

WORLD INSURANCE REPORT 2017



Table of Contents

Preface	3
Gazing into the InsurTech Kaleidoscope	4
Digital Collaboration Redefines Insurance	6
Key Findings	7
The Rise of Digital in Insurance	8
Is Digital Changing the Competitive Landscape?	10
Collaboration is an Effective Way Forward	11
Conclusion	15
Navigating the Innovation Conundrum	16
Key Findings	17
InsurTech Capabilities Put Insurers on New Trajectory	18
Emerging Technologies Act as Catalysts for the InsurTech Revolution	18
Defining Priorities to Steer the Future	21
The Way Forward	33
About Us	34
Acknowledgements	35

Preface

Introducing the 2017 World Insurance Report

The insurance industry is on the brink of a greater change today than ever before. Unlike its peripheral role in the past, technology today is transforming every aspect of the insurance business, changing not only the external market dynamics but also the internal revenue and operating models. And unlike before, the industry is being rapidly inundated by a range of new technologies and innovations, making it imperative for insurers to design a balanced strategy that ensures returns from their investments in innovation without a loss of focus.

Our 2017 World Insurance Report (WIR) draws upon Capgemini's Voice of the Customer survey to track changing consumer preferences when it comes to their insurance transactions. We found that digital is becoming integral to the insurance customer experience, especially within the highly-prized segments of Generation Y¹ and the tech-savvy. In fact, digital or digitally-enabled features are increasingly defining the top customer Moments of Truth, which are those instances when customers form or change an impression about their insurer due to an interaction. Nimble InsurTech firms² are able to innovatively meet these preferences and are gaining traction among customers. However, incumbent insurers carry their own strengths of trust, brand and security in the eyes of the customer. Thus, incumbent and InsurTech firms are increasingly discovering that collaborating together offers a win-win path forward.

InsurTech capabilities will play a crucial role for success in this new reality and a majority of insurers believe it will help them better serve customers and meet their evolving demands. Emerging technologies, such as artificial intelligence (AI) and connected devices, are acting as pillars for the development of InsurTech capabilities and are driving myriad innovations in digitization, data and analytics, and insurance-as-a-utility.

Faced with this plethora of innovation opportunities, it becomes important for insurers to not only invest in innovation but invest correctly. In our spotlight, Navigating the Innovation Conundrum, we provide a framework to help insurers analyze and prioritize their investments in line with their own strategic priorities as they begin to embrace the InsurTech revolution.

The continued reliance of consumers on digital technologies that support mobile apps, social networking, on-demand services and the like makes it clear that the mass market has entered a new phase. Any industry seeking to serve the masses must now adapt to new terms of engagement. Keeping all these factors in mind, our 2017 World Insurance Report aims to make it easier for insurance companies to develop a comprehensive InsurTech strategy. We hope you find it useful.



Thierry Delaporte
CEO, Capgemini (FS SBU)



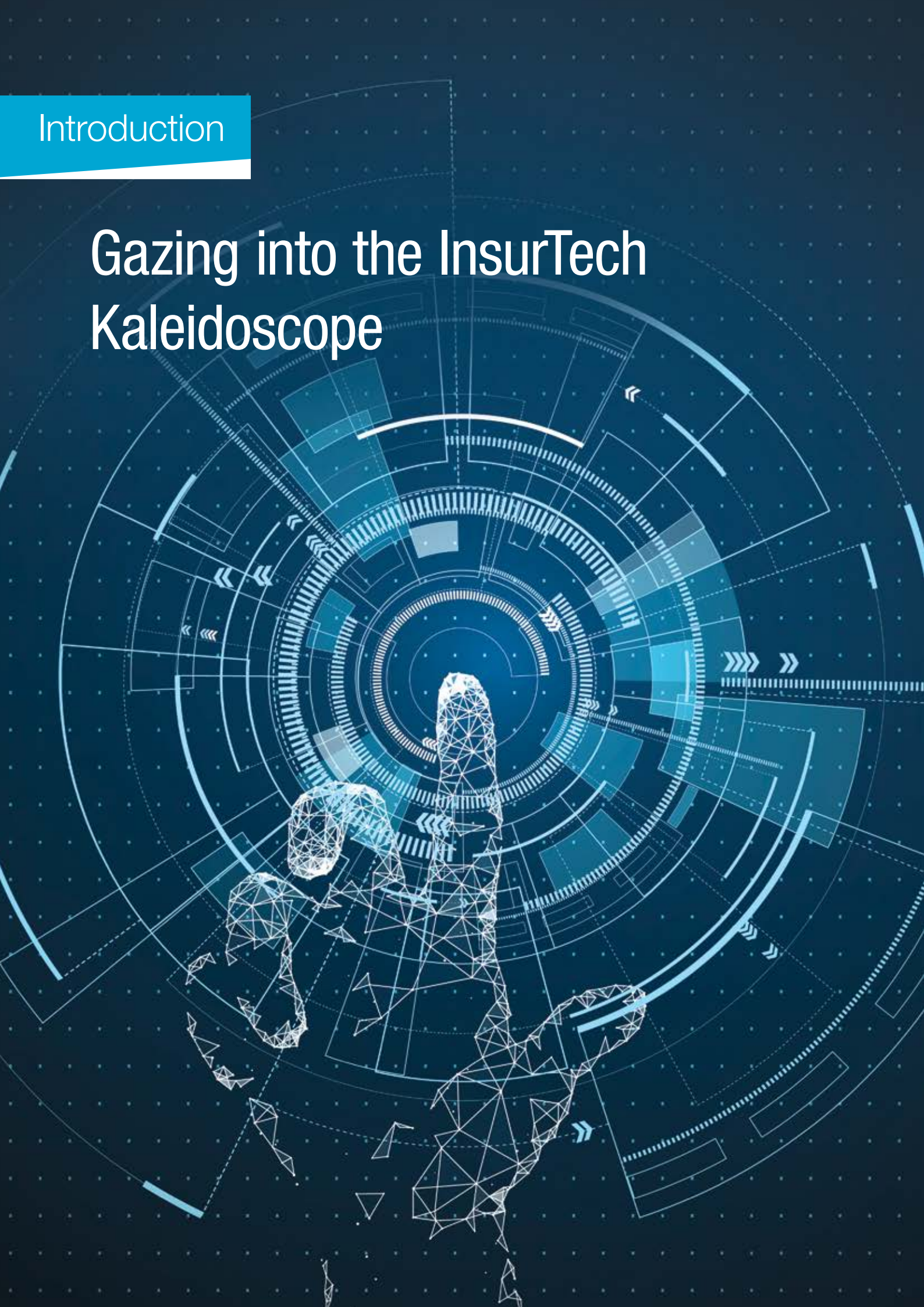
Vincent Bastid
Secretary General, Efma

¹ Gen Y refers to people aged 15 to 34; Only customers aged 18 to 34 (born between 1983 and 1999) were surveyed in the VoC survey and therefore reflect the Gen Y customers for the purpose of this document, while non-Gen Y customers are those aged 35 and above

² In the context of this report, 'InsurTech' refers to the technology-based capabilities that have specific application in insurance, whereas 'InsurTech firms' refers to new firms with offerings based on InsurTech capabilities, that are less than five years old and have a relatively small but growing customer base

Introduction

Gazing into the InsurTech Kaleidoscope



One of the most potent disruptors faced by the insurance industry today is the phenomenon of InsurTech. In an industry that has generally been famous for its resistance to change, InsurTech is creating waves that can no more be ignored and insurers are now actively exploring a variety of exciting opportunities presented by InsurTech. However, in doing so, there is a danger of getting lost in the maze of innovations and not really gaining the results envisioned. Thus, it is imperative for insurers to plan a focused strategy for innovation that can truly benefit them.

The 2017 World Insurance Report offers a framework for navigating this innovation conundrum by leveraging insight from more than 8,000 customers and more than 100 global industry leaders and subject matter experts.

Insurers can use these insights to:

- **Understand evolving customer preferences**
 - Customers increasingly prefer to access digital touchpoints during interactions with insurers and are increasingly comfortable using services from InsurTechs, especially those that provide positive experiences in digital transactions deemed important.
- **Navigate changing industry dynamics**
 - Initially viewed as competitors, InsurTechs have emerged as natural partners to insurers, given their complementary strengths. InsurTechs and incumbents are now exploring partnerships.
- **Identify key emerging technologies for investment**
 - Insurers are being bombarded by an array of new technology, including connected ecosystems, wearables, artificial intelligence, blockchain and more—all of which have the potential to disrupt current business models. Companies must prioritize their investments and have so far identified advanced analytics, robotic process automation, artificial intelligence and connected devices as the hottest technologies.
- **Address the innovation conundrum**
 - Emerging technologies are driving numerous innovations in three categories: data and analytics to enhance customer engagement, digitization to improve efficiency (including cost optimization), and insurance-as-a-utility to stimulate new revenue streams. Insurers should evaluate each innovation category by how well it aligns with their specific strategic priorities.

Now is the time to tap into InsurTech momentum. The analyses and frameworks presented in the 2017 WIR provide insight about how to capitalize on some of the biggest technology-based opportunities.

Chapter 1

Digital Collaboration Redefines Insurance



Key Findings

Driven by the steady advance of consumer technology and evolving customer expectations, digital technology, once a peripheral enabler, is now central to insurers' strategies.

- Emerging digital technologies, such as sensor-based wearables and the Internet of Things (IoT), are altering consumer behavior, driving a need to reinvent insurance offerings.
- Digital interactions are highly valued by customers, especially Gen Y and the tech savvy, who ranked the computer as the most important touchpoint for their insurance transactions.
- Young and tech-savvy customers represent important segments in terms of incremental revenue potential, with 36.2% of Gen Y customers and 42.1% of tech-savvy customers saying they are likely to buy another product (compared to 29.1% of non-Gen Y customers and 19.7% of the non-tech-savvy).
- However, these segments are also more vulnerable to attrition, with only 48.6% of Gen Y customers (compared to 55.0% of older customers) saying they are likely to stay with their existing firms, and 51.3% of the tech-savvy saying so (compared to 54.7% of the non-tech savvy).
- Building and maintaining relationships with young and tech-savvy customers will require insurers to cater to their clear preference for digital touchpoints.

Digital technology advancement is also altering the competitive landscape by raising the profile of InsurTech players and driving the industry down a path of disruptive innovation.

- InsurTechs are becoming integral to the insurance experience, with nearly one-third of customers globally (31.4%) saying they use them exclusively or in combination with incumbent firms to fulfill their insurance needs.
- InsurTechs have also been successful in delivering better experiences on key digital interactions of importance to customers, such as instant claims notification and access to innovative and customized products.

However, traditional insurers hold an advantage regarding trust.

- Nearly 40% of customers (39.8%) say they trust their insurers, compared to only 26.3% for InsurTechs.
- In addition to trust, insurance firms enjoy better brand recognition, superior technical knowledge of the insurance business and economies of scale.

With strengths that fall into different areas, collaboration between InsurTechs and traditional insurers is becoming a natural progression.

- InsurTechs and incumbent insurers have complementary strengths, with InsurTechs offering better value for money and timely and efficient service, and insurers offering superior security, brand identity, and support for personal interaction.
- By combining their strengths, insurance firms and InsurTechs will be positioned to create personalized and compelling customer offerings.
- Collaboration also allows each to address specific internal and external challenges.
- In exploring different ways of working together, most insurers favor partnering with InsurTech firms over acquisition or in-house development.

The Rise of Digital in Insurance

Global insurers are unparalleled in their ability to assess and manage risk, having fine-tuned their underwriting expertise over decades. Now a new wave of technology from consumer-focused firms is forcing them to alter long-held business practices. Insurers must now navigate a flood of new technologies, which range from wearable devices to driverless cars and are expected to be taken up by a large number of consumers in coming years. As these technologies briskly advance, insurers must develop strategies that take full advantage of the opportunities they present, while minimizing the risks.

