nearly 1,000 companies.<sup>31</sup>

**Objective:** Humania Assurance sought to enhance its digital strategy after market analysis revealed a lack of customer-centricity in the Canadian life and health insurance industry, as compared with the rest of the world. From a business perspective, the company wanted to focus on technological innovation to offer its network of more than 7,800 independent distributors a product that combined quality, quick delivery, and affordability as well as outstanding customer experience.

**Solution:** The company developed a business rule engine (BRE) to boost the agility of its online life insurance purchasing platform (HuGO) and to gain operational performance by automating complex decision-making processes. Instead of standard risk assessment criteria such as age and insurance amounts, the solution leverages immediate risk profile analysis. The innovative system—a web application written in Java, using a Liferay portal—uses algorithms to ask pertinent questions and interpret answers in real time. HuGO delivers an eligibility decision for up to 65% of applications within 15 to 45 minutes.

**Implementation:** An intercompany project team of 60 Humania employees and external subject matter experts, such as Munich RE Automation Solutions (MRAS), used

Agile methodology across all departments (technology, operations, sales and marketing, administration) to develop the business rule engine. Consultants from Savoir-faire Linux helped integrate BRE into Humania Assurance internal systems. Thousands of real cases were tested with various reinsurance partners working on the project. Surprisingly, test decision outcomes were identical to those made through conventional underwriting.

**Results:** Thanks to HuGO innovation, Humania is one of the first-of-its-kind Canadian trendsetters in the use of predictive analytics to render quick life insurance eligibility decisions. Before the HuGO platform was enhanced with predictive analytics and automation, it took 21 days on average to issue a life insurance policy. Now, Humania does it in just 24 hours. The solution reduced the number of underwriting requirements, such as those related to lab tests. It also enhanced the firm's independent advisor network productivity. HuGO is a commercial success. Since November 2016, close to 1,000 independent brokers across Canada have opted to use HuGO, and as of June 15, 2017, more than 3,500 transactions had been performed. Humania had reached \$1 billion of face amount coverage by mid-April 2017.<sup>32</sup>

*Source: Capgemini Financial Services Analysis, 2018, Efma Database, accessed February 2018*

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31 Humania Assurance LinkedIn Page, <https://www.linkedin.com/company/humania-assurance/?originalSubdomain=in>, accessed February 2018.

32 Itbusiness.ca, "Small but mighty insurance company beats the competition at the 2017 Digital Transformation Awards," Mandy Kovacs, June 14, 2017, <https://www.itbusiness.ca/news/small-but-mighty-insurance-company-beats-the-competition-at-the-2017-digital-transformation-awards/91425>.

# How InShared Moved from Customer Segmentation to Customer Personalization

InShared is a Netherlands-based self-service internet insurance company. Launched in 2009, the InsurTech firm offers a range of products from car and home insurance to accident and liability insurance. InShared encourages good choices from clients and rewards measures taken to prevent damages and reduce claims.

**Challenge:** Auto insurance firms' margins are taking a competitive hit and profits are under pressure. The rise of aggregators is driving further increase in price competition. As a digital business, InShared was challenged to simultaneously and cost-effectively push the three key profit levers: website traffic, conversion, and margins. InShared sought pricing and marketing strategies that fit a low-cost business model, with the help of automation.

**Solution:** InShared developed a data-driven profiling process that evaluates each website visitor and can predict—with 90% accuracy—the probability of customer conversion. The solution also assesses InShared customers' buying behavior to tailor individual web and marketing efforts automatically. Through behavioral economics, the firm was able to granularly adjust pricing to spur customers' willingness to buy, based on insights from big data analysis on customer data.

For going beyond customer segmentation to customer personalization, InShared leveraged predictive profiling to ensure that through real-time actionable insights each customer journey was potentially unique.

**Implementation:** Development and implementation of the predictive-profiling solution was a joint effort of InShared marketing, IT, and pricing experts together with support from two external agencies. Through numerous A/B tests (through which two versions of a webpage or app were compared against each other), the profiling efforts were continuously improved.

**Results:** Through its predictive-profiling solution, InShared improved website traffic by 6% and conversion by 17% and boosted its web sales over aggregator sites. The average Customer Effort Score, which measures the ease of policy purchase and management for customers, was high at 4.31 after implementation. During a time when auto insurance margins are under pressure, InShared grew business by 27% at attractive margins.

*Source: Capgemini Financial Services Analysis, 2018, Efma Database, accessed February 2018*

## Digital transformation is leading the way to automated, integrated processes across the value chain

For real-time, actionable insights to be valuable, they must be supported with execution at the digital layer with the help of digital transformation.

*“Automation in closed systems has been part of the insurance industry’s core competencies for many years. Digitalization is a logical evolution, as it opens interfaces and system landscapes. Ultimately, this gives us new opportunities to actively involve and inspire our customers.”*

–Dr. Norbert Rollinger, CEO, R+V Versicherung AG

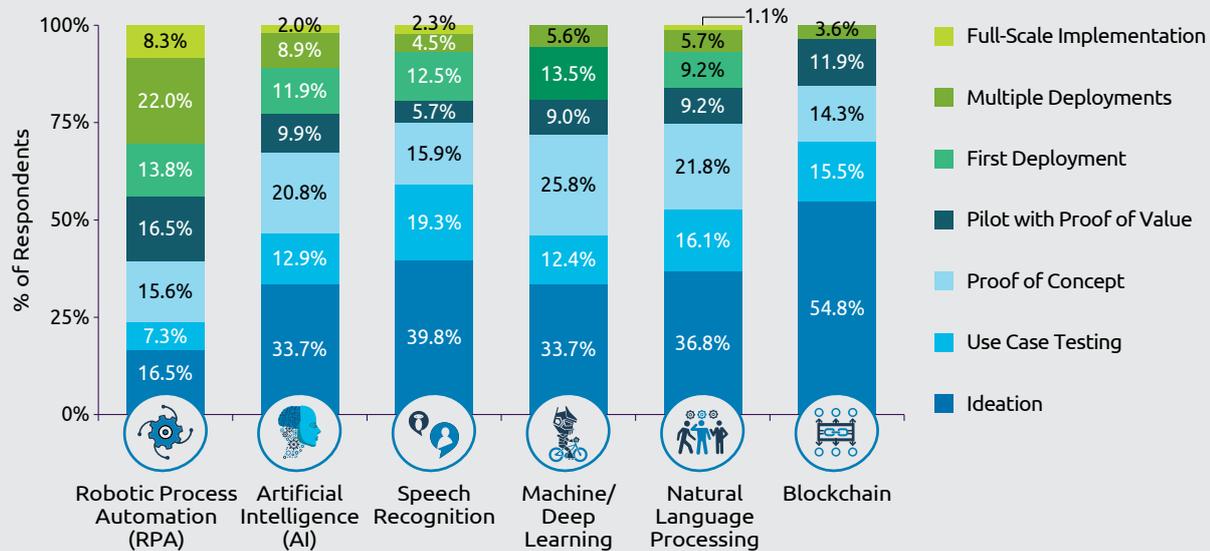
**Robotic Process Automation (RPA):** RPA enables insurers to automate structured-data processes with shorter pay-back times. RPA can be integrated

seamlessly with existing systems. With more than 40% of insurers actively deploying RPA systems and another 32% saying they are at the proof-of-concept stage, RPA is undoubtedly insurers’ most-sought automation tool. (Figure 2.10)

Malaysian insurer MPI Generali partnered this year with U.S. tech firm Kofax to implement RPA solutions to improve customer experience and operational efficiency. The phased implementation revolves around policy servicing and new applications, claims management, and improvements to accounts and billings.<sup>33</sup>

Earlier this year, U.S.-based enterprise content management specialists, The Dayhuff Group, launched ROBIN, a cognitive robotic process automation solution for the insurance industry that aims to boost underwriting and claims processing productivity. ROBIN’s pre-configured dictionary can read standard insurance documents and has demonstrated up to a 20% reduction in the time it takes to process new business or close a claim.<sup>34</sup>

Figure 2.10 Tools for Digital Core Transformation: Stage of Adoption (%), 2018



Note: The percentages in the chart may not add up to exactly 100% due to rounding off

Question: On a scale of 1-7, please describe at what stage your organization is in using the following digital technologies in various automation initiatives; where 1= Ideation, 2= Use Case Testing, 3= Proof of Concept, 4= Pilot with Proof of Value, 5= First Deployment, 6= Multiple Deployments and 7= Full-Scale Implementation

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

33 Borneo Post Online, “MPI Generali undergoes digital transformation with tech firm Kofax,” February 10, 2018, <http://www.theborneopost.com/2018/02/10/mpi-general-undergoes-digital-transformation-with-tech-firm-kofax/>, accessed March 2018.