“

“We currently live in world of constantly evolving technology. If you (insurance firms and technology providers) don’t adopt, you will become Dinosaur” – Alfred Goxhaj, CIO, SOMPO International

”

The range of technologies expected to influence insurance business models is broad. Wearable devices tracking everything from vital signs to sleep, and telematics monitoring personal driving styles are introducing reams of new data pertinent to risk assessments and premium calculations. Similarly, advanced medical technology is making healthcare more proactive and reliable, changing the metrics by which insurers assess health. Further, as the data generated by these advances become connected via the Internet of Things, the amount of insight that can be developed from the data grows powerful. On the back

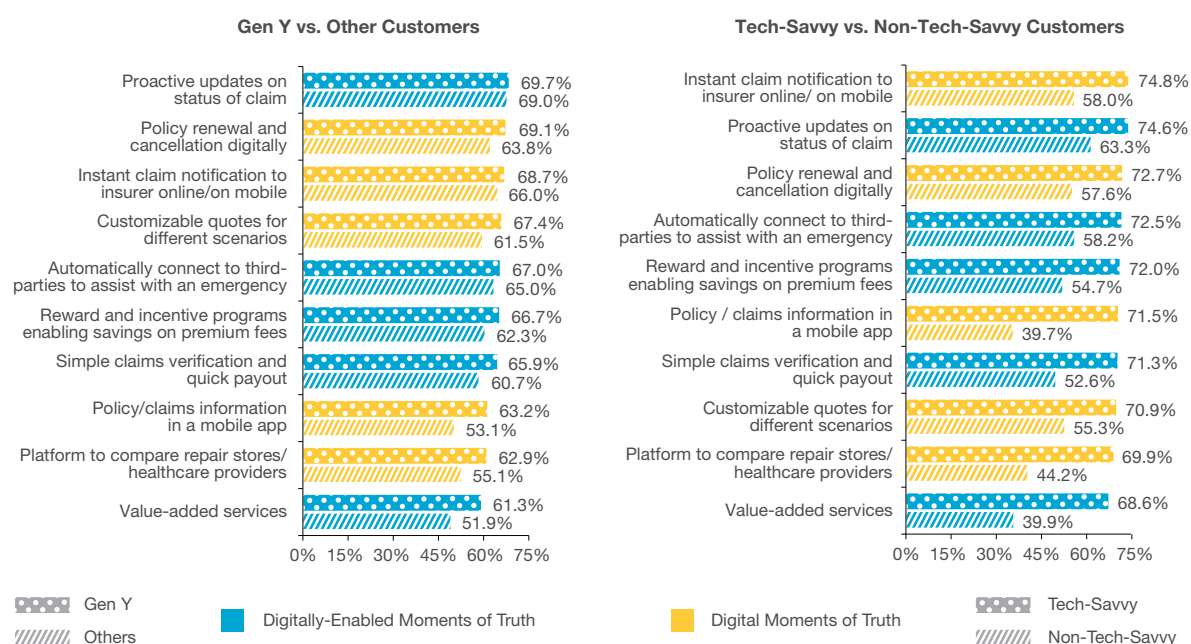
end, insurers can use increasingly advanced tools to quickly analyze volumes of data coming from various sources and drive actionable insights in real time. Other back-end benefits include the use of robotic process automation, which is ideal for handling insurers’ many rules-based and repetitive administrative tasks.

Insurers are motivated to take advantage of digital technology. Margin pressure is building as competition from new entrants and incumbents heats up, and as regulations become more stringent. Insurers know they must get better, not only at finding efficiency and economy but at connecting with customers and winning their loyalty.

Today’s younger-generation customers want to be reached in the manner they prefer. Hence, the key to attracting new customers is the ability to respond to their growing demands for digital touchpoints. Young and tech-savvy customers, important segments because of their potential impact on profitability, place high importance on digital transactions, according to our analysis of Moments of Truth (Figure 1.1).

Nearly three-quarters (74.8%) of tech-savvy customers, for example, place importance on the ability to send claim notifications to insurers online or via mobile, compared to only 58.0% of the non-tech savvy. Similarly, nearly 70% (69.1%) of Gen Y customers value the ability to digitally renew or cancel policies, compared to 63.8% for other customers. A closer look at our Moments of Truth findings reveals that preferences of Gen Y and non-Gen Y customers are

Figure 1.1: Importance of Top-10 Moments of Truth (%), 2016



Source: Capgemini Financial Services Analysis, 2017; Capgemini and LinkedIn WFTR, 2017

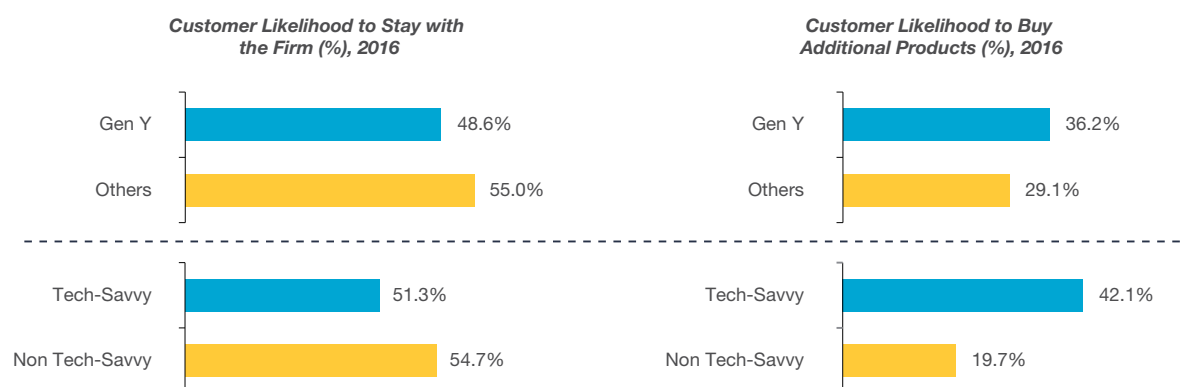
more closely aligned than those of the tech savvy and non tech savvy, indicating that the habits and ideals of the younger generation are starting to become the norm for other age groups as well. As the proportion of younger and tech-savvy customers continues to rise, their preferences will gradually become mainstream.

Not only do the young and the tech savvy represent the future, but they also stand to provide insurers with greater revenue opportunities and challenges. Well over one-third of Gen Y customers (36.2%), for example, say they are likely to buy another product, compared to 29.1% of non-Gen Y customers. And more than twice as many tech-savvy customers (42.1%) say they are likely to buy another product over the non-tech savvy (19.7%). However, sales to these customers are not guaranteed as both are also more susceptible to attrition. Both segments say they are significantly less

likely to stay with their current firms, compared to their counterparts, probably because their experiences are not meeting expectations (Figure 1.2).

Cracking the code on the young and tech savvy will require insurers to make digital channels a centerpiece, not a sideline, of their offerings. According to the World Insurance Report (WIR) 2016, customers of all types are more likely to turn to a PC (33.2%) to access their insurer at least once a month, rather than an agent (30.6%). Digital channels (including PC, mobile and social media) are only expected to become more important, with 27.5% of customers saying they expect to use them over the next 12 months to purchase or renew an insurance policy, up from 19.3% at the time of the survey.

Figure 1.2 Customer Likelihood to Stay and Buy Additional Products (%), 2016



Source: Capgemini Financial Services Analysis, 2017; Capgemini and LinkedIn WFTR, 2017

Insurers understand where the future is headed and are steadily making changes aimed at meeting customers' higher expectations for digital engagement. Wide-ranging examples include:

- Aviva offers a free app that monitors and scores driving skills, awarding safer drivers greater savings on auto insurance policies.³
- Allstate's QuickFoto Claim lets policyholders send in pictures of their damaged vehicles and receive estimates electronically, saving them the trouble of visiting a repair shop or adjuster for auto claims.⁴
- Meiji Yasuda Life Insurance has distributed 30,000 Windows tablets to its sales force to better explain its products through video and other content.⁵
- United Healthcare customers can pay their medical bills electronically through the firm's myClaims Manager website, which also displays claims and benefits information, including the status of deductible and out-of-pocket spending.⁶
- Aetna uses Twitter to address customer concerns and queries, supplementing it with phone communication when necessary to protect privacy.⁷

3 Take the Aviva Drive challenge, accessed April 2017 at <https://www.aviva.co.uk/car-insurance/drive/>

4 "Start Your Claim In A Snap", accessed April 2017 at <https://www.allstate.com/claims/quick-foto-claim.aspx>

5 "Japanese Insurer Adopts Windows Tablets", Nathan Golia, InsuranceTech, August 07, 2013, accessed April 2017 at <http://www.insurancetech.com/channels/japanese-insurer-adopts-windows-tablets/d/d-id/1314697?>

6 "UnitedHealthcare's New Online Service Lets Consumers Pay Their Medical Bills Online and Better Manage Health Care Expenses", accessed April 2017 at <http://www.instamed.com/news-and-events/unitedhealthcares-new-online-service-lets-consumers-pay-their-medical-bills-online-and-better-manage-health-care-expenses/>

7 "Aetna, I'm Glad I Met Ya!" — On Twitter", Ankita Rao, August 09, 2013, accessed April 2017 at <http://www.npr.org/sections/health-shots/2013/08/09/210474766/aetna-im-glad-i-met-ya-on-twitter>

Is Digital Changing the Competitive Landscape?

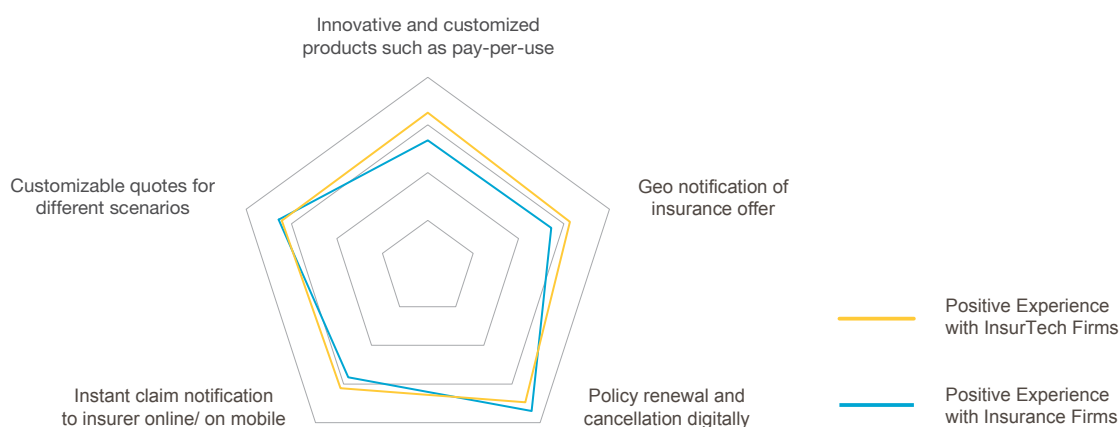
The cheaper, more powerful technology that helped spur the FinTech revolution in the broader financial services industry is also impacting the insurance industry. As with FinTechs, a growing cadre of InsurTech firms is not only carving out viable businesses but helping to push the entire industry down a path of disruptive innovation. The advances being pushed by InsurTechs cover a broad spectrum:

- The auto insurance comparison site EverQuote provides a short list of companies for consumers to choose from, based on how individual profiles match up against the buying patterns of existing customers.⁸
- Aggregator apps such as FinanceFox⁹ and Brolly¹⁰ provide a one-stop platform for viewing and managing all of a customer's policies.
- Bright Health relies on consumer-friendly digital technology and small networks of providers to simplify the healthcare experience. It monitors customer health by smartphone and bestows rewards for positive behavior.¹¹

- Trov provides on-demand insurance for individual items, such as electronics like laptops, cameras and mobile phones. Choosing policies and making claims are all handled via smartphone.¹²
- The web-based insurance agency Fabric targets new parents with a life insurance product they can purchase in two minutes via their mobile phone or computer.¹³

InsurTech innovations dovetail with the growing desire and comfort level customers have for digital interaction with insurers. Nearly one-third of customers globally (31.4%) say they use InsurTechs exclusively or in combination with incumbent firms to fulfill their insurance needs, with the percentage being highest (37.5%) in Asia-Pacific. Further, once InsurTechs attract customers, they do a good job of delivering positive experiences along the most important Moments of Truth. InsurTechs performed better than incumbent firms, for example, in providing instant claim notifications; developing innovative and customized products; and using geo notification (Figure 1.3).

Figure 1.3 Comparison of Positive Experience with Insurance and InsurTech Firms for Digital Moments of Truth (%), 2016



Source: Capgemini Financial Services Analysis, 2017; Capgemini and LinkedIn WFTR, 2017

Traditional insurance firms, however, have their own strengths. For one, they have the advantage in customer confidence, with nearly 40% of customers (39.8%) saying they trust their insurance companies, compared with 26.3% for InsurTechs. These broad

differences between InsurTechs and incumbents have helped set the stage for collaboration. In the next section, we examine the strengths that each side offers.