34 satPRnews / Dayhuff Group press release, “Cognitive Automation Solution ROBIN Introduces Cutting Edge Technology to Insurance Data Processing,” Lauren Maddern, March 3, 2018, <https://www.satprnews.com/2018/03/03/cognitive-automation-solution-robin-introduces-cutting-edge-technology-to-insurance-data-processing/>, accessed March 2018.

**Artificial Intelligence (AI):** Insurers can leverage AI to automate processes that use unstructured data and core processes such as underwriting and claims processing, which can lead to significant reduction in process times and increase in efficiency. More than 50% of insurers said their firms were piloting or deploying AI solutions.

Chinese insurer Ping An is leveraging artificial intelligence for authentication and claims settlements. With AI, the insurer could reduce claims settlement times from three days to 30 minutes.<sup>35</sup> And, UK-based InsurTech firm Cytora has developed an AI-based *risk engine* that enables commercial insurers to target, select and price risk.<sup>36</sup>

**Speech Recognition:** Insurers can enhance customer engagement with real-time contextual analytics that analyze customer emotions by examining pitch, tone, and tempo to predict expectations and to tailor services and communications to suit customer needs.

Canadian insurer Manulife launched *Manulife Benefits*, which uses voice recognition technology to deliver essential account information to customers in a conversational way.<sup>37</sup>

*“Insurers need to develop new customer interfaces, such as for voice recognition, as young generations have a completely different style of communication. They are moving from typing to speaking.”*

—Hideaki Saito, President & CEO,  
AXA Direct Life Insurance Co. Ltd.

**Machine/Deep Learning:** Insurers can leverage machine learning and deep learning techniques to build systems with self-learning capabilities. These systems can handle tasks that involve decision making by interpreting patterns in unstructured data or by analyzing unstructured data. Around 54% of executives interviewed for the *World Insurance Report 2018* said they were piloting or deploying this technology.

French multinational insurance firm AXA has leveraged machine learning to build a proof of concept that can predict “large-loss” traffic accidents with 78% accuracy. This will enable AXA to improve its pricing accuracy.<sup>38</sup>

Online customer acquisition platform acuteIQ leverages machine learning to identify best prospects for insurance business. This will increase the efficiency of marketing activities by improving the customer conversion ratio.<sup>39</sup>

**Natural Language Processing (NLP):** NLP can be used widely to automate documentation processes and can be leveraged to understand customer emotions and behavior with real-time contextual analytics.

For example, Prudential launched a chatbot that can understand non-scripted questions, clarify the intentions of the requestor, and deliver responses in a human-like conversation. The cognitive powered chatbot, *askPRU*, was designed to assist financial consultants with real-time customer-related data.<sup>40</sup>

Additionally, U.S.-based Groundspeed provides data automation services for commercial insurers and brokers. The InsurTech firm leverages machine learning and NLP to transform loss runs, exposure schedules, and policy forms into common format data.<sup>41</sup>

**Blockchain:** Firms can transfer data internally or across organizations in a seamless, secure, and transparent way via blockchain solutions. Core processes such as claims processing can be automated using smart contracts. Although more than 70% of executives interviewed for the *World Insurance Report 2018* said they were in the ideation stage for blockchain, more deployments are anticipated in the near-future because of its benefits and the active involvement of insurers in standardizing blockchain solutions via industry associations such as B3i and RiskBlock.

35 *China Daily*, “Major insurer Ping An using AI to improve efficiency,” Chen Meiling, September 6, 2017, [http://www.chinadaily.com.cn/business/2017-09/06/content\\_31642243.htm](http://www.chinadaily.com.cn/business/2017-09/06/content_31642243.htm), accessed March 2018

36 Cytora website, <https://cytora.com>, accessed March 2018.

37 *The Insurance & Investment Journal*, “Manulife uses voice recognition technology for group benefits,” November 17, 2017, <https://insurance-journal.ca/article/manulife-uses-voice-recognition-technology-for-group-benefits>, accessed March 2018.

38 Google Cloud website, “Using machine learning for insurance pricing optimization,” Kaz Sato, March 29, 2017, <https://cloud.google.com/blog/big-data/2017/03/using-machine-learning-for-insurance-pricing-optimization>, accessed March 2018.

39 *AI Business*, “How the Insurance Industry can use Machine Learning,” Ian Foley, August 1, 2017, <https://aibusiness.com/ai-impacting-insurance>, accessed March 2018.

40 *Digital News Asia*, “Prudential Singapore’s chatbot provides information specific to customers’ life insurance plans,” September 5, 2017, <https://www.digitalnewsasia.com/business/prudential-singapore-chatbot-provides-information-specific-customers-life-insurance>, accessed March 2018.

41 Groundspeed website, <http://groundspeed.com>, accessed March 2018.

Late last year, AIA Hong Kong launched a blockchain solution for bancassurance, an arrangement between a bank and an insurance company allowing the insurance company to sell its products to the bank's client base. It was co-developed with AIA Hong Kong's bank partners, based on the distributed ledger platform *Hyperledger Fabric*, and is the first instance of blockchain technology being deployed in a bancassurance partnership in Hong Kong.<sup>42</sup>

InsurTech disruptor InsurETH provides blockchain-based travel-delay insurance that automatically detects flight delays. If a delay is registered, the InsurETH app triggers an insurance claim, verifies it via an open blockchain data ledger, and automatically pays the user if the claim proves valid.<sup>43</sup>

*“Managing information and maintaining good client relationships play a key role in insurance and digital technologies transform the way these are handled.”*

–Jordi Calbet, COO, Zurich Insurance

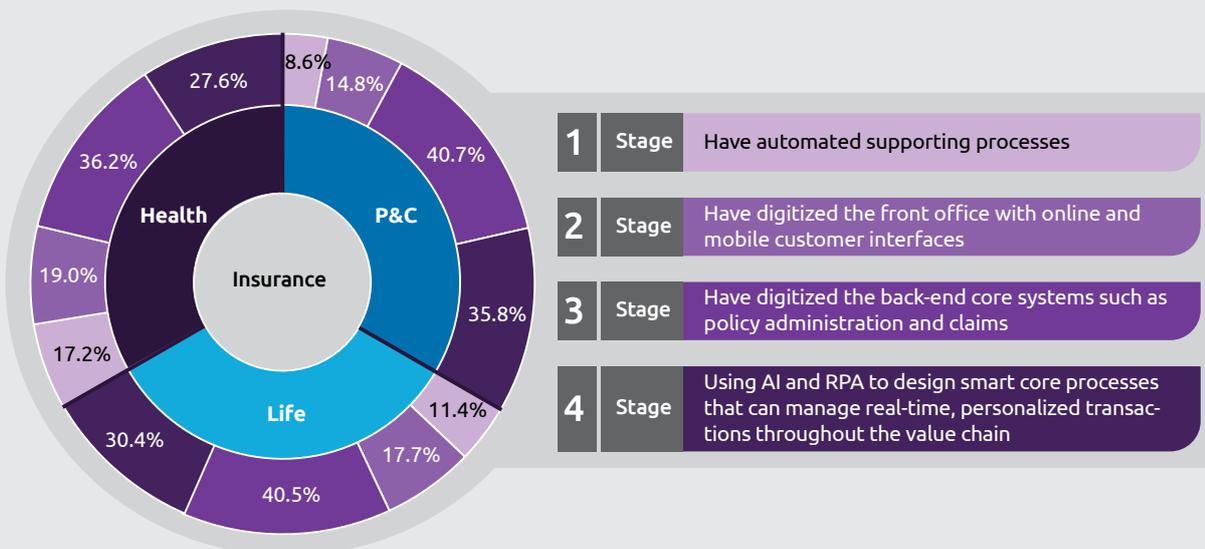
P&C insurers are relatively more active in leveraging RPA and AI, compared with life and health insurers. 35.8% of P&C insurers said they are leveraging RPA and AI to design smart core processes as compared with 30.4% of life insurers and 27.6% of health insurers. (Figure 2.11) When it comes to digitizing back-end core systems, P&C and life insurers are on a par with each other (around 40%), while health insurers are slightly less active (36.2%).