8 "EverQuote breaks mold of youthful startup", Callum Borchers, May 25, 2015, accessed April 2017 at <https://www.bostonglobe.com/business/2015/05/24/everquote/aYNGil7M7s5EZMpmImPyQQ/story.html>

9 FinanceFox Website, accessed June 2017 at <https://www.financefox.us/>

10 Brolly Website, accessed June 2017 at <https://www.heybrolly.com/>

11 "Bright Health is a smarter, more connected healthcare experience.", accessed April 2017 at <http://www.brighthealthplan.com/#welcome-to-bright-health>

12 "Trov, the world's first on-demand insurance for single items, launches in the UK", November 22, 2016, accessed April 2017 at <http://www.prnewswire.com/news-releases/trov-the-worlds-first-on-demand-insurance-for-single-items-launches-in-the-uk-300367472.html>

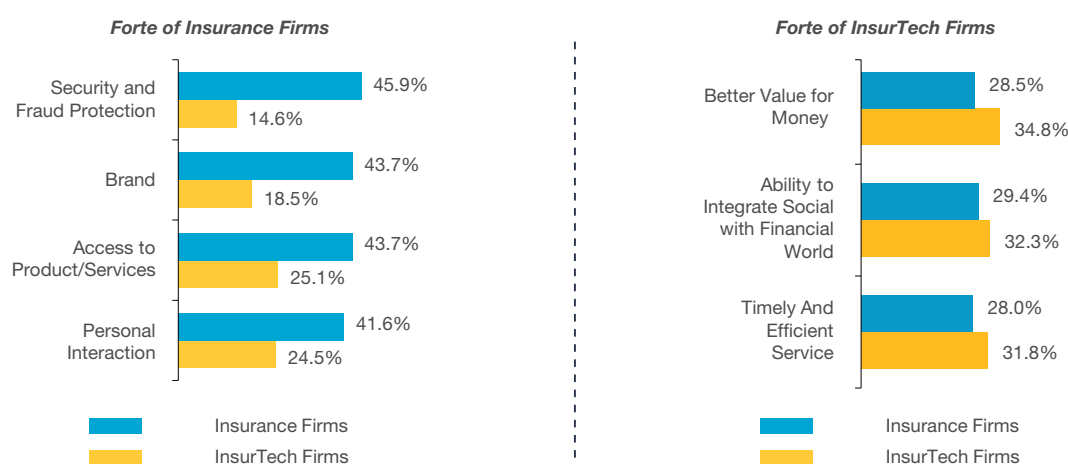
13 "Online insurer Fabric launches life coverage for New York parents", Suzanne Barlyn, Reuters, May 23, 2017, accessed June 2017 at <http://www.reuters.com/article/us-new-york-insurance-fabric-idUSKBN18J1H7>

Collaboration is an Effective Way Forward

InsurTechs, like FinTechs in the broader financial services sector, were initially perceived as competitors to incumbent institutions. When it comes to meeting customer expectations, however, InsurTechs display specific strengths that complement insurance firms. InsurTechs offer better value for the money than incumbents, integrating social networking and financials, and providing timely and efficient service,

customers say (Figure 1.4). Meanwhile, in addition to their customer trust advantage, insurance firms excel in security and fraud protection, strong brand recognition, access to products and services, and supporting personal interaction. Given that their strengths span different categories, collaboration between InsurTechs and traditional insurers is a natural fit.

Figure 1.4 Customer Value Perception for Insurance and InsurTech Firms (%), 2016



Source: Capgemini Financial Services Analysis, 2017; Capgemini and LinkedIn WFTR, 2017

Collaboration also helps both insurers and InsurTechs address specific challenges they face. Insurers have been handcuffed by aging systems and paper-based processes that slow critical functions like underwriting, claims management and on-boarding. To improve risk underwriting and support enterprise-level decision making, insurers need to take steps to integrate information stored in siloed systems. And given that claims management is the most critical Moment of Truth for customers, insurers must make the process both swift and painless. They also must impress customers with more up-to-the-minute technology during the on-boarding process.

Insurers also face external pressures, such as more stringent regulations, intensifying competition and increasingly demanding customers. Legacy systems' modification to accommodate regulatory demands has been hugely expensive. Insurers also feel the pinch of competition, driving them to seek greater efficiency and speed to market, while simultaneously trying to improve their standing among customers. InsurTechs can help traditional firms address these challenges by injecting new technology and a fresh approach into both back-end and customer-facing processes.

The benefits of partnering go both ways, as incumbents can help InsurTechs face the many challenges they face as newcomers to the industry. InsurTechs face high customer-acquisition costs because they lack existing customer bases and brand awareness. Perhaps most important, they lack credibility and trust in an industry that revolves around both. And while InsurTechs may be experts in harnessing new technology, they have little know-how when it comes to mainstay tasks like managing risk or navigating regulations. Nor do they have large capital reserves for scaling up the business.

Given the many benefits of collaboration, insurers and InsurTechs are exploring various ways to work together:

- **Venture Capital Investments** – One popular way of collaborating is to establish an investment arm to make investments or take equity positions in InsurTechs. Some of these include XL Group's XL Innovate¹⁴, Allianz Ventures¹⁵, and the \$100 million MassMutual Ventures¹⁶ fund.
- **Strategic Partnerships** – Some insurers are exploring partnerships aimed at leveraging InsurTech strengths. AXA, for example, is making its insurance

14 "XL Group Creates New Venture Capital Initiative: XL Innovate", XL Catlin Website, April 1, 2015, accessed June 2017 at <http://xlcatalin.com/insurance/news/xl-group-creates-new-venture-capital-initiative>

15 Allianz Website, accessed June 2017 at https://www.allianz.com/en/about_us/strategy_values/allianz-ventures/

16 "Insurtech: Disruptions and Opportunities in the Insurance Industry", Anik Sen, Dennis Lam, October 6, 2016, accessed June 2017 at <https://www.pinebridge.com/insights/investing/2016/10/insurtech-disruptions-and-opportunities-in-the-insurance-industry>

available throughout Asia via a variety of Alibaba e-commerce platforms, including Ant Financial,¹⁷ while Allianz is working with Simplesurance to offer its products via hundreds of online shops and portals popular throughout Europe.¹⁸

- **Incubators** – Incubators provide budding entrepreneurs with infrastructure, resources, and mentorship to build their ideas. Some development labs, such as AXA's Kamet, invite outside entrepreneurs to work alongside company employees in building new business models.¹⁹ Allianz's AllianzX sponsors a 100-day Entrepreneur-in-Residence program in which entrepreneurs develop and market a new business idea from scratch, taking advantage of company resources.²⁰
- **In-house Incubators** – Some firms seek to establish incubators by staffing them with dedicated in-house innovation experts, many with backgrounds at start-ups or outside the industry. Some examples are MetLife's LumenLab and Manulife's Lab of Forward Thinking.²¹

- **Acquisitions** – Insurers can also consider acquiring an InsurTech firm, as Allstate did when it purchased SquareTrade, a provider of insurance to protect consumer electronic devices such as mobile phones, laptops and tablets.²²

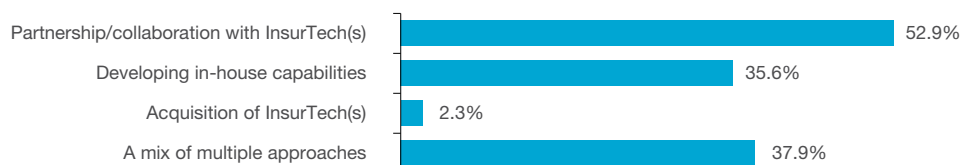
While many firms are open to exploring multiple approaches, partnership is the preferred mode of InsurTech collaboration.

“As Cardif Vita's (BNPP Group) Co-Managing Director Fabio Pittana said, “The way of partnership is the best way to innovate.”

Indeed, 52.9% of insurers say they would like to partner with InsurTechs, compared to 35.6% that say they would rather develop in-house digital capabilities. (Figure 1.5)

Partnerships allow each side to bring their best to the table, without going through the pain of actually meshing two distinct cultures.

Figure 1.5 Insurers' Approaches to Leverage Digital Technologies (%), 2017



Source: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

“Collaboration is effective without ‘culture crunch’,” noted Frédéric de Courtois, CEO Global Business Lines & International at Generali. “Business is on-boarded easily as there’s a common interest and everyone keeps their core competence.”

For many firms, a mix of approaches helps to ensure that no opportunity is overlooked. 37.9% of firms said they are considering a combination of partnering, in-house development and acquisition to get up to speed in digital technology.

“As indicated by QBE Insurance Head of Strategy and Architecture Andy Hopkins who says, “We have allocated budget to invest in InsurTech firms while at the same time utilizing an innovation lab that has been set up in Wisconsin.”

Acquisitions alone, however, do not hold great appeal for insurers, with very few (2.3%) citing them as their favored approach.

¹⁷ “AXA, Alibaba and Ant Financial Services announce global strategic partnership”, AXA Media Relations, AXA, July 29, 2016, accessed April 2017 at <https://www.axa.com/en/newsroom/press-releases/axa-alibaba-ant-financial-services-announce-global-strategic-partnership>

¹⁸ “Berlin-based InsurTech startup distributes Allianz products in Europe”, Petra Krüll, Allianz, June 20, 2016, accessed April 2017 at https://www.allianz.com/en/press/news/financials/stakes_investments/160620_allianz-cooperates-with-simplesurance/

¹⁹ “AXA launches Kamet, a €100m InsurTech incubator”, AXA Media Relations, AXA, September 7, 2015, accessed April 2017 at <https://www.axa.com/en/newsroom/press-releases/axa-launches-kamet>

²⁰ “Develop and market an idea from scratch in 100 days”, accessed April 2017 on <https://www.allianzx.com/for-entrepreneurs/>

²¹ “Insurtech: Disruptions and Opportunities in the Insurance Industry”, Anik Sen, Dennis Lam, October 6, 2016, accessed June 2017 at <https://www.pinebridge.com/insights/investing/2016/10/insurtech-disruptions-and-opportunities-in-the-insurance-industry>

²² “What Is SquareTrade and Why Did Allstate Buy It?”, Mark P. Cussen, Investopedia, December 1, 2016, accessed April 2017 at <http://www.investopedia.com/articles/insurance/120116/what-squaretrade-and-why-did-allstate-buy-it.asp>

Asian Insurer Jumpstarts Innovation

AIA, one of the leading providers of life insurance in the pan-Asian market, wanted to be a pioneer in the next generation of corporate innovation and create opportunities for innovators in the health insurance space. So it started an accelerator program to give it exposure to high-potential start-ups with expertise in its areas of interest. The first accelerator program received over hundred applications, of which around 30 were shortlisted and 8 selected. The program aims to combine the deep resources and execution expertise of an established player with the creativity and spark of startups to develop a conducive environment for innovation.

The program is orchestrated mainly by AIA's innovation team, called Edge, while other departments also participate in the form of mentorship and by connecting with the start-ups to share use cases and applications. The program begins with a pitch day where applicant start-ups are evaluated and the final list selected. This is followed by the orientation day which marks the beginning of the 12-week incubation period. The program then concludes with a demo day. In addition to gaining front-door access to potential business-line customers within AIA, the startups enjoy networking opportunities with investors, fellow entrepreneurs, and AIA's partners, which include Amazon, Hong Kong Science and Technology Parks Corporation, InvestHK, and Microsoft.

AIA benefits by getting front-row access to a wide variety of disruptive technologies that can help it drive product development and benefit customers. It also is achieving its goal of educating its employees about the power of emerging technology. Through its accelerators, AIA has been able to quickly generate potential solutions to some of the firm's most pressing problems. In its most recent accelerator, for example, it sought solutions that could energize and empower insurance specialists to deliver great customer experiences. It also asked for solutions that could improve the quality of sales leads and product recommendations. Finally, it wanted solutions to encourage and reward healthy behaviors among its customers. Simply putting out these requests generated a raft of ideas from forward-thinking companies.

Through the accelerator program, startups have succeeded in raising their profiles and significantly increasing their valuations. For its part, AIA has not only benefitted from the fresh thinking and insights of tech-driven firms, but also reshaped its image as an innovative company.

Source: Efma Innovation sources – 2017

Aviva, the 300 Years Old Insurance Company is Going Through a Digital Transformation

Aviva may be more than 300 years old, but that does not stop it from being on par with industry newcomers in being a digital innovator. Among its many digital initiatives, the global insurer -- with operations in 16 markets throughout the UK, Europe, Asia and Canada, and serving about 33 million customers -- launched 3 Digital Garages (London, Singapore and Toronto) to experiment, explore and test the insurance models of the future. The company has also established a corporate venture capital fund and aims to invest 100 million pounds by 2020 to support start-ups operating in 4 business areas: Internet of Things, data analytics, improvement of the customer experience and distribution systems.

Aviva took several steps to boost the flow of ideas and one such initiative is the Aviva Digital On program. In 2015, it started a partnership with PoliHub, an incubator managed by the Politecnico Foundation of Milan, to seek ideas that would support its multiple goals: building its reputation as a digital innovator, meeting customer needs in an increasingly digital marketplace, and improving its capabilities in process development so it could more easily adopt and integrate new technology.

To jumpstart the flow of ideas, it trained employees on how to identify opportunities and encouraged them to continuously test new ways of doing things. It took care to recognize and reward all good ideas, not only the best ones. And in a rather unique move, it sought input from non-insurance players to broaden the diversity of ideas.

In just two months, Digital On collected ideas for nearly 60 projects. A jury consisting of university professors, Aviva top management and technology partners chose three winning ideas, which will be evaluated for Aviva's future planning and development. Aviva is continuing its collaboration with PoliHub and plans to launch the Aviva Customer Innovation Award by the end of 2017.

Source: Efma Innovation sources – 2017

Conclusion

Insurers and InsurTechs have much to gain and little to lose by working together. There is no stopping the wave of technology priming consumer expectations - so insurance providers of all stripes must step up their game. The highest priorities for traditional insurers must be to stimulate more innovative cultures and put digital practices first. And the best way to achieve those goals is to recognize the value of collaboration and to embrace it through leadership acceptance and support. By regarding InsurTechs as partners rather than competitors, incumbents can benefit from early access to disruptive technologies, giving them first-mover advantage. Meanwhile, InsurTechs that work with insurers can leverage the expertise and resources of incumbents, setting the stage for scale and growth. Many leading insurers, such as AXA, Allianz, and XL Catlin, are already collaborating, investing, or partnering with InsurTech firms.²³

Collaboration will play a particularly crucial role in helping insurance as well as InsurTech firms address the growing importance of digital. Digital is rapidly defining the Moments of Truth for Gen Y and tech-savvy customers.

A closer look identifies three common themes underpinning the top Moments of Truth for these customer segments: Convenience, Agility and Personalization (CAP). Customers want to conduct seamless transactions that are accessible anywhere and at any time. They also demand products and services that are highly customized to their needs and that rapidly adapt to changing situations. Insurers would be hard put to fulfill these demands without the power of digital.

Figure 1.6 Conclusion



Source: Capgemini Financial Services Analysis, 2017; Capgemini and LinkedIn WFTR, 2017

Customers, especially the young and tech savvy, are not expected to back down in their demand for better service. Insurers must put Convenience, Agility, and Personalization (CAP) at the center of their efforts to deliver Moments of Truth, in keeping with the attributes

of service that customers prize most. Ultimately, the insurers who collaborate most effectively to leverage digital technology and provide CAP will likely be the most successful in driving profitable growth.

23 "Success factors for InsurTech / incumbent partnerships", Michael Fitzgerald, Digital Insurance Agenda, April 21, 2017, accessed May 2017 at <http://www.digitalinsuranceagenda.com/93/success-factors-for-insurtech--incumbent-partnerships/>

Chapter 2

Navigating the Innovation Conundrum



Key Findings

The deployment of emerging technologies in insurance, or InsurTech, is transforming the insurance process from beginning to end, delivering significant benefits to both customers and insurers.

- Insurers overwhelmingly agree (75.0%) that developing InsurTech capabilities will help them better meet customers' evolving demands.
- They also strongly agree (52.7%) that InsurTech capabilities will help them design personalized products and do so quickly.

Insurers are prioritizing their investments on InsurTech capabilities that are easily integrated with existing systems and processes and have potential to affect the whole value chain.

- A majority of insurers (82.8%) cited advanced analytics as the industry's most important emerging capability.
- More than 60.0% of insurance executives indicated that artificial intelligence, connected devices and robotic process automation (RPA) were very important emerging technologies.
- Advanced analytics and RPA are the leading investment priorities, with more than 79.0% of the industry estimated to be already making investments in these capabilities. Over 40.0% of the industry is expected to invest in artificial intelligence, robo-advisors, and blockchain over the next three years.

Innovations around digitization, data and analytics, and insurance-as-a-utility are expected to deliver the highly-prized goals of Convenience, Agility and Personalization (CAP).

- Of all digitization innovations, automation of key processes may have the greatest potential impact, particularly in terms of improving cost efficiencies with more than 90.0% of the executives voting for it.
- Of all data and analytics' innovations, more than 85.0% of executives agreed that delivering targeted products and services has the highest impact on both the ability to generate new revenue streams and enhance customer engagement.
- All of the innovations around insurance-as-a-utility were viewed as boosters to top-line growth and customer engagement.

For successful implementation of profitable and sustainable business models, insurers need to invest in a portfolio of synergistic InsurTech capabilities.

- Proficiencies useful for one type of innovation are often also applicable elsewhere, so a full analysis of the costs and cross-over benefits of each investment is essential.
- Insurers need a comprehensive and holistic strategy that leverages the right mix of digital, and data and analytics capabilities to carve out a new business model that aligns with their strategic priorities.

InsurTech Capabilities Put Insurers on New Trajectory

Insurance is undergoing a technology renaissance as a wave of emerging InsurTech capabilities begins to make its mark on virtually every aspect of the insurance process. In product development, behavioral analytics are being used to develop next-generation services, like usage-based or just-in-time insurance, that speak more directly to customer needs. In underwriting, advanced risk analytics are being deployed to deliver quotes more quickly to customers, even in real-time, and to develop pricing schemes that better reflect underlying risk. In policy administration and claims management, technologies that promote self-service and automation, such as drones to conduct loss assessments, are becoming higher priorities.

From the customer's perspective, some of the biggest changes in insurance are occurring at the initial touchpoint. Digital technologies are making traditional one-on-one interactions between customers and agents obsolete through an array of insurance distribution possibilities:

- **B2C Aggregators** – Customers who would like to compare policies from different providers can turn to marketplaces organized by digital B2C aggregators. Some of these marketplaces, such as Insurify, use predictive modeling to also deliver insurer recommendations based on specific customer needs.²⁴
- **B2B Aggregators** – Marketplaces are becoming more common even in the commercial insurance sector, with offerings from incumbents such as

Allstate, as well as InsurTechs like Next that use advanced data analytics to link small businesses with specific insurance needs (personal trainers or landscapers, for example) to tailored plans.²⁵

- **P2P Intermediaries** – In these marketplaces, groups of people with mutual interests pool their capital to finance their own insurance, enabled by P2P intermediaries. Outfits such as Otherwise not only rely on premiums contributed by customers to cover claims, but also set aside a portion of the pooled amount to pay an insurance firm to step in and cover bigger claims.²⁶
- **Mobile Apps and Chatbots** – Customers are increasingly able to get quotes, make comparisons and receive recommendations through mobile apps and even chatbots. The mobile-first insurer Cover, for example, lets users get price quotes by submitting photos of items they'd like covered.²⁷

Insurers overwhelmingly agree that developing InsurTech capabilities will help them better meet customers' evolving demands, with 75.0% saying so. They also strongly agree (52.7%) that InsurTech capabilities will help them design personalized products and do so quickly. Catering to customer needs through new technology will in turn help insurers address core aspects of their business, like improving operational efficiency (40.8%) and profitability (44.6%) (Figure 2.1).

Emerging Technologies Act as Catalysts for the InsurTech Revolution

Insurers do not have the luxury of focusing on one new game-changing technology at a time. A wide spectrum of technology is advancing upon the industry, with each entrant expected to have its own profound impact on how insurers run their business. In addition to dealing with the birth and growth of so much new technology at once, insurers must navigate the interrelationships between these next-generation technologies, as some are naturally complementary, while others exhibit dependencies.

Several of the emerging technologies operate on the back end to enable insurers to optimize their business processes across the value chain:

- **Blockchain** – Blockchain offers numerous insurance applications, including more efficient information exchange, simplified claims submission and improved fraud management.
- **Artificial Intelligence** – By mimicking the human capacity to process language and to self-learn, these systems hold potential for personalizing customer interactions, gleaning customer insights from unstructured data, and detecting fraud.

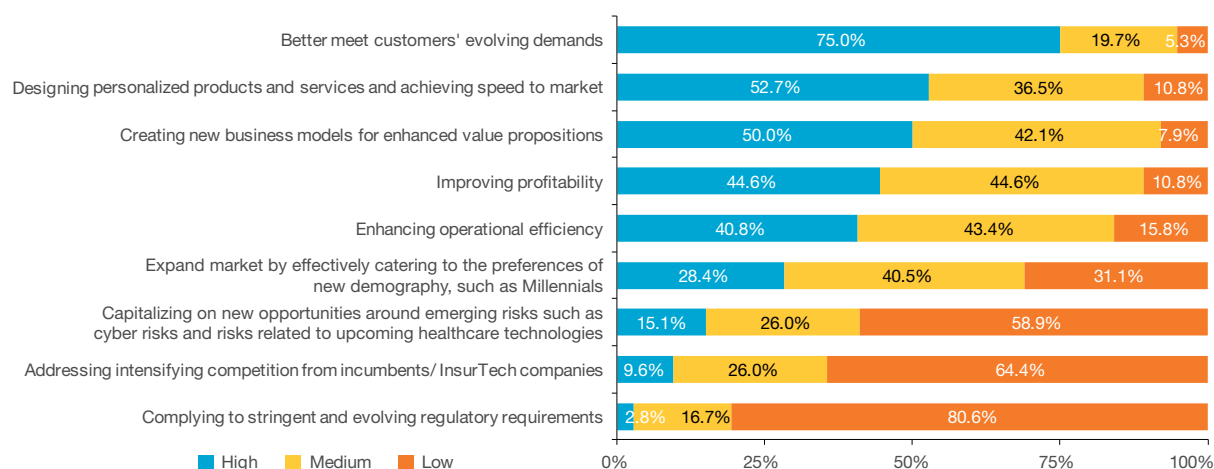
²⁴ "Insurify Launches with Intelligent Virtual Agent to Simplify Shopping for Car Insurance", BusinessWire, January 28, 2016, accessed June 2017 at <http://www.businesswire.com/news/home/20160128005412/en/Insurify-Launches-Intelligent-Virtual-Agent-Simplify-Shopping>

²⁵ "Next Insurance raises \$29 million for online platform that targets small businesses with tailored plans", Paul Sawers, venturebeat, accessed June 2017 at <https://venturebeat.com/2017/05/03/next-insurance-raises-29-million-for-online-platform-that-targets-small-businesses-with-tailored-plans/>

²⁶ BNP Paribas website, accessed June 2017 at <https://group.bnpparibas/en/news/otherwise-leading-broker-peer-to-peer-insurance>

²⁷ Cover Website accessed June 2017 at <http://www.usecover.com/blog/mobile-insurance-app/>

Figure 2.1: Executives' Perception on Benefits Realized by Leveraging InsurTech Capabilities (%), 2017



Note: High represents the percentage of executives who have given a ranking of 1, 2, or 3; Medium represents the percentage of executives who have given a ranking of 4, 5, or 6; Low represents the percentage of executives who have given a ranking of 7, 8, or 9

Question: In your opinion, which of the below are the most important benefits that firms can gain by adopting innovations based on emerging technologies? (Please rank the benefits, with 1 being Most Important and 9 being Least Important)

Source: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

“

“Blockchain has the potential to kill the market and will create a radical shift in the industry. This will be especially powerful when coupled with AI” – Andy Hopkins, Head of Strategy and Architecture, QBE Insurance Group Limited

”

- **Advanced Analytics** – As the volume of structured and unstructured data continues to grow exponentially, insurers can use these tools and techniques to analyze data and make better decisions related to pricing, risk management, and new, customized products.

- **Robotic Process Automation** – Repetitive, labor-intensive tasks that do not require much decision making—such as data entry, customer communications, compliance tracking and property assessment—are RPA candidates.

Other emerging technologies have applications in specific lines of business and will be more visible to customers on the front end:

- **Robo Advisors** – By using pre-defined algorithms, robo advisors can handle a wide range of customer interactions related to advice, including policy renewals, query resolutions, and cross selling.
- **Wearables** – These connected devices provide valuable, near-real-time health data to insurers, helping them to better model health-related risks to create personalized pricing, speed claims processing, react quickly to health events, and foster healthy behavior among customers.

- **Connected Ecosystems** – These sensor-based devices monitor customers' home environments, enabling insurers to segment customers according to their safety standards and introduce personalized pricing, as well as proactively reduce the occurrence of incidents requiring reimbursement, and speed claims processing.

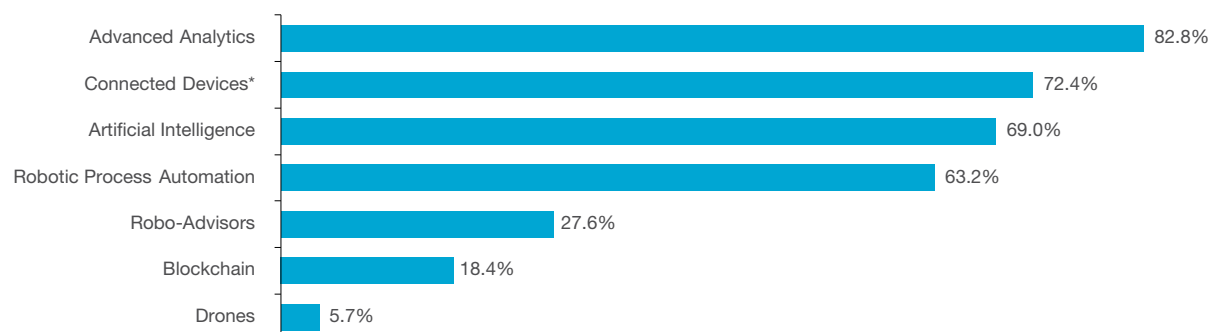
“

“Connected Ecosystems enables insurance firms to understand risk profiles better and spot issues earlier, hence making it easier to manage the risk.” – Vice President - Digital, State Farm Insurance.

”

- **Drones** – Digital images captured by aerial drones can speed property assessments during underwriting and property loss assessment while processing claims, especially in cases, such as fire or natural disaster, where the properties are difficult to access.

As insurers begin to prioritize their investments, their focus is turning first to technologies with broad application throughout the organization and that are easily integrated with existing systems and processes. Solidly at the top of the list are advanced analytic tools, with 82.8% of insurers citing them as important to the industry. Accordingly, more than 85.0% of the industry is believed to be already investing in the tools, which are seen as having high potential to increase both revenues and profit. Artificial intelligence ranks as the third most important emerging technology (69.0%) and is also expected to be the biggest recipient of investment dollars over the next one to three years, with more than 45.0% of the industry expected to invest over that timeframe, and with more than 35.0% believed to be already investing (Figures 2.2 and 2.3).