Insurers across sub-sectors generally follow a similar trend in adopting digital technologies, with P&C insurers being slightly more active in deploying the technologies as compared to life and health insurers. (Figure 2.12)

*“Digitalization is evolving at a very high-speed and digital revolution will not stop. To stay competitive, insurance companies should be open to changes and quickly adapt to new technology trends.”*

–Pietro Lanzillotta, Bonding Director, Atradius

**Figure 2.11 Digital Core Transformation: Insurer Readiness, by Sub-Sector (%), 2018**



Note: The percentages in the chart may not add up to exactly 100% due to rounding off; The sections for 'Life', 'P&C' and 'Health' are for the purpose of representation only and do not indicate respective premium or other contribution of that sub-sector

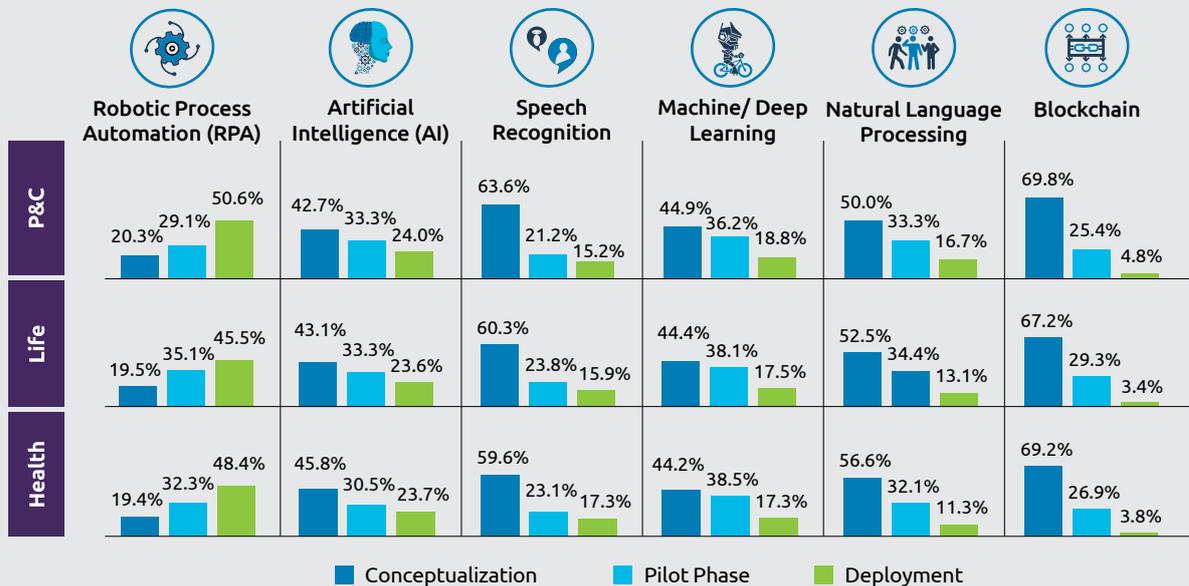
Question: From the below options, please select the highest level of readiness as applicable to your firm's various lines of business when it comes to digital automation and transformation

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

42 AIA website, <http://www.aia.com.hk/en/about-aia/media-centre/press-releases/2017/aia-press-release-20171114.html>, accessed March 2018.

43 Chappuis Halder & Co. FinTank, "InsurETH runs smart contracts on the Ethereum platform to automate insurance claims and refund in case of flight delays or cancellations," June 9, 2016, <http://fintank.net/2016/06/09/insureth-smart-contracts>, accessed March 2018.

Figure 2.12 Tools for Digital Core Transformation: Stage of Adoption, by Sub-Sector (%), 2018



Note: Conceptualization refers to Ideation and Use Case Testing; Pilot Phase refers to Proof of Concept and Pilot with Proof of Value and Deployment refers to First Deployment, Multiple Deployments, and Full-Scale Implementation; The percentages in the chart may not add up to exactly 100% due to rounding off

Question: On a scale of 1-7, please describe at what stage your organization is in using the following digital technologies in various automation initiatives; where 1= Ideation, 2= Use Case Testing, 3= Proof of Concept, 4= Pilot with Proof of Value, 5= First Deployment, 6= Multiple Deployments and 7= Full-Scale Implementation

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

More than 40% of surveyed insurers across sub-sectors said they expect a return on investment within 12 months or less for their financial commitments to digital transformation/ automation. (Figure 2.13). Compared with life and health insurers, P&C insurers expected a shorter payback time on their investments.

Insurers across sub-sectors rate continuous improvement on key performance indicators (KPIs) as the key benefit of digital transformation and automation, with 68.3%, 67.5%, and 67.2% of P&C, life, and health insurers, respectively, rating them as very important. (Figure 2.14)

*“Machines can now match or outperform humans across a range of activities in a number of industries, including insurance; specially with back-office functions. Automation at scale represents a massive competitive advantage for businesses that can get it right.”*

—Mary Kotch, EVP Global Chief Information Officer, Validus Holdings Inc.

Key challenges to insurers in digitizing their systems include:

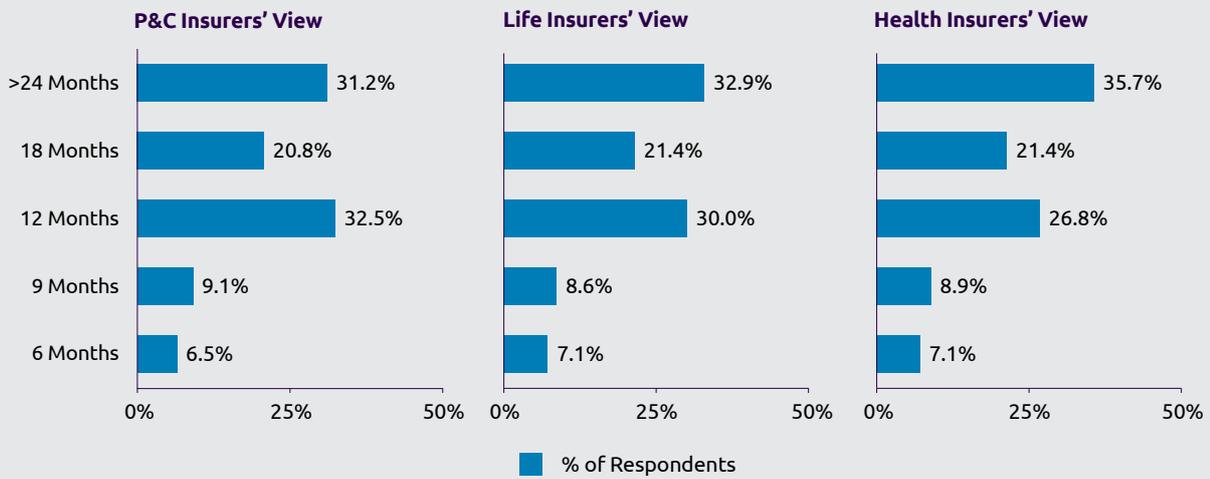
**Cybersecurity.** Automated and fully-digital systems face high vulnerability to cyber-attacks, which can lead to substantial financial and reputation loss.

**High initial cost.** Initial cost of implementation may be high for automation systems, especially when migrating from or integrating with legacy systems.

**Change management.** Insurers should have a long-term vision to instill innovative culture and up-skill the employees to ensure a smooth transition to handle the processes in an automated environment.

**Integrated automation.** Automation processes cannot be implemented in silos, and some systems and methods will have dependencies. Insurers may have to automate their interrelated operations to reap the real benefits of automation.

**Figure 2.13 Expected Payback Time of Investments Made in Digital Transformation/ Automation (%), 2018**

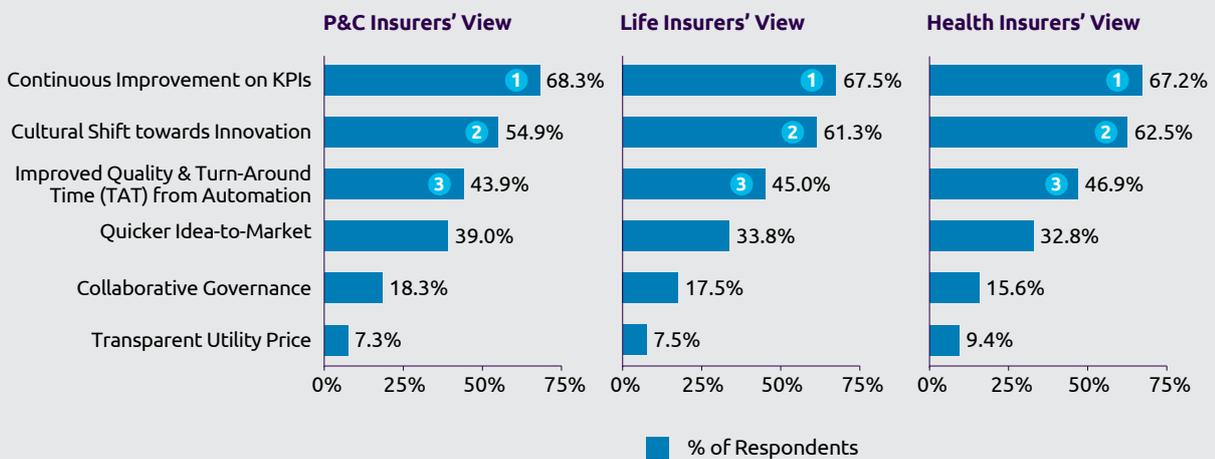


Note: The percentages in the chart may not add up to exactly 100% due to rounding off

Question: What is the payback time that you expect out of your investments made in digital transformation/ automation (leveraging RPA, AI and other digital tools) in your organization?