Figure 2.2: Importance of Emerging Technologies (%), 2017

Note: * Connected Devices represents Connected Ecosystems and Wearables. The percentages in the chart indicate the number of executives who have that particular technology among their top four technology priorities

Question: From the below list of emerging technologies, please select and rank the top 4 which you think are the biggest priority to the insurance industry (with 1 being the Most Relevant)?

Source: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

Figure 2.3: Emerging Technologies – Investment Time Frame (%), 2017

Investment Time Frame				
Technologies	Already Investing	1-3 Years	3-5 Years	Not Planning to Invest
Robo-Advisors	34.1%	40.9%	18.2%	6.8%
Wearables	43.2%	29.5%	13.6%	13.6%
Connected Ecosystems	50.0%	36.4%	6.8%	6.8%
Drones	18.2%	29.5%	27.3%	25.0%
Robotic Process Automation (RPA)	79.5%	15.9%	0.0%	4.5%
Advanced Analytics	86.4%	11.4%	2.3%	0.0%
Artificial Intelligence	36.4%	45.5%	13.6%	4.5%
Blockchain	18.2%	40.9%	22.7%	18.2%

Note: The percentage in the table indicates the number of executives who have marked yes for a particular option

Question: According to you, which of the below options best describes the insurance industry's investment plan for the following technologies?

Source: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

Top Three

Of the more consumer-facing technologies, connected devices made the greatest impression on insurers, with 72.4% citing them as a priority as compared to only 5.7% for drones. Connected devices already garner hefty investment, with roughly 50.0% of the industry believed to be investing in them now and more than 35.0% expected to in one to three years.

Insurers can make astute technology investment decisions through a range of assessment criteria such as potential impact on revenues and profits versus cost, and ease of integration. Within this framework, robotic process automation comes out on top, scoring high in terms of impact and low in terms of cost. Indeed, more than 79.0% of the industry is estimated to be already investing in RPA.

“

“RPA is a transformational technology, which can enable a massive cost reduction in claims processing as it will have a big impact on staffing numbers and training time.” – David Williams, Technical Director, AXA.

”

Insurers may fall short in their plans for deploying emerging technologies unless they address key success factors. First, an up-to-date technological platform, including optimized business processes, is necessary to support a speedy and problem-free transition to more advanced technologies. Equally important is to acquire or build up the necessary skill set among the workforce to ensure the technology's full potential is reached. Given that new technologies come with new vulnerabilities, insurers must also implement fail-safe data security systems. Finally, buy-in from the highest levels of leadership, bolstered by a top-to-bottom technology implementation plan, is critical.

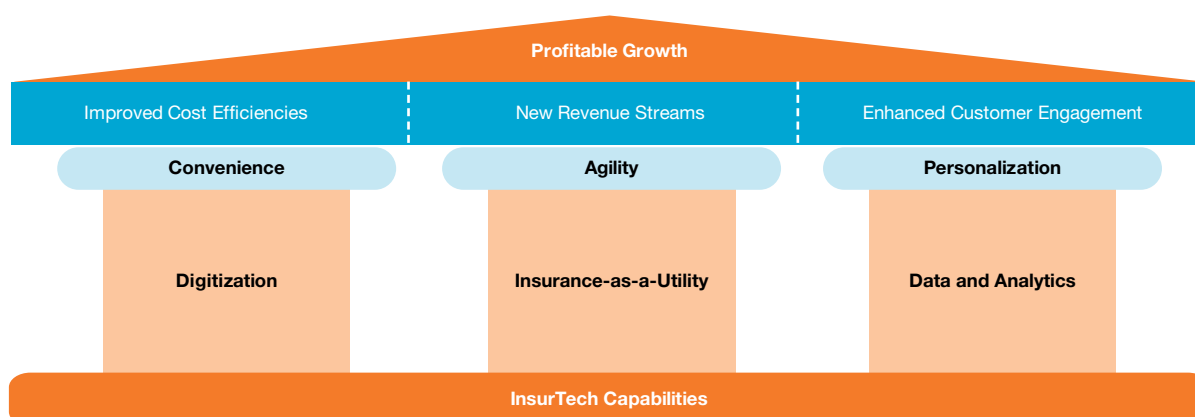
Defining Priorities to Steer the Future

There is no doubt that the breakthrough insurance technologies taking hold today will have a long-range transformative impact.

So, how should insurers incorporate these technologies into their organizations? Design a balanced and focused approach to emerging technology that maximizes returns while minimizing redundancies and inefficiencies. Central to insurers' efforts should be the goal of driving profitable growth by delivering qualities most prized by customers: Convenience, Agility and Personalization (CAP). Insurers can assess InsurTech innovations by grouping and analyzing them within three broad areas – digitization, data and analytics, and insurance-as-a-utility (Figure 2.4).

Through digitization, InsurTech is creating new avenues of connection and convenience for customers. Through data and analytics, much greater depth and richness is being added to customer personalization. And through the concept of insurance-as-a-utility, InsurTech is adding flexibility, speed and agility to the insurance experience. As the industry deploys these technologies in the push toward CAP, it will also reap benefits from improved cost efficiencies, new revenue streams, and enhanced customer engagement, leading to profitable growth.

Figure 2.4: Navigating the Innovation Conundrum to Deliver CAP



Source: Capgemini Financial Services Analysis, 2017

InsurTech Innovations in Digitization

Digitization technology includes customer-facing innovations in the front office, such as connected devices and mobile-only solutions, as well as those that operate in the background, such as open Application Programming Interfaces (APIs), smart contracts and process automation. Advances along any one of these dimensions are expected to help insurers boost profitability and growth.

“

“Automation will enable a firm to improve the speed of service and cost position; Open APIs will facilitate real-time communication with customers and partners.” – Horst Nussbaumer, Chief Claims Officer, ZURICH Insurance Group Germany.

”

Connected Devices – When it comes to creating bonds with customers, insurance companies are at a disadvantage. They mostly engage with customers only

when a policy has to be acquired/ renewed or during a claim event. Connected devices offer an opportunity to turn that paradigm around by generating more touchpoints to interact with customers. Devices in the home to monitor safety and security, or on a person's body to monitor health, allow insurers to provide value-added services based on the data they collect. Though the costs of scaling back-end systems to hold and analyze all the data generated by connected devices will be high, the ability to generate more positive, helpful interactions with customers are expected to pay back the effort and investment.

All in all, connected devices scored high in terms of enhancing customer engagement with 88.4% of executives vouching for it and more than half of executives suggesting that connected devices are highly scalable.

Examples of connected devices in use in insurance include the start-up Oscar, which monitors fitness levels through wearable devices and rewards those who meet certain goals with gift vouchers.²⁸ Similarly, a home insurance start-up called Hippo provides sensors to detect water leaks, allowing it to proactively contact homeowners at the first sign of water damage.²⁹

Automation of Key Processes – No two insurance events are alike, making it difficult to introduce extensive automation into key processes. Various emerging technologies, however, such as artificial intelligence, are enabling some InsurTechs to achieve gains in this area. Though the initial investment may be high, automation pays off in time through lower ongoing operational costs and more importantly, greatly improved experiences as customers encounter fewer errors and enjoy faster, smoother service. From an operational standpoint, automation affords greater scalability and availability as existing computers handle larger volumes of work. Overall, automation has the greatest impact on improving cost efficiencies with more than 90.0% of the executives indicating the same and more than 60.0% of the executives reported that automation scores high on scalability and enhancing customer engagement.

“

“Robotic process automation improves the efficiency of processes, ensures quality of service by minimizing errors, and enables insurance companies to devote resources to more added value activities” – Jose Benítez, Director of Strategy and Corporate Coordination, Generali.

”

Lemonade, a New York-based InsurTech firm, is using bots enabled with AI to speed claims processing to an unprecedented degree. In only three seconds, the Lemonade bot can review a claim, cross-reference it against the policy agreement, check the claim for possible fraud, approve it, send a message authorizing a money transfer, and inform the customer of the claim's resolution.³⁰ Even damage assessment is becoming more automated. When QBE was restricted by government authorities from assessing earthquake-related damages in Ecuador, it used drones to scope out the affected area, helping it to settle around 90.0% of large-loss claims within 90 days.³¹

Smart Contracts Using Blockchain – Insurance company customers expect that any claim they make to their insurer will take weeks or even months to get resolved. Smart contracts executed through blockchain, however, can achieve settlements in a matter of hours, affording a huge competitive advantage to insurers that embrace the technology. Blockchain converts standard contracts into computer code, transforming them into highly transparent, immutable, single sources of truth and eliminating middlemen, such as lawyers, who traditionally serve to authorize and validate transactions. The result is a highly automated, cost-saving process. Scalability remains an issue as all nodes must process every transaction, though parallel processing is being explored as a way of easing this problem. Over time, the technology is expected to generate new revenue streams through the creation of new products and services built around blockchain-based smart contracts. For now, blockchain is expected to have the greatest impact on improving cost efficiencies.

Dynamis, a provider of supplemental unemployment insurance is using smart contract logic to underwrite policies and evaluate claims without the need for full-time staff.³² Blockchain also brings unparalleled flexibility to contract creation. Start-up SafeShare Global, for example, uses blockchain to create insurance products for the sharing economy, such as when homeowners rent out rooms to professionals seeking office space, meeting a growing need not currently being addressed.³³

Mobile-only Solutions – Buying insurance can be a long, drawn-out process, requiring lengthy risk assessments and sometimes even face-to-face meetings. Mobile-first insurance solutions seek to deliver coverage quickly and easily, even when customers are on the go, heightening engagement and satisfaction. Wrisk, for example, has optimized its mobile app to deliver motor, travel and home insurance all through one easy-to-access interface.³⁴ Revenue opportunities are also strong in mobile because of the sheer volume and richness of new mobile apps being created. In addition, the ubiquity of mobile devices makes mobile-first solutions highly scalable. All in all, mobile solutions score highly along all the business impact dimensions, especially in terms of enhancing customer engagement (78.0%), scalability (69.8%) and generating new revenue streams (67.4%).

28 This Insurance Company Pays People to Stay Fit", Issie Lapowsky, Wired, December 2014, accessed June 2017 at <https://www.wired.com/2014/12/oscar-misfit/>

29 "Hippo Insurance Opens for Business With Significant Redesign of Home Insurance in Recent Times", NASDAQ Globenewswire, April 26, 2017, accessed June 2017 at <https://globenewswire.com/news-release/2017/04/26/972900/0/en/Hippo-Insurance-Opens-for-Business-With-Significant-Redesign-of-Home-Insurance-in-Recent-Times.html>

30 "Lemonade Sets New World Record", PR Newswire, January 5, 2017, accessed June 2017 at <http://www.prnewswire.com/news-releases/lemonade-sets-new-world-record-300386198.html>

31 "QBE deploys drones to assess insurance claims", Allie Coyne, itnews, February 27, 2017, accessed June 2017 at <https://www.itnews.com.au/news/qbe-deploys-drones-to-assess-insurance-claims-452739>

32 "P2P Insurance Solutions", January 1, 2016, Dynamis, accessed June 2017 at <http://blog.dynamisapp.com/p2p-insurance-solutions/>

33 "How to insure your business in the sharing economy", Rebecca Burn-Callander, Safe Share, April 18, 2016, accessed June 2017 at <http://www.safeshareinsurance.com/how-to-insure-your-business-in-the-sharing-economy/>

34 "Munich Re Digital Partners picks up partner #6", Shefi Ben-Hutta, Coverager, November 21, 2016, accessed June 2017 at <https://coverager.com/munich-re-digital-partners-picks-up-partner-6/>

Open APIs for Developing New Applications –

APIs are simple software protocols that allow insurers to tap into a wealth of creativity from outside developers. Insurers participate by giving outside developers access to a pre-set library of APIs to build new applications. While insurers must maintain strict process controls and oversight, they benefit from an outpouring of innovation that extends beyond what internal development teams might generate. They also benefit from reduced costs, as the bulk of app development is essentially outsourced to third parties. Customers, meanwhile, benefit from having access to an expanded array of insurance services apps.

Like mobile solutions, open APIs scored highly along all four dimensions of business impact, with more than 50.0% of executives saying that they have a strong impact in scalability, generating new revenue streams, and improving cost efficiencies and 48.8% of the executives opining that they have a strong impact in enhancing customer engagement.

“

“For insurance firms, Open APIs are a prerequisite for forging partnerships.” - Dr. Klaus Endres, COO, ZURICH Insurance Group Germany

”

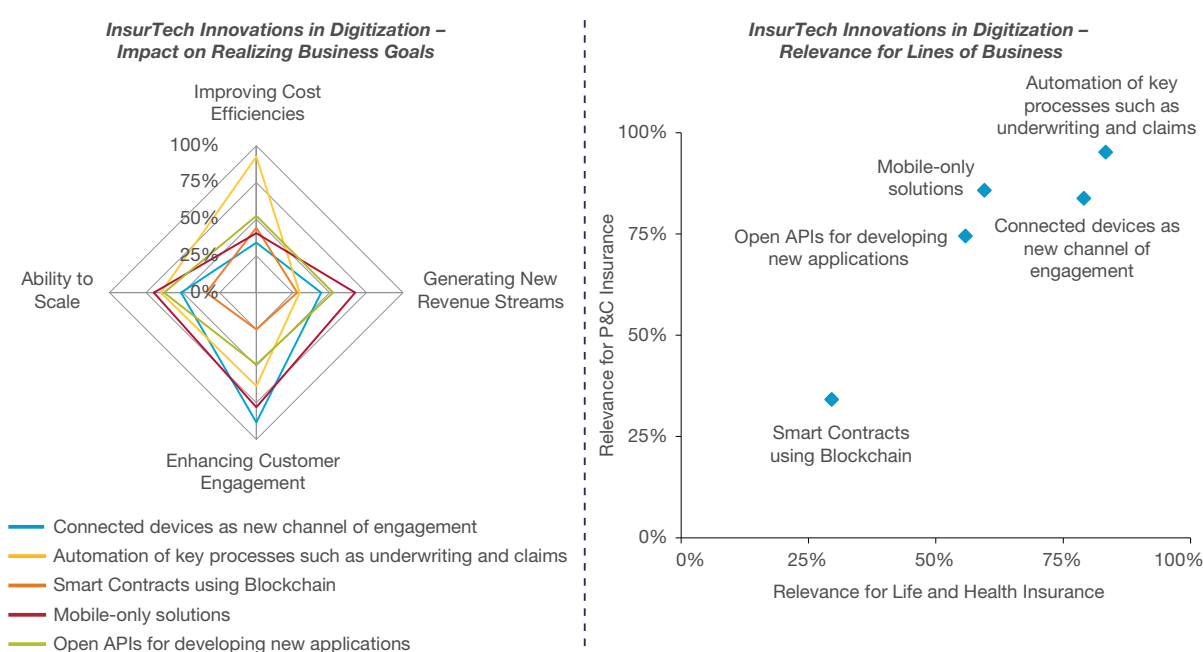
The Open API movement works both ways, with software companies offering APIs that insurers and others can use to improve their own customer

offerings. One example is MuHu, which offers video solutions to the transportation industry to help identify and track unsafe driving. Insurers can use MuHu's open API for video intelligence to build underwriting and risk applications based on real-time driving data.³⁵

Overall Impact – Of all digitization innovations, automation of key processes stood out for having the greatest potential impact, particularly in terms of improving cost efficiencies with more than 90.0% of respondents giving it high marks. Process automation also beat out almost all other innovations in terms of ability to scale, and it followed connected devices and mobile-only solutions in ability to enhance customer engagement. Mobile-only solutions were ranked highly for scalability and ability to generate new revenue streams, beating out open APIs along that dimension. More than half of executives were united in their view that mobile-only solutions and open APIs have a strong positive impact across all the business goals.

Some digital technologies were viewed as having more relevance to different types of insurance businesses. Automating key processes and deploying connected devices were deemed the more useful across the board, having high applicability to property and casualty insurance, as well as to health and life insurance with more than 80.0% of the executives suggesting the same. Mobile-only solutions and open APIs, in contrast, were seen as being more relevant to property and casualty.

Figure 2.5 InsurTech Innovations in Digitization – Business Impact and Relevance



Note: The data in the spider chart represents the percentage of executives who have given a rating of 4 and 5 on a 5-point scale

Question: Please rate the below innovations based on digitization in terms of their impact on realizing the following business goals

Please rate the below innovations based on digitization in terms of their scalability and relevance to specific lines of business

Note: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

35 “MuHu Announces Video Intelligence API”, Eric Carter, ProgrammableWeb, May 2, 2017, accessed June 2017 at <https://www.programmableweb.com/news/muhu-announces-video-intelligence-api/brief/2017/05/02>

AXA Germany Strikes a Chord with Customers

For most mass retailers, positive connections with customers occur on a regular basis, every time a good or service needs to be replenished. Insurers, however, tend to interact with their customers only when negative events occur and vexing financial matters need to be settled. AXA Germany, the German arm of the France-headquartered global insurance firm AXA, sought to use digital technology to reframe the typical touchpoints between the insurer and its customers.

The insurer wanted to increase day-to-day engagements with customers in the hope of establishing closer, more positive connections. Specifically, it wanted to become more relevant in customers' everyday lives, build trust, and create innovative business models and value-added services that would boost customer touchpoints.

To achieve this, AXA Germany adopted the Design Thinking approach, which evaluates different ideas through the prism of customer needs, the technical feasibility of implementation, marketability, and how well the initiative fits into business objectives. It then conducted primary research with both customers and non-customers to understand challenges in their day-to-day lives and how AXA Germany could step in and address them.

Through its research, AXA Germany discovered that many people, especially women, feel unsafe when walking alone. From there, it developed an app called WayGuard, which aims to empower users to feel confident and safe when they have to travel alone. With just a click, WayGuard users can be connected to a 24/7 central security team that can provide assistance as soon as the user feels unsafe. The app also supports connections to family members and friends who can track a user's location in real-time through GPS, and see when users have arrived safely at their destinations. An emergency call feature sends alerts to emergency responders if necessary. AXA Germany took care to ensure the app overwrites older location data with the latest one so that no travel patterns can be discerned and privacy can be maintained.

AXA Germany sought input from a diverse team of people in developing its app, leveraging off-shore technology support as well as in-house professionals in a variety of locations and with different backgrounds and experience. In a unique move, AXA Germany has partnered with the German police in its hometown Cologne who provided insights that helped further refine the app and who are alerted with the user details whenever the user triggers the emergency call feature.

Due to intense interest from users, an initial test phase of WayGuard was expanded from 1,500 to 4,500. Further, AXA saw interest extend well beyond women to include men, parents and youngsters. Following a successful release, AXA Germany enjoyed positive media coverage and won an award for best security app of 2016 from App Magazine, establishing it as an innovative brand. Furthermore, WayGuard was honored as a finalist at Der Deutsche Innovationspreis. In addition, the partnership with the German police helped position AXA as a trusted entity. As some digital-only features of the app, such as location sharing, can be accessed worldwide, it makes WayGuard a highly scalable initiative that can respond to the increasing popularity of the app.

Most important, the app resonated with users, who registered in droves, at a rate of about 1,600 per week. As a result, not only is AXA becoming part of customers' everyday lives, it is generating feelings of safety and protection, helping it to achieve the mass marketer's dream of reinforcing positive sentiments on a regular basis.

“

“We aim to empower people to live a better life. We must continue to support our customers better, especially when it comes to new risks, by protecting them and helping them to act freely. Our customers want a genuine partner for their day-to-day life, not just a benefit payer. Services like WayGuard help to proof this demand.” - Jens Hasselbächer, CSO at AXA Germany.

”

Source: WIR 2017 Executive Interviews, 2017

Keeping Up at BNP Paribas Cardif

BNP Paribas Cardif in Italy, one of the top ten insurers in the Italian market, wanted to keep in sync with the insurance market as it moves from traditional models requiring upfront premiums for estimated risks, to more interactive models that emphasize tailored premiums based on customer behaviors. It also wanted to stay on top of demographic and technological changes that are putting connected devices, mobile technology, and advances like Big Data, the Internet of Things and artificial intelligence at the forefront.

The insurer knew that developing a strong pipeline for innovation would be key to keeping up with the ongoing changes. It developed an Open Innovation model that leverages strong connections with external organizations like start-ups, universities, incubators and accelerators to identify potential projects, evaluate their costs and benefits, and then sell the idea internally.

The biggest source of new ideas is the company's Cardif Open F@B, which calls for startups, students and small entrepreneurs to identify and present projects to be developed by the insurer's R&D department. Now in its fourth year, the latest Call4Ideas contest is focused on preventive insurance, one of the most innovative frontiers of the industry.

Rather than compensate customers for damage, the insurer is seeking to help prevent damages from occurring in the first place by bringing to market solutions that emphasize customers' safety and well-being. The insurer is specifically seeking solutions designed to mitigate risks in the areas of health, housing and mobility, and is encouraging the use of predictive analytics to anticipate events, as well as digital platforms that employ connected devices.

Past calls have focused on cultivating solutions in the areas of customer experience, customer acquisition, Big Data and the Internet of Things. The first three years of the Cardif Open F@B generated 150 ideas, including 15% from international entrants in 2016. Seven projects have been financed and three are expected to become products and services for Cardif clients by the first quarter of 2018.

Source: Efma Innovation sources – 2017

InsurTech Innovations in Data and Analytics

As consumers spend more time online, they leave a digital trail that allows firms to analyze their data and develop just-right products offered at just the right time. Insurers can collect such data from connected devices, online product inquiries, and even social media. Capturing and analyzing this exploding volume of data puts insurers in position to achieve a variety of goals.

“

“Advanced analytics combined with big data has a great impact on fraud detection and can also help firms to select the ‘good’ risks”
– Frédéric de Courtois, CEO Global Business Lines & International, Generali.

”

Building Individual Customer Profiles – Insurers are not new to the idea of creating individual customer profiles that aid target marketing, quicker onboarding, more accurate risk assessment, and better customer service. Now, innovations in data and analytics are making it possible to further enhance customer profiles and have a single customer view through features like externally-sourced data, real-time data analysis, and instant delivery of relevant feedback to customers. Around 90.0% of executives said insurers improve customer engagement by making information more personal and instantaneous, and 72.1% of executives said customer profiles facilitate new revenue streams.

Auto insurer Amodo has made data collection and analysis a strategic pillar. It takes behavioral data from connected devices in the vehicle and overlays it against time, weather, map and GPS data to produce near real-time reports on a driver’s capabilities and capacity to adjust to changing conditions.³⁶ Providers can also relay such information back to customers in the form of educational feedback, as MyDrive Solutions does, helping drivers to improve their habits.³⁷

Personalized Risk Assessment/Management

– Static risk assessments are only partly useful, given that risk factors fluctuate all the time. Insurers at the forefront of personalized risk collect real-time information to proactively identify and mitigate emerging risks, which in turn supports more accurate pricing on premiums and can help reduce claims costs. Real-time risk monitoring can also enhance customer engagement by giving insurers the opportunity to proactively get in touch with customers and reward

them for good behaviors. 65.1% of the executives said personalized risk assessment is an efficient way to enhance customer engagement, while 54.5% of executives indicated it also spurs cost efficiencies through better pricing premiums.

“

“Advanced analytics for risk prevention is mandatory in the current insurance corporate landscape, wherein the full comprehension of client profile is not possible without having the appropriate technology.” – Nadia Alencar, CIO, AXA Insurance Company – Brasil.

”

Cigna was able to provide personalized health coaching to individuals based on information received from armband fitness trackers.³⁸ Similarly, health insurer Max Bupa is working with wearable provider GOQii to target the growing market of tech-savvy customers interested in wearables. In addition to offering a fitness band to track physiology, the insurer is offering health coaching and related tools to encourage good health.³⁹

Pricing Analytics – Massive amounts of data are the key to assessing and pricing risk, and in turn, developing products that best match a customer’s insurance needs. InsurTechs have taken data-gathering to a new level by making lifestyle data (generated by sensors on mobile phones) part of the equation. Such data can deliver pertinent insights that insurers have never before had the opportunity to consider, such as the sleeping patterns of drivers, whether they frequent drinking establishments, and how hard they work. The data science company Sentiance has partnered with InsurTech RISK to incorporate this type of real-world, everyday data into customer profiling, pricing and marketing schemes.⁴⁰ Through analytics, insurers have a better chance of optimally pricing policies, which could positively impact loss ratios. They can also more accurately assess risk, which aids in the development of new products that previously could not be considered. Though the initial investment in back-end systems and algorithms for performing the analytics could be costly and time-consuming, scalability is expected over time. Also, more than 60.0% of the executives said that pricing analytics is expected to be most effective in driving cost efficiencies, scalability, and generating new revenue streams.

³⁶ Amodo Website, accessed June 2017 at <https://www.amodo.eu/insurance/>

³⁷ MyDrive Website, accessed June 2017 at <http://www.mydrivesolutions.com/>

³⁸ “Cigna shares some data from its wearable device randomized control trial”, Aditi Pai, MobiHealthNews, September 22, 2015, accessed June 2017 at <http://www.mobihealthnews.com/46932/cigna-shares-some-data-from-its-wearable-device-randomized-control-trial>

³⁹ “GOQii enters into alliance with Max Bupa and Swiss Re for Health Offerings”, GOQii editor, GOQii blog, April 20, 2017, accessed June 2017 at <https://goqii.com/blog/tag/max-bupa/>

⁴⁰ “RISK: from Usage to User Based Insurance”, Tom Vandendooren from Sentiance and Tony Dingemanse from Risk.nl, Sentiance, February 27, 2017, accessed June 2017 at <http://www.sentiance.com/2017/02/27/risk-from-usage-to-user-based-insurance/>

“

“Insurance firms should focus on adjusting the pricing based on the knowledge about their customer’s behavior. Emerging Technologies enable an insurance firm to adjust pricing by having more details on the risk exposure of the clients and they also promote self-service”
– Vicente Cáceres, Head of Operations & IT, BanSabadell Seguros (Vida, Pensiones y Seguros Generales).