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

**Figure 2.14 Key Benefits of Implementing Digital Transformation/ Automation: Insurers' View (%), 2018**



Question: What are the key benefits of investing in digital transformation/ automation initiatives? Please rate each on a scale of 1-7, where 1= Least Important Benefit and 7= Most Important Benefit; Only ratings 6 and 7 are shown in the chart

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

*“Digitization affects everyone and everything. Parallel to digitization initiatives, however, the current business model must also be up and running; this is currently the real challenge for us at Münchener Verein.”*

–Dr. Martin Zsohar, Executive Board Member,  
Münchener Verein Versicherungsgruppe

Mitigating these challenges and successfully implementing digital transformation is key to having a well-defined infrastructure to support real-time data capture and data analysis. Senior leadership support and an effective change management strategy is crucial for successfully building the InsurTech capabilities.

**Leadership support and vision:** Top leadership of an organization must spot the trends in the industry/ compare the trends in other industries, understand customers’ evolving expectations and drive the innovation effort in their organization. This will include formulating the vision for innovation, budget allocation, and formulating and implementing change management strategy.

*“Digital should be a part of the DNA of the organization and it is important for insurers to have an integrated view of digital – encompassing people, process, and technology.”*

–Ritesh Sarda, CIO, Sun Life Financial Hong Kong

**Innovative culture:** Maintaining an innovative culture across the organization is essential for bringing new innovations from employees, and it will also be easier to roll-out new innovations successfully if employees are welcoming new innovations and adaptive to changes.

**Right resources:** Genesis and implementation of innovation requires right talent and complementing infrastructure in-terms of hardware and software. This includes setting up innovation labs and establishing agile teams and investing in latest technology for creating proofs of concept.

*“Technology is important and for technology adoption to be successful, change management is even more important. Company culture should be conducive for innovation.”*

–Jordi Balcells, Head of Allianz Technology - Branch of Iberolatam, Allianz Technology

# Blockchain Solution Helps to Integrate an Insurance Ecosystem in Italy

For Italian brokers and insurers working to prepare a quote, sharing risk data has never been easy. A vast amount of data must be processed to quickly establish an accurate big-picture evaluation of greater corporate risks. The manual data-exchange process is not built on a common or unique quote-creation platform, and a lot of back-and-forth communication between broker and insurer is required to prepare a complete quote. Moreover, risk data sharing must be both transparent and secure at the same time.

Clearly, an automated data-sharing process that ensures seamless, transparent, and secure sharing and approval would save time, money, and frustration.

In June 2017, a group of brokers and insurers in Italy—AIG, Generali Global Corporate & Commercial Italy, AON, UnipolSai Assicurazioni, and Willis Towers Watson—started collaborating with Capgemini Italy to devise a solution. Following just two months of design and development with Capgemini's Distributed Ledger Technology (DLT) practice, the group collaboratively devised a platform that enabled the distribution, sharing and synchronization of risk data in a safe, transparent, and efficient way.

The platform was built on a private ecosystem based on R3's open-source Corda technology, which is accessible by every Italian insurer or broker, after authorization by ecosystem members.

The new platform covers the following process phases:

- Brokers collect a minimum set of risk information to share with selected insurers for a first evaluation
- Insurance underwriters evaluate and either express interest or reject
- Brokers collect the data and send a quote to insurers
- Insurance companies then send a quotation proposal to the brokers to start negotiating via the platform, which allows an agreement between the parties (the system manages coinsurance risks)
- Once there is agreement on the insurance policy content, an electronic order is sent to all parties, so the policy can be issued by accessing the information written on the ledger—all encrypted and accessible to only the parties involved.

From a client perspective, this new solution offers a simple, quick, transparent, and safe service. It also allows the sector's agents to quickly share the pieces of information needed to develop a real-time quotation and to issue policy documents—in a faster, verifiable, and tracked manner.

The newly-designed solution allows negotiation and quotation times to be better managed, with potential to decrease time by up to 90%. Additionally, the quality of the information distributed via the standardized data model and accepted and shared through private blockchain (permissioned ledger) is enhanced. What's more, the platform can positively affect core and non-core processes such as streamlining other organizational processes related to risk assessment and improving premium calculation accuracy.

Based on its initial success, the group plans to extend the risk data-sharing solution to other phases of the Property and Liability insurance value chain, such as policy issuance and post-sales processes.

*Source: Capgemini Financial Services Analysis, 2018, WIR 2018 Executive Interviews*

# RPA Initiative Boosts Efficiency at Zurich Insurance Group (Zurich)

Zurich is a multi-line insurer. With about 53,000 employees, it provides a wide range of property and casualty, and life insurance products and services in more than 210 countries and territories. It serves individuals, small businesses, and mid-sized and large companies, as well as multinational corporations.<sup>44</sup>

**Background:** An early adopter of robotic process automation (RPA), Zurich focused its initial automation efforts on transactional, rules-based processes that required few or no exceptions to standard flows. To increase productivity benefits, however, the firm decided to expand its RPA initiatives beyond discrete tasks. Keeping customers and brokers as the ultimate front-end beneficiaries, Zurich began to automate complete end-to-end process chains, including an RPA program for policy issuance. Company leaders wanted to create an innovative system in which technology helps the workforce to deliver faster, top-quality results.

**Solution:** With an eye on improved services for partners and customers, Zurich implemented an RPA solution that leverages robots so that employees can focus on more high-impact tasks. As a result, the company's commercial insurance service teams across Europe can concentrate on complex policies while standard international insurance programs are issued by a software robot. In short, the RPA solution completely automated policy-issuance workflow for international commercial customers, beyond discrete tasks automated in isolation.

**Implementation:** The end-to-end automated process was designed to begin at the point when a policy-processing notification is issued internally to the final point when customer policy documents are generated. After performing a set of data validations to align master and local policy terms, the robot loads complete policy details into the administration system. It then issues an invoice and drafts policy documents within the standard format template (including pre-definable customization). Finally, policy documents are released to the handler for quality review.<sup>45</sup>

On average, the RPA solution spans over close to 50 core applications across EMEA. It includes thousands of common activities, hundreds of exception flows, and multiple customizations by customers, product lines, and other parameters.

To enable smooth functioning of the automated process, Zurich worked to define various scenarios, clearly instructing the robot where to act and what to do within the process. If the robot encounters missing data or information, it is programmed to respond to correct the problem or call for a handler intervention with pre-designed error or interruption notes.

The RPA program was jointly implemented by Zurich's Commercial Insurance team in Europe and Capgemini. The European roll-out began with five countries and involved a traveling squad that included a business analyst and RPA specialists linked to a central RPA delivery center to automate the highly-complex international issuance process. The maintenance of the program was supported by a global RPA Center of Excellence team along with RPA controllers in each country. An automated maintenance solution also was designed.

**Results:** The RPA implementation helped reduce policy issuance throughput time from several days to around one hour. In addition to efficiency gains, other potential benefits of the program include improved customer service and governance, as well as reduced operational risks. The RPA program also won the Information Services Group (ISG) Paragon Award™ Europe in the "Collaboration" category.<sup>46</sup>

Zurich Insurance Group is now exploring how the robots can be optimized for other activities.

*Source: Capgemini Financial Services Analysis, 2018; LinkedIn, "Robotics in insurance", Joyjit Gorain, August 2, 2017, <https://www.linkedin.com/pulse/robotics-insurance-joyjit-gorain/>, accessed March 2018.*

44 Zurich website, <https://www.zurich.com/en/about-us/facts-and-figures>, accessed April 2018

45 Blue Prism website, "Zurich Insurance: RPA Case Study," <https://www.blueprism.com/videos/automation/zurich-insurance-rpa-case-study>, accessed March 2018

46 Capgemini website, "Zurich and Capgemini Win Collaboration Award for Robotic Process Automation," July 12, 2017, <https://www.capgemini.com/news/zurich-and-capgemini-win-collaboration-award-for-robotic-process-automation>, accessed March 2018

# Building InsurTech capabilities through collaboration and a cloud-native approach

Capabilities developed through collaboration with InsurTech firms and a cloud-native approach can help insurers strengthen their digital agility.

Partnership with InsurTech firms is a way for insurers to acquire and develop digital capabilities efficiently and cost-effectively. Cloud-Native applications can boost incumbents' InsurTech capabilities by ensuring the availability of necessary resources at a lower cost and by making these capabilities scalable. The cloud will play a critical role in InsurTech capability development by enabling a robust infrastructural foundation on which new digital capabilities can be built.

By collaborating with InsurTech firms, traditional insurers will be able to more quickly deliver innovative offerings that keep pace with evolving customer demands.