”

Emerging Risk Identification – The world is filled with risks that are hidden, but have potential to cause huge liability issues, much like asbestos a few decades ago. Most businesses, however, are ill-prepared to identify and prepare for such unpredictable dangers. The InsurTech Praedicat is addressing the issue by using sophisticated data processing to analyze millions of pages of scientific literature to learn about new risks.⁴¹ Such an approach can help insurers avoid excessive losses, while also giving them a heads up on possible new products they could develop to mitigate new risks. Insurers can also avoid the trap of adding excessive exclusions into their contracts, which is tempting in the face of unknown risks, but creates the possibility of losing customers who might need the coverage. The most obvious benefit of the ability to identify and mitigate unknown risk is avoidance of large and unexpected losses. A subtler but still substantial benefit is the head start insurers can get in developing new products to address emerging risks. For those reasons, risk identification scores highly along the dimensions of both generating new revenue and improving cost efficiencies with 52.4% and 61.4% of executives suggesting them, respectively.

“

“Predicting risks, and associating the right prices to each one, directly affects the way we make money and sustain our margins.”
– Nadia Alencar, CIO, AXA Insurance Company – Brasil.

”

Targeted Products and Services – The more personal an insurance product, the more appealing it is to customers. That is the premise behind targeted products and services, which score extremely high along the dimensions of enhancing customer engagement and generating new revenue streams with more than 85.0% of executives voting for it. Being able to identify and target unique customer needs generates customer loyalty, while also raising the possibility of delivering highly compelling, personalized products,

such as usage-based pricing. Y-Risk has put targeted products at the forefront of its efforts by addressing the sharing economy with insurance products priced by the task, the mile or the activity.⁴² It offers tailor-made insurance products by taking into account customer risks and insurance goals, and prices premiums on a case-by-case basis.

“

“Insurance firms should focus on micro-segmentation to deliver the right product at the right time for the right price.” – Andy Hopkins, Head of Strategy and Architecture, QBE Insurance Group Limited.

”

AI-Augmented Customer Service – Artificial intelligence can be useful in automating labor-intensive tasks like responding to customer queries and problems, greatly reducing per-call costs. Though some customers may initially bristle at being served by a chatbot, AI-augmented customer service, nevertheless, offers possibilities for enhanced customer engagement. Customers may be served more quickly, rather than having to wait on hold, for example. Also, some chatbots have been designed to use the vast amounts of data they consolidate and analyze to proactively engage with customers, enhancing the overall relationship. For these reasons, AI-augmented customer service scores highly for both improving cost efficiencies and enhancing engagement with more than 60.0% of executives suggesting the same.

Some InsurTechs are taking the technology in a new direction by using AI to support sales, fostering a new distribution channel along with new revenue streams. Next Insurance, for example, uses AI to support a chatbot that lets people get quotes and buy insurance via Facebook Messenger.⁴³ The offering establishes social media as an insurance distribution channel while effectively addressing underserved small businesses that heavily use mobile. Another example of AI in the industry is Axa’s Xtra chatbot, which initiates wellness and health-related conversations with customers based on their behaviors and activities, enhancing customer experience and engagement.⁴⁴

“

“There is a deluge of data which is coming at Insurers and humans can’t process it. AI can help insurers to identify trends and patterns faster and more accurately for improved decision making” – Alfred Goxhaj, CIO, SOMPO International.

”

41 “Emerging Risk Can Finally Be Measured”, Advertorial, Raconteur, June 14, 2017, accessed at June 2017 at <https://www.raconteur.net/sponsored/emerging-risk-can-finally-be-measured>

42 Y-Risk Website, accessed June 2017 at <http://yrisk.com/what-we-offer.html>

43 “Next Insurance launches Facebook Messenger chatbot to replace the insurance agent”, Eileen Brown, ZDNet, March 21, 2017, accessed June 2017 at <http://www.zdnet.com/article/next-insurance-launches-facebook-messenger-chatbot-to-replace-the-insurance-agent/>

44 “Xtra by AXA – AI driven personal wellness coaching app”, The Digital Insurer, accessed June 2017 at <https://www.the-digital-insurer.com/dia/xtra-by-axa-ai-driven-personal-wellness-coaching-app/>

Overall Impact – Of all the innovations in data and analytics, insurers agreed unanimously that targeted products and services have the highest impact on both the ability to generate new revenue streams and to enhance customer engagement (Figure 2.6).

Using technology to build individual customer profiles was a fairly close second on both those fronts. Pricing analytics was the only innovation viewed by at least 50.0% of insurers as having a high ability to achieve all four business goals – scalability, cost efficiency, revenue generation and customer engagement. Most

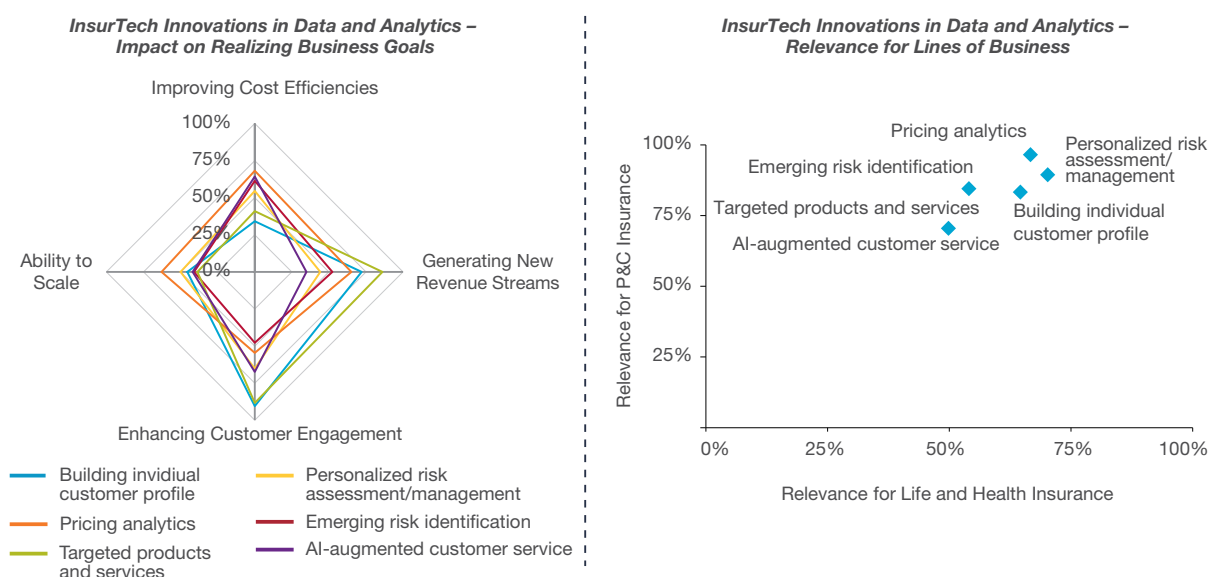
of the data technologies explored were seen as being useful for both the health and life insurance businesses, as well as for property and casualty.

“

“Advanced analytics is extremely relevant to insurance firms, as the insights derived will be crucial in implementing new business models.”
– Maribel de la Vega, CIO, Liberty.

”

Figure 2.6 InsurTech Innovations in Data and Analytics – Business Impact and Relevance



Note: The data in the spider chart represents the percentage of executives who have given a rating of 4 and 5 on a 5-point scale

Question: Please rate the below innovations based on data and analytics in terms of their impact on realizing the following business goals

Please rate the below innovations based on data and analytics in terms of their scalability and relevance to specific lines of business

Note: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

InsurTech Innovations in Insurance-as-a-Utility

For an industry that hasn't changed much in decades, even centuries, the swirl of innovation now surrounding insurance is like a shock to the system. InsurTechs are injecting scores of new ideas, forcing incumbents to respond. Many of the new approaches would not be possible without new technology, while others are the result of looking at enduring practices in new, more creative ways. These new business models are the enablers for insurance-as-a-utility.

Peer-to-Peer Insurance – Social networking and crowdsourcing have made it possible for a wide variety of peer groups, say dentists, condo owners or farmers, to insure each other's losses through pooled resources. The approach appeals to people who believe groups of like-minded individuals working toward a common goal will do a better job of avoiding risks and losses. Not surprisingly, peer-to-peer insurance scores most highly along the customer engagement dimension with more

than 50.0% of executives strongly vouching for it. The model has limits in terms of ability to scale, however, because of the need to restrict access to defined groups.

“

“Peer-to-peer insurance is very innovative and can potentially make large risks affordable to SMEs especially - it reinforces the aspect of collaboration to make the deal more competitive.”– Nadia Alencar, CIO, AXA Insurance Company – Brasil.

”

The P2P InsurTech firm Friendsurance emphasizes the benefits of working together by rewarding cash-back bonuses of up to 40.0% of paid premiums to groups that do not file any claims. Friendsurance allocates a portion of premiums to traditional insurers who settle claims that exceed the amount of the deductible portion, ensuring that all claims get fulfilled.⁴⁵

45 Friendsurance Website, accessed June 2017 at <http://www.friendsurance.com>

Signal Iduna Targets Next Generation of Customers

People who are young, organized and networked are the focus of sijox, an insurance brand launched by one of the leading German insurers Signal Iduna in 2011. sijox seeks to attract customers under the age of 30 by making insurance products more accessible and understandable. Its distribution strategy involves targeting young people where they hang out online, including Facebook and Twitter, as well as in person through a team of about 150 youthful consultants who communicate with potential customers face to face.

In October 2016, sijox piloted a disability insurance product aimed at customers between 18 and 25. The new AppLife product gives users a chance to reduce their premiums by maintaining healthy behavior. The app encourages regular exercise and movement by tracking customer steps and displaying the results in real time, thereby helping customers to reduce the risks of health threats like hypertension, diabetes and obesity. Meanwhile, no health-related data is being gathered. Under this “pay-as-you-live” approach, customers who move more, pay less. Very active users can receive up to 42% of their disability contribution back.

Both the app and the product are designed to be as simple and modern as possible. sijox employs playful content and gaming features to make the app more compelling. In fact, the gaming functions are attracting numerous users who do not even have the disability insurance. Through the smartphone app, sijox expects to be able to solicit customer input into further AppLife developments. It is also maintaining regular, positive contact with the next generation of insurance customers.

“

“AppLife rewards an active lifestyle and therefore promotes healthy behavior. AppLife not only improves our customers’ fitness and general health, but it allows people to deal with the important aspect of a potential inability to work in a very perceptible and tangible way.” – Clemens Vatter, Member of Life Insurance Executive Board, at Signal Iduna.

”

Source: WIR 2017 Executive Interviews, 2017

MetLife Puts Its Stamp on Innovation in Asia

When MetLife opened LumenLab, its overall goals were two-fold: to create new businesses to address changing customer needs, and just as important, to instill a new culture of innovation.

MetLife, one of the largest insurance companies in the world with about 100 million customers, opened its LumenLab innovation center in Singapore so it could more readily respond to the changing preferences of Asian life insurance customers, as well as incursions from new competitors. It wanted to develop disruptive business models in the areas of health, wealth and aging, to not only add new customers, but also increase the frequency of interactions with existing ones.

To achieve these business goals, the insurer has created structured and methodical processes that can support ongoing idea incubation and development. It uses a test-and-learn framework with effective risk controls built in so as to encourage out-of-the-box thinking with minimal restriction. MetLife assesses new products and initiatives at early stages and quickly writes them off if they do not align with business objectives, creating a low-cost, high-innovation environment. It also seeks to undertake multiple projects at once, to help diversify risks. Finally, to back up its efforts, MetLife is creating an impactful innovation ecosystem by partnering with the Monetary Authority of Singapore.

LumenLab is seeking to put customer input at the front and center of every stage of product development, in keeping with its goal to better understand and serve customers. Projects so far have taken advantage of blockchain, artificial intelligence and virtual reality, and serve a wide variety of purposes. Developments include a health quiz platform called BerryQ, virtual reality for financial services called conVRse, a dementia diagnosis and coaching platform called Mind Matters, financial mobile tools for Japanese pre-retirees dubbed Sonareru, blockchain for insurance called InsurChain, and Mpub, a health publisher app for customers in Japan and Korea. Some projects are already being implemented in local markets. These include Misir, a TripAdvisor-like service for insurance in Bangladesh and NoKatsu, an app for dementia management in Japan.