**Enhanced customer experience:** InsurTech firms help in improving customer experience across various touch points through online/ mobile-first solutions.

**Innovative offerings:** Enabled by their innovative and entrepreneurial culture, InsurTech firms are front-runners in introducing new products and services that leverage the latest technologies.

**Agility:** Because InsurTech firms have no legacy baggage, they have little cost of failure and can nimbly experiment with new technology and business models.

**Cost efficiency:** Operational costs for InsurTech firms are low because they tend to use cost-effective mobile/online solutions as primary communication channels.

*“By collaborating with InsurTech firms who are specializing in disruptive distribution models, we are able to focus on the wholesale aspect of the business and let companies that live and breathe for customer service handle the customer part of the value chain.”*

—Espen Husstad, CEO, Insr

Therefore, strategic collaboration with InsurTech firms can help incumbents to tap new innovations for early-mover advantages. Most InsurTech offerings complement those from traditional insurers, and only a few compete head-on. Based on their extent of integration in the insurance value chain, most InsurTech firms today fall into one of three categories.

1. **Enablers:** Provide technology support to traditional insurers and other InsurTech firms through specialization in data gathering and data analysis. For example, London-based Octo Telematics helps auto insurers analyze customers' driving behavior through applying advanced analytics to behavioral, contextual, and other telematics data—actionable intelligence that can enable insurers to price risk and offer usage-based insurance and other value-added services.<sup>47</sup>
2. **Distributors:** Provide distribution support to traditional insurers and other InsurTech firms who provide end-to-end insurance offerings. Examples include aggregators, comparison sites, and marketplaces that focus on quote gathering and policy acquisition. For instance, PolicyGenius provides an online marketplace for consumers to shop for life, health, disability, renters, and pet insurance from hundreds of insurers in the United States.<sup>48</sup>
3. **Full carriers:** Provide end-to-end insurance offerings and compete with traditional insurers. Some focus within niche areas or underserved geographies. For example, Stockholm, Sweden-based BIMA leverages mobile technology to provide affordable insurance and mobile health services for low-income families around the world.<sup>49</sup> And, New York-based InsurTech firm Lemonade offers renters and home owners policies for homes, apartments, co-ops, and condos. Leveraging technologies such as AI, Lemonade delivers insurance policies and settles claims online via web and mobile applications.<sup>50</sup>

47 Octo Telematics website, <https://www.octotelematics.com/automotive>, accessed March 2018.

48 Medium, “InsurTech for Consumers: Aggregators, Comparison Tools and Marketplaces,” Dhruv Sarin, April 7, 2017, <https://medium.com/@dsarin91/insurtech-for-consumers-aggregators-comparison-tools-and-marketplaces-6c984848b919>, accessed March 2018.

49 Bima website, <http://www.bimamobile.com/about-bima/about-us-new>, accessed March 2018.

The majority of InsurTech firms are enabling firms or distributors and may be interested in collaborative value-adding partnerships with incumbent insurers.

From incubation to acquisition, traditional insurers are adopting a range of InsurTech collaboration approaches:

*“It is very important for insurers to have a symbiotic model of collaboration with InsurTech firms, especially for distribution and analytics”*

-Aitor del Coso, Subdirector General De Clientes Y Digital, Mutua Madrileña

**Incubators/Accelerators.** Insurers incubate select InsurTech firms to stimulate innovation. Some incumbents partner with accelerator service providers to run accelerators, and key executives of established firms also act as mentors to InsurTech firms. American Family Insurance has partnered with Microsoft to launch an accelerator program for start-ups who are working in home automation space. The accelerator will provide workplace, mentorship, and inputs on how to launch the company.<sup>51</sup>

**Investing in InsurTech firm.** Firms invest directly or through their investment arms in InsurTech firms which can complement their products and services or add a new capability. Firms can also invest in InsurTechs with an expectation of higher returns in the future.

MetLife announced plans early this year for *MetLife Digital Ventures*, which allocates USD 100 million to directly fund InsurTech firms working on solutions relevant to MetLife’s customers.<sup>52</sup>

**Co-branding.** With an eye on quick time to market, some incumbents are partnering with InsurTech firms to develop co-branded offerings. InsurTech firms manage the technological implementation while insurers focus on the core insurance processes. Oscar Health, a consumer-focused, technology-driven

insurance startup based in New York, partnered last year with Humana, one of the leading health insurers in the United States, to provide insurance plans for small businesses in and around Nashville, Tennessee.<sup>53</sup>

**Acquisition.** Other traditional firms are acquiring InsurTech firms to deliver new products and services and to enhance their innovation capability. Incumbents must enter the acquisition process selectively to ensure alignment around business objectives and organizational culture. For example, XL Innovate, the venture capital arm of erstwhile Dublin-based XL Catlin, acquired data analytics and consulting firm New Energy Risk in 2015 to enhance its data-handling expertise.<sup>54</sup>

**Solution/implementation support.** Insurers can leverage InsurTech firms to purchase tailor-made solutions or as outsourced service providers to implement new offerings. However, such actions may diminish the uniqueness of the innovation if competitors follow suit. British multinational insurance company Aviva partnered with Appian, a provider of Low-Code platform for digital transformation, to automate its business processes. Aviva has automated more than 40 applications on its existing infrastructure via this association.<sup>55</sup>

A cloud-native approach can help insurers implement new applications or make changes within current applications that enhance their real-time data-handling capabilities. The new applications will enable them to deliver innovative mobile services, implement new business models such as on-demand insurance, and improve existing services such as 24/7 chatbot customer service.

With elastic scalability and anti-fragility, a cloud-native approach can provide a flexible infrastructure for developing and deploying new applications quickly and with low risk.

50 Lemonade website, <https://www.lemonade.com/faq>, accessed March 2018.

51 American Family Insurance website, <http://newsroom.amfam.com/microsoft-and-american-family-insurance-launch-startup-accelerator-focused-on-home-automation>, accessed March 2018.

52 *Think Advisor*, “MetLife to Offer \$120,000 and Training to 10 Startups,” Allison Bell, January 8, 2018, <https://www.thinkadvisor.com/2018/01/09/metlife-to-offer-120000-and-training-to-10-startup>, accessed March 2018.

53 Humana website, <http://press.humana.com/press-release/regional-news/humana-and-oscar-health-enter-strategic-partnership-offer-consumer-focus>, accessed March 2018.

54 XL Group press release: PR Newswire, “XL Innovate Acquires New Energy Risk,” September 29, 2015, <https://www.prnewswire.com/news-releases/xl-innovate-acquires-new-energy-risk-300145979.html>, accessed March 2018.

55 Cloud Pro website, “How Aviva used automation to transform its customer experience,” Dale Walker, August 8, 2017, <http://www.cloudpro.co.uk/leadership/6967/how-aviva-used-automation-to-transform-its-customer-experience>, accessed March 2018.

According to the report “Cloud Native Comes of Age in Insurance,” cloud-native leaders are realizing tangible benefits to their business due to cloud-native adoption. Around 84% of cloud-native leaders said cloud-native applications have increased their revenue as compared to just 44% of cloud-native laggards. Added to that, 88% of cloud-native leaders opined that the cloud-native approach has improved their business agility and 87% said it has enabled them to provide a better experience to customers.<sup>56</sup>

**Quicker time to market.** Insurers can improve their response to market requirements by being agile and supporting continuous development and delivery.

**Cost-effectiveness.** New products (or minimum viable products) can be built and tested at lower costs, which may also foster a culture of innovation.

**Availability and scalability.** Cloud-native applications allow automated scaling, infinite elasticity, and features such as microservices and containerization to reduce technology and business risks.

For example, last year P&C insurer Liberty Mutual developed and deployed a cloud-native portal within six months for Australian underwriters in the accident and health insurance space. The insurer took 28 days to

launch a minimum viable product (MVP), allowing users to buy motorcycle insurance via an app.<sup>57</sup> Similarly, Allstate’s in-house CompoZed Labs, using Pivotal Cloud Foundry to create cloud-native applications, empowers its developers to create an MVP, test it quickly, and scale it promptly if successful. A stark contrast with the 87-year-old firm’s earlier product-development process that could take months—or even years—to build and deploy.<sup>58</sup>

MetLife developed a new user interface, built on the Docker containers-as-a-service platform, that streamlines the experience of its customers and agents by allowing them to get a complete view of their MetLife relationship on any platform (mobile, tablet, and PC).<sup>59</sup>

Insurers that quickly identify the immense potential of a cloud-native approach will be positioned for success.

In short, digital agility across the organization demands dedication to building InsurTech capabilities, supported through collaboration with InsurTech firms and adoption of a cloud-native approach. This will enable insurers to develop future-ready operating models that safeguard long-term sustainability and help reinvent customer engagement metrics while driving operational efficiency.

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56 Capgemini website, “Cloud Native Comes of Age in Insurance”, [https://www.capgemini.com/wp-content/uploads/2018/03/insuranceperspectivespaper\\_cloudnative\\_final.pdf](https://www.capgemini.com/wp-content/uploads/2018/03/insuranceperspectivespaper_cloudnative_final.pdf), accessed March 2018.

57 Altoros website, “Liberty Mutual Delivers an Insurance App in 6 Months with Cloud Foundry,” Alesia Bulanok, July 6, 2017, <https://www.althoros.com/blog/liberty-mutual-delivers-an-insurance-app-in-6-months-with-cloud-foundry>, accessed March 2018.

58 *Fortune*, “How Insurance Giant Allstate Is Using Cloud Tech to Build New Businesses”, Barb Darrow, June 19, 2017, <http://fortune.com/2017/06/19/allstate-insurance-cloud>, accessed March 2018.

59 *Docker* blog, “Docker Enterprise Edition lights a new spark of innovation within MetLife,” Jenny Fong, May 3, 2017, <https://blog.docker.com/2017/05/docker-enterprise-edition-at-metlife/>, accessed March 2018.





# The path forward: building future-ready operating models

- Business imperatives for the insurer of the future
- Building a digitally-integrated ecosystem to become future-ready

# Business imperatives for the insurer of the future

Digital agility is critical to deft navigation of today's dynamically competitive insurance market and will be a necessity in meeting the business imperatives of the future.

**Changes in allied industries are spurring the need to reinvent business.** As new technologies disrupt various industries the impact has cascaded to the insurance industry. For example, the advent of autonomous vehicles may require auto insurers to transform everything from underwriting to the nature of customer relationships as the auto insurance possibly shifts from personal property to commercial liability insurance.

**More and more traditional insurance products must be assessed and redesigned at fundamental levels.** Technological advancements are enabling InsurTech firms to provide hyper granular coverage by unbundling risks and offering micro-duration and on-demand coverage, as well as usage-based insurance. As customers begin to expect dynamic coverage in all areas, incumbent insurers may have to shift to more real-time and individualized coverage, too.

**End-to-end personalization of the customer experience journey is becoming a necessity.** Consumers have come to expect highly-personalized interactions from tech giants and InsurTech firms such as Lemonade that use automation and AI to create unique user experiences. Going forward, customers will expect a highly-tailored insurance journey with customized quotes, personalized premiums, value-added services, and selective risk coverage based on their specific needs.

**The need to predict new risks with little historical data is growing.** Rapid changes in the external environment—the rise of the sharing economy, the advent of driverless cars, and new forms of cyber threats—are giving rise to new risk scenarios that have little historical data. Building capabilities to efficiently

assess and quickly cover such risks will be critical for insurers looking to stake their early-mover claim in a highly competitive market.

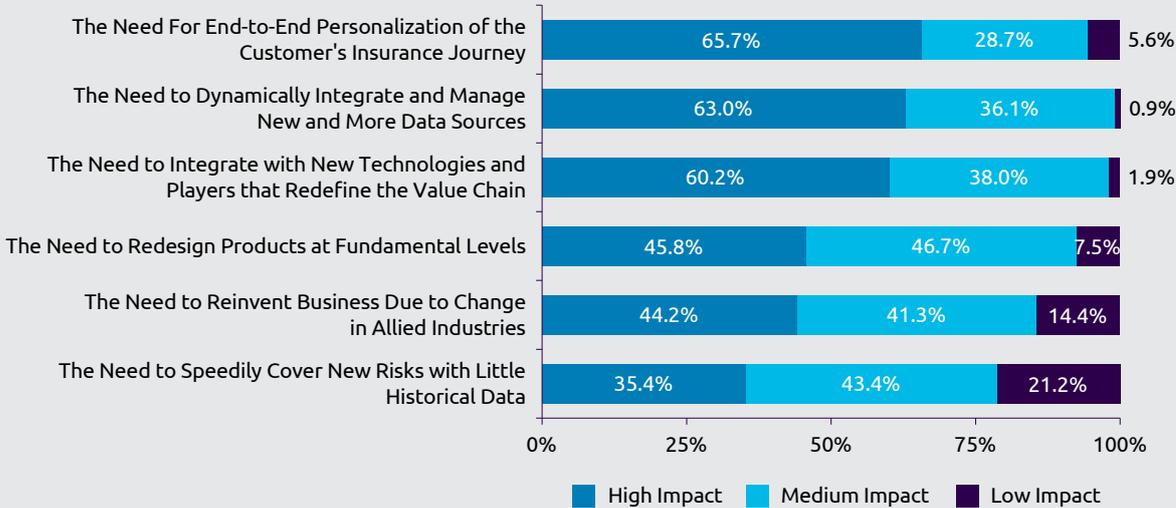
**Dynamic integration and management of new and more data sources have become business mandates.** The rapid rise of connected devices and smartphones, as well as increased use of social media platforms, are generating streams of real-time data in various formats. As insurers tap into these devices and platforms to personally connect with customers, it is essential to integrate and manage new and more data sources dynamically.

**Integration with new technologies and players who are redefining the insurance value chain.** Several new players—aggregators, original equipment manufacturers (OEMs), one-stop policy management apps, and third parties such as repair stores—are entering the insurance value chain, making it essential for incumbents to plan empowering partnerships strategically. Technologies such as blockchain and application programming interfaces are restructuring the insurance ecosystem, making it vital for insurers to fold these technologies into their businesses.

Of the factors outlined above, *WIR 2018* executive respondents rated the need for end-to-end personalization of the customer's insurance journey (65.7%) and the need to integrate with new data sources (63%) as their most pressing, high-impact imperatives for the future. These were followed by the need to integrate with new technologies/players (60.2%) and the need to redesign products at fundamental levels (45.8%). (Figure 3.1)

Within these circumstances, it is vital for insurers to build future-ready operating models with the help of digital agility to ensure continued competitiveness in various scenarios.

**Figure 3.1 Impact of Business Imperatives for the Insurer of the Future – Insurers’ Perspective (%), 2018**



Question: Please rate on a scale of 1-7 the below imperatives in terms of their impact, with 1= Very Low Impact and 7= Very High Impact; Ratings 1 and 2 are classified as Low Impact, ratings 3,4, and 5 are classified as Medium Impact and ratings 6 and 7 are classified as High Impact

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

# Building a digitally-integrated ecosystem to become future-ready

Industry siloes are breaking down as firms re-orient themselves to be where the customer is—and that makes collaboration along the value chain critical. Thus, one of the key components of a future-ready operating model is a digitally-integrated ecosystem that enhances customer experience and drives operational efficiencies. (Figure 3.2)

*“Digitized and completely integrated ecosystems are key for the long term, as aggressive new competitors, new products, and new distribution channels emerging in the marketplace require an agile response.”*

—Pete Atwater, Vice President, Information Technology,  
The Guardian Life Insurance Company of America

The proposed digitally-integrated ecosystem seamlessly interconnects insurers with their customers and partners in a manner that enables efficient flow of information and services.

**Integration with customers:** In the digitally integrated ecosystem, insurers will be accessible to the customer over various channels through extended multi-device, multi-platform, and mobility offerings. For instance, Progressive Insurance customers can communicate with the firm’s chatbot based on the popular character used in its marketing campaigns and advertisements, *Flo*, via a call or instant message through Flo’s Facebook page.<sup>60</sup>

Insurers will connect with customers, individually, through connected devices, and the real-time data captured from these devices will be used to provide personalized offerings and value-added services. Insurers will move beyond traditional touchpoints to act as a constant risk-mitigation partner for customers.

*“Creating a digitally integrated ecosystem is important for delivering comprehensive and cost-effective customer journeys and for increased partnering to focus more on core competency/delivery.”*

—Vivi Gevelt, Senior Vice President, Claims, Storebrand

**Integration with partners:** Digital integration with partners will play a crucial role as insurers seek to increase their reach and provide customers with convenient and seamless services. Insurers should integrate with aggregators and intermediaries for distribution, with third-party vendors such as repair stores for efficient claims management and payout, and with OEMs for real-time customer data. Insurers can also explore non-traditional partners as did Lifenet Insurance Company in Japan, when it partnered with KDDI Corporation, one of Asia’s largest telecommunications providers, to distribute its insurance policies on KDDI’s channels through bundled products. This helped Lifenet increase its customer reach and also helped KDDI augment its service offerings to customers.<sup>61</sup>

Technologies such as APIs, cloud-based storage, and blockchain, can enable better integration of the insurance ecosystem by allowing seamless and secure transfer of data between diverse systems.

**Digitally-integrated processes:** Apart from external integration, firms must digitally integrate across the insurance lifecycle to streamline operations. Digitization and analytics can help support seamless hand-offs between processes and systems and break inter-departmental siloes. Real-time analytics can be leveraged to create hyper-efficient feedback loops that allow insurers to adapt or refine rapidly. The use of RPA and AI will enable smart core processes to manage real-time, personalized transactions throughout the value chain.

*“Only with an integrated ecosystem can insurers be ready to implement new models of interaction with clients and anticipate their needs.”*

—Santiago Villa Ramos, CEO, Generali España

60 *Friendly Agent Bot*, “10 InsurTech Chatbots and how they are making Insurance cool,” January 4, 2018, [https://www.friendlyagentbot.com/2018/01/04/10-insurtech-chatbot/?utm\\_content=buffer16d04&utm\\_medium=social&utm\\_source=twitter.com&utm\\_campaign=buffer](https://www.friendlyagentbot.com/2018/01/04/10-insurtech-chatbot/?utm_content=buffer16d04&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer), accessed March 2018.

61 *WIR 2018* Executive Interviews

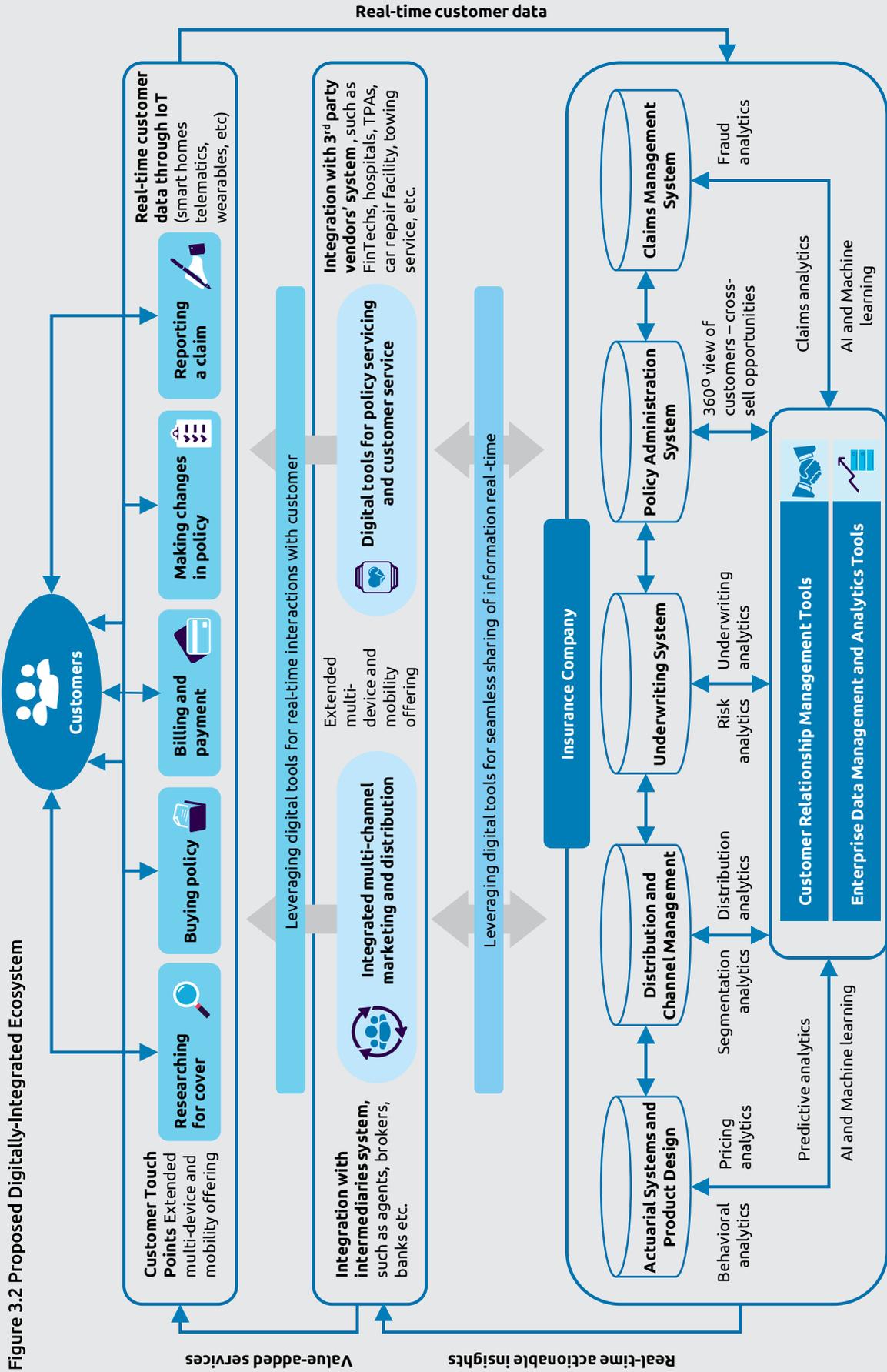


Figure 3.2 Proposed Digitally-Integrated Ecosystem

Source: Capgemini Financial Services Analysis, 2018

# Smart Mentoring through AI Helps Allianz Salesforce

Allianz France, a part of the global insurance and asset management company The Allianz Group, has more than five million customers, nearly 500,000 of which are corporates.<sup>62</sup> Like many insurance firms, Allianz France seeks to stand out in today's fiercely competitive market. With an eye on the future, the firm collaborated with a Paris-based tech innovator to develop and implement an artificial intelligence (AI) solution to help sales executives gain performance feedback based on real-time insight into the executives' customer interactions.

**Challenge:** Allianz sales executives wanted meaningful, objective sales preparation, mentoring, and analysis versus traditional training from instructors who merely applied standard sales methods and offered subjective assessments. Allianz France aimed to put a smart mentoring solution in place to develop the skills of advisors and tied agents (who represent Allianz) to boost customer satisfaction, generate word-of-mouth recommendations, and grow sales.

**Solution:** Allianz France partnered with ZTO Technology and leveraged Comscope, the startup's diagnostic and training tool that translates video and audio recordings of one-on-one interactions (interview, sales pitch, etc.) into qualitative variables.

The result was Allianz AI Smart Mentoring a solution that analyzes verbal expressions and body language in real-time during agent interactions with clients based on video

recordings and machine learning algorithms. Allianz AI Smart Mentoring delivers a personalized map of Allianz advisor/agent qualities as well as areas for improvement.

Allianz AI Smart Sales Mentoring uses AI algorithms and machine learning to deliver:

- Personalized and objective skills reports,
- A comprehensive and exhaustive analysis of various dimensions (verbal/nonverbal) of a client interview.

**Implementation:** Internal stakeholders from Allianz France (distribution, R&D, strategic planning, sales, tied agents, and advisors) worked closely with ZTO Technology to develop and implement the Allianz AI Sales Smart Mentoring solution within three months.

**Results:** To date, Allianz AI Smart Sales Mentoring has been used during 20 training sessions to instruct nearly 200 agents and advisors. Based on excellent satisfaction-rate feedback (9.3 out of 10), Allianz France plans to deploy the solution during new sales orientations throughout the country. The firm may also expand use of the solution to sales recruitment efforts and among all client-facing employees.

*Source: Capgemini Financial Services Analysis, 2018, Efma Database, accessed February 2018*

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62 Allianz website, <https://www.allianzglobalbenefits.com/countries/france.html/>, accessed April 2018

# Direct Seguros Taps Machine Learning to Optimize Revenue Opportunities

Madrid-based Direct Seguros specializes in telephone and online sale of automobile and motorcycle insurance. With more than 600,000 customers, Direct Seguros has developed a reputation as an innovator dedicated to individualized customer service and experience.<sup>63</sup> The company is part of the French multinational insurance conglomerate AXA.

**Challenge:** Direct Seguros wanted to transform its customer communication capabilities and digital resources to pursue new revenue opportunities without scalability constraints.

**Solution:** The company strategically decided to tap big data and omnichannel capabilities to personalize its contact center service and improve its operating model. The selected solution, GILA by Direct Seguros, exemplifies real-time data capture and real-time analytics working in sync through digitization.

GILA aims to capture real-time customer transaction information and to score each customer based on parameters—such as frequency of calls, navigation to website terms, or recent quote requests—to evaluate and prioritize leads. The technology combines the capacity to collect information in real time with computational velocity to drive results and orient users in two seconds or less. Based on a prospective customer's likelihood to buy and

potential for loyalty (as predicted by the algorithms), they are either directed to the website or to an agent. Machine-learning algorithms were, thus, used effectively to analyze customer profiles so that contact center service could be individually focused.

**Implementation:** The project was implemented in two phases. Phase I included the setup and preparation to enable real-time connection of the big data platform with CRM and web applications. Phase II was dedicated to achieving the use case for inbound and outbound sales service. Agile methodology was used during both phases—and Time Box (fixed schedule) and User Stories tools were leveraged to ensure timeliness and end-user (customer) satisfaction.

**Results:** GILA will help Direct Seguros reduce sales calls by 25% (by reorienting customer callers to online channels) with no impact in underwritten policies. Moreover, the value of new Direct Seguros' business is expected to rise by 17%. During the first three months, GILA generated new-business leads valued at EUR €110,000, with annual revenue estimated at EUR €550,000.

*Source: Capgemini Financial Services Analysis, 2018, Efma Database, accessed February 2018*

63 Direct Seguros website, <https://www.directseguros.es/sala-de-prensa/600000-clientes.html>, accessed April 2018

A digitally integrated ecosystem within and outside the organization will support real-time, personalized services that customers will increasingly demand in the future. Improved digital agility and a digitally-integrated ecosystem can benefit insurers' top- and bottom lines.

**Enhanced revenues and customer engagement:**

Digital agility and an integrated ecosystem can provide a significant boost to insurers' customer engagement and revenue growth by enabling greater insight into customer needs and improving time to market for innovations. New technologies enable innovative value-added services and analytics allow greater scope to leverage existing data to create new offerings or to target new customer groups. As traditional revenue models and insurer strongholds may face the threat of redundancy, digital tools and technologies can be used to explore new revenue sources and to plan future-ready portfolio expansion.

Insurers said the most important way in which digital agility and an integrated ecosystem can enhance revenues and customer engagement is improved ability to reach customers in a manner they prefer. (Figure 3.3)

**Operational efficiency and cost savings benefits:**

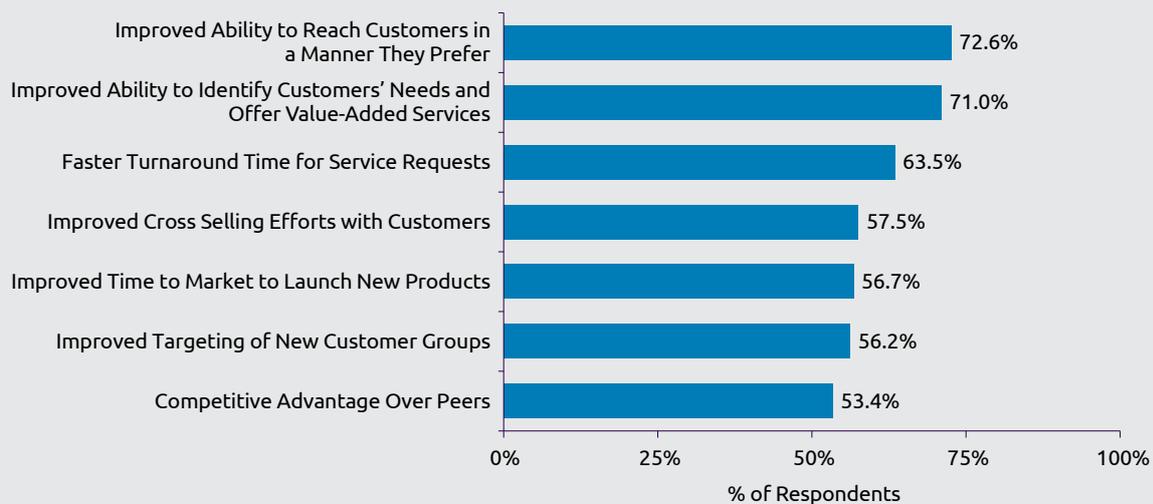
Digital agility and an integrated ecosystem will help insurers address increasing margin pressures

by enabling streamlined operations and optimized use of resources. A digitally-agile insurer with a digitally-integrated ecosystem is well positioned to operate efficiently through faster service-request turnaround times, increased staff productivity, and fewer resource requirements. RPA-based digitized processes enable higher operational efficiency and agility because they can be reconfigured as required with minimal disruption to the existing business. This can help insurers speedily comply with new regulations and adapt to changing requirements with less downtime penalties.

Insurers rated faster turnaround time for service requests as one of the top benefits of digital agility and an integrated ecosystem in terms of operational efficiency and cost savings. (Figure 3.4)

Fast-moving external market factors are upending the strategic plans of many firms. With change as the only constant, insurers can no longer rely on a single, static approach for the future. In a competitive environment where quick and decisive response to new challenges and opportunities can make or break a business, insurers must embrace the future through digital agility and by aligning with values that today's customers prefer.

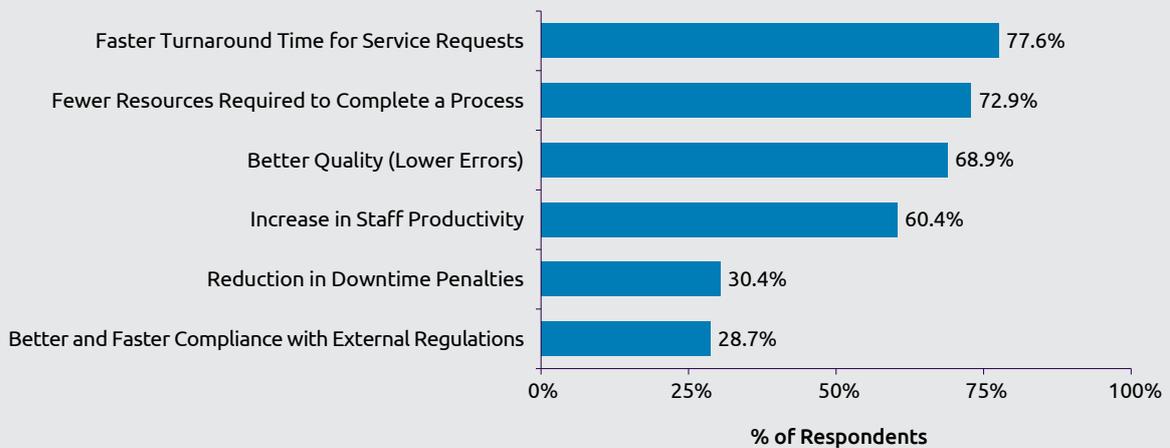
**Figure 3.3 Benefits of Digital Agility and Digitally-Integrated Ecosystem for Enhanced Revenues and Customer Engagement (%), 2018**



Question: To what extent do you agree with the following statements (Please rate on a scale of 1 to 7, where 1= Strongly Disagree and 7= Strongly Agree): We can achieve higher revenues and higher customer retention and acquisition by improving digital agility and creating a completely digitally integrated operating model due to the following factors; Only ratings 6 and 7 are shown in the chart

Source: Capgemini Financial Services Analysis, 2018; WIR 2018 Executive Interviews

**Figure 3.4 Benefits of Digital Agility and Digitally-Integrated Ecosystem for Operational Efficiency and Cost Savings (%), 2018**



Question: To what extent do you agree with the following statements (Please rate on a scale of 1 to 7, where 1= Strongly Disagree and 7= Strongly Agree): We can achieve operational efficiency and cost savings by improving digital agility and creating a completely digitally integrated operating model due to the following factors; Only ratings 6 and 7 are shown in the chart

Source: Capgemini Financial Services Analysis, 2018; *WIR 2018* Executive Interviews

# Methodology

## cope and research sources

*The World Insurance Report (WIR) 2018* covers all the three broad insurance segments—life, non-life, and health insurance. This year's report draws on research insights from two primary sources – 2018 Global Insurance Voice of the Customer Survey and 2018 Global Insurance Executive Interviews. These primary research together cover insights from 26 markets: Australia, Belgium, Brazil, Bulgaria, Canada, China, France, Germany, Hong Kong, India, Italy, Japan, Korea, Mexico, the Netherlands, Norway, Pakistan, Poland, Portugal, Singapore, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, and the United States.

## 2018 Global Insurance Voice of the Customer Survey

A global survey of customer behavior toward insurance forms the basis of the eleventh-annual *World Insurance Report*. Our comprehensive Voice of the Customer Survey, which was administered in January and February 2018, in collaboration with Phronesis, polled more than 10,000 insurance (personal lines) customers

in 20 countries. The survey sought to gain deep insight into customer preferences, expectations, and behaviors with respect to specific types of insurance transactions. The survey questioned customers on their general satisfaction with their insurer, the importance of specific channels (including digital channels such as internet, mobile, and social media) for executing different types of transactions and their satisfaction with those transactions, among other factors. Participants were also asked questions around factors that influence their decision to choose or stay with their current insurer, their willingness to receive proactive services from their insurer, and their perception of BigTech firms and firms in other industries.

## 2018 Global Insurance Executive Interviews

The *WIR 2018* also includes insights from focused interviews of over 130 senior insurance executives of leading insurance companies across 22 markets. These markets together represent all the three regions – Americas (North America and Latin America), EMEA (Europe, Middle East, and Africa), and Asia-Pacific (including Japan).

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