Customer satisfaction and positive brand impressions are already on the rise thanks to specific LumenLab initiatives. About 91% of 100,000 users of BerryQ, for example, said they learned something new from taking the app's health-related quizzes. Further, after using BerryQ, 89% of MetLife policyholders said they were likely to recommend the insurer to a friend. Through BerryQ, MetLife has collected 1.4 million data points. A pilot of the MindMatters dementia diagnosis and coaching app resulted in a majority of the 330 users asking if they could recommend it to their friends. In addition, MetLife bolstered its reputation as an expert by gaining acceptance from market-leading screening organizations and top clinicians in the field of neuropsychology. MetLife also enhanced its brand through its conVRse virtual reality app that connects customers to service agents. The nearly 1,000 customers who used it registered satisfaction rates of above 90%. Further, over 90% of customers who used the app said the conversations had improved their impression of MetLife.

Source: Efma Innovation sources – 2017

Multi-Risk Policy – These policies cover different types of risk under one contract and with a single premium and deductible. Such an approach can reduce operational and marketing costs, and may appeal to customers who wish to keep track of only one policy and pay one premium. For that reason, the multi-risk policy scores most highly along the dimension of enhanced customer engagement with more than 60.0% of executives seconding the view.

Aioi Nissay Dowa Insurance Europe (ANDIE) offers a multi-risk policy for car dealerships that covers a variety of risks, including damage to buildings and contents, damage from natural disasters and business interruption. ANDIE says this type of coverage usually results in a reduced premium compared to a series of single insurance contracts.⁴⁶

On-Demand Insurance – Packaged to be attractive in small doses, on-demand insurance is generating revenue from previously untapped markets. Aside from generating new products and revenue streams, on-demand insurance is also attracting customers who previously did not consider themselves candidates for lump-sum insurance. These customers relish the ability to draw down coverage when they feel they most need it. As a result, on-demand insurance scored impressively for generating revenue and improving engagement with more than 80.0% and 85.0% of the executives indicating them, respectively. However, the costs of on-demand insurance can be high, given insurers need to make sure their processes for selling policies, settling claims and on boarding customers are quick and hassle-free.

Slice Labs offers home share insurance that covers policyholders from theft, vandalism and more when they open their homes to outsiders. The insurance can be instantly turned on and off via a mobile app, so users only pay for the times they want coverage.⁴⁷ Another provider called Sure offers a similar type of on-again, off-again insurance for travel, home rentals and smartphones.⁴⁸

Usage-Based Insurance – Rather than rely only on past driving records and historical statistics to determine premium costs, usage-based auto insurance incorporates present-day habits and/or the number of miles driven. The tying of insurance premiums to driving behavior can be appealing to customers, especially to those who engage in less risky practices. Insurers, meanwhile, can benefit by studying behaviors and delivering value-added tips and services aimed at helping customers improve their driving records,

thus enhancing engagement. Offering usage-based insurance requires the use of emerging technologies, such as connected devices and advanced analytics, which could be costly. Overall, 86.0% and 69.8% of executives said usage-based insurance gets the most points for enhancing customer engagement and generating revenue, respectively.

Usage-based insurer Metromile charges users a low monthly base rate, plus a few cents per mile driven, resulting in a variable monthly rate.⁴⁹ In effect, policyholders who drive less pay less. Progressive takes a slightly different approach in its Snapshot program, tracking miles as well as driver habits.⁵⁰ A plug-in device or mobile app monitors car-trip details, including hard braking. Discounts go to drivers who drive less often, in less risky ways, and at times when fewer drivers are on the road.

Micro Insurance – Aimed at low-income users mostly in the developing world, micro-insurance offers protection against specific perils in exchange for very low premium payments. Its success relies on the ability to efficiently sell and service high volumes of simple, low-margin products, making digital technology a critical part of any rollout. As a new product in the portfolio of most insurers, micro-insurance offers the possibility of new revenue streams. As a result, micro insurance scored highly in terms of revenue generation and customer engagement, according to more than 70.0% and 54.0% of executives, respectively. However, the need to handle high volumes is expected to impact cost efficiencies.

BIMA has developed a fully-automated mobile-based process for signing customers, and works with mobile operators to provide access.⁵¹ Star Microinsurance relies on a variety of digital payment platforms to facilitate premium payments for the policies it offers, which cover funerals, child care and healthcare.⁵²

Flexible Coverage – Since its inception, insurance has been viewed, primarily, as a static product, providing fairly generic coverage through annually-paid premiums. Some insurers are gaining market share and generating new revenue by getting creative with more flexible types of coverage, such as for home-sharing or pets. Offering flexibility in terms of the timing and price of premiums based on customer need can further enhance engagement. All in all, flexible coverage scored highly in engagement and generating new revenue streams, as indicated by 75.0% and 65.1% of executives, respectively.

46 Aioi Nissay Dowa Insurance Europe Website, accessed June 2017 at http://www.aioinissaydowa.eu/en/our_operations/germany/multi-risk_policy.cfm?sCriteria=multi%20risk%20policy#.WUxXmcbMx-U

47 Slice Website, accessed June 2017 at <https://www.slice.is>

48 "Sure – Insurance On-Demand", The Digital Insurer, accessed June 2017 at <https://www.the-digital-insurer.com/dia/sure-insurance-demand/>

49 Metromile Website, accessed June 2017 at <https://www.metromile.com/insurance/>

50 Progressive Website, accessed June 2017 at <https://www.progressive.com/auto/snapshot/>

51 "Mobile-delivered Microinsurance from BIMA", accessed June 2017 at <http://bima.live.gpmd.net/assets/BIMA-mobile-operators.pdf>

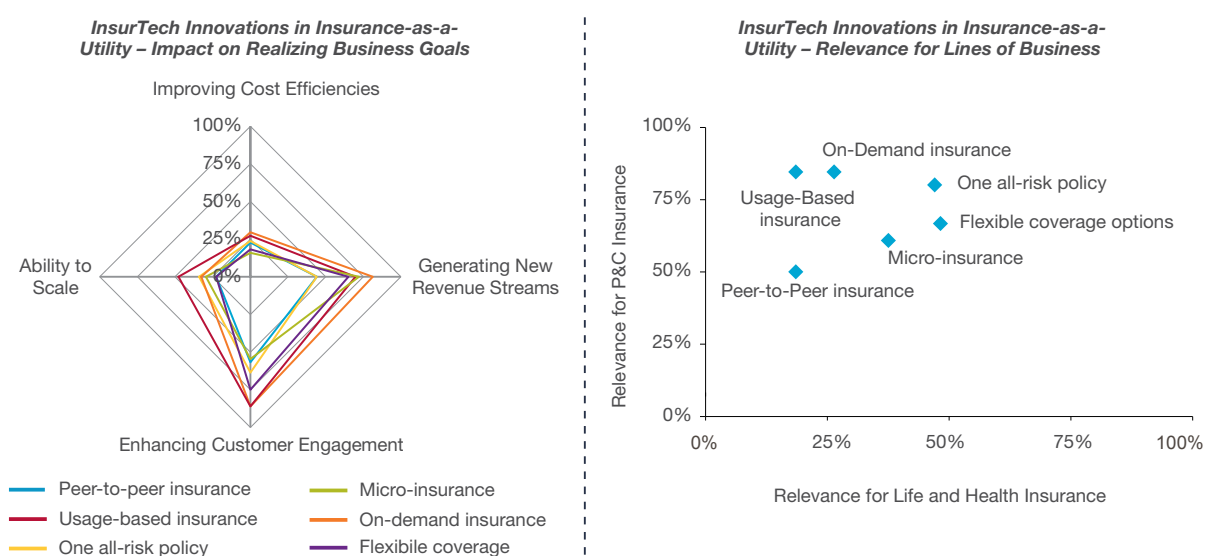
52 Star Microinsurance Website, accessed June 2017 at <http://starmicroinsurancecegh.com>

Search engine optimization and social media are making it possible for Bought By Many to group people with similar insurance needs into large buying pools that can qualify for discounts from insurers. Building upon insights into what insurance customers seek, Bought By Many recently introduced its own pet-insurance product based on 40,000 pieces of customer feedback.⁵³ GEICO similarly addressed a market need by introducing straightforward insurance to rideshare drivers. Its hybrid plan does not require drivers to keep track of whether they are using their vehicles for personal or business purposes, but simply covers them in all situations.⁵⁴

Overall Impact – All of the innovations around insurance-as-a-utility were viewed as having greater influence on boosting top-line growth and customer engagement, than reducing costs (Figure 2.7).

Insurers agreed that usage-based and on-demand insurance have the highest potential for generating positive returns and attracting customers, with flexible coverage options coming close behind. Flexible coverage and multi-risk policy were also seen as having the greatest applicability to both life and health insurance, and property and casualty.

Figure 2.7 InsurTech Innovations in Insurance-as-a-Utility – Business Impact and Relevance



Note: The data in the spider chart represents the percentage of executives who have given a rating of 4 and 5 on a 5-point scale

Question: Please rate the below innovations based on insurance-as-a-utility in terms of their impact on realizing the following business goals

Please rate the below innovations based on insurance-as-a-utility in terms of their scalability and relevance to specific lines of business

Note: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

53 "Insurance Startup Bought By Many Launches Unique Pet Insurance Products", PR Newswire, February 8, 2017, accessed June 2017 at <http://www.prnewswire.com/news-releases/insurance-startup-bought-by-many-launches-unique-pet-insurance-products-613153343.html>

54 Geico Website, accessed June 2017 at <https://www.geico.com/more/driving/auto/car-safety-insurance/introducing-geico-rideshare-insurance/>

The Way Forward

Throughout the span of an insurance firm's business, different strategic goals fluctuate and priorities shift. Some years, cutting costs and bringing the budget back down to size is the main goal. Other times, revenue becomes stagnant and there's no choice but to take measures to rev it up again. Sometimes an insurer has taken prudent steps to expand processing capacity and it's time to ramp up scalability.

As individual firms juggle internal priorities, the industry as a whole is facing margin pressures and stress from InsurTechs agitating to lure away customers. To be competitive, insurers must successfully implement

profitable and sustainable new business models. However, many incumbents are not as well-equipped as nimble InsurTechs to incorporate new business models into their operations and must expand their digital and data analytical capabilities. Those wishing to offer on-demand insurance, for example, must improve proficiency across a number of digital and analytical areas, including connected devices, mobile-only solutions, pricing analytics and building customer profiles, among others. Proficiencies useful for one type of innovation are often also applicable elsewhere, so a full analysis of the costs and overall benefits of each investment is recommended (Figure 2.8).

Figure 2.8 Prioritizing the Capabilities Required to Implement New Business Models

Capabilities	New Business Models					
	Peer-to-Peer insurance	One all-risk policy	On-Demand insurance	Usage-Based insurance	Micro-Insurance	Flexible coverage
Connected devices	High	Medium	High	High	Low	High
Automation	Medium	Low	Medium	Medium	High	Low
Smart contracts	High	Medium	Low	Low	High	Low
Mobile-only solutions	High	Medium	High	High	High	Low
Open APIs	Medium	Medium	Medium	Medium	Medium	Medium
Building customer profile	Medium	High	High	High	Low	High
Personalized risk assessment	Medium	High	Medium	Medium	Low	Medium
Pricing analytics	Medium	High	High	High	Medium	High
Emerging risk identification	Medium	Medium	Medium	Medium	Low	Medium
Targeted products and services	Medium	Medium	High	Medium	Medium	High
AI-augmented customer service	Medium	Medium	Medium	Medium	Low	Medium

Innovations in digitization
 Innovations in data and analytics
 ◆ High
 ◆ Medium
 ◆ Low

Note: The Capabilities are marked "High" if most of the executives have marked "Very Important"; "Medium" if most of the executives have marked "Important"; "Low" if most of the executives have marked "Somewhat Important"

Question: Please rate the importance of the below digital and data & analytics capabilities required to implement the innovations based on insurance-as-a-utility

Source: Capgemini Financial Services Analysis, 2017; WIR 2017 Executive Interviews, 2017

The ultimate goal for incumbent insurers should be to develop a portfolio of InsurTech capabilities that are synergistic. Investing in mobile-only solutions to support on-demand insurance, for example, will also prepare an insurer to develop capabilities relevant to peer-to-peer insurance, usage-based insurance and micro-insurance. Building upon their experience and deep resources, insurers should seek to design a coordinated strategy that will position them to address InsurTech innovations on multiple fronts.

To gain a competitive edge and to drive sustainable-profitable growth, leading insurers have already started investing in synergistic InsurTech capabilities. Firms yet to lay down a holistic framework to leverage these disruptive capabilities risk being left behind.

About Us



About Capgemini

With more than 190,000 people, Capgemini is present in over 40 countries and celebrates its 50th anniversary in 2017. A global leader in consulting, technology and outsourcing services, the Group reported 2016 global revenues of EUR 12.5 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Learn more about us at www.capgemini.com

About Capgemini's Financial Services

Capgemini's Financial Services Business Unit offers global banks, capital markets firms, and insurers transformative business and IT solutions to help them nimbly respond to industry disruptions, to give their customers differentiated value, and to expand their revenue streams. A team of more than 55,000 professionals collaboratively delivers a holistic framework across technologies and geographies, from infrastructure to applications, to provide tailored solutions to 1000+ clients, representing two-thirds of the world's largest financial institutions. Client engagements are built on bar-setting expertise, fresh market insights and more than a quarter century of global delivery excellence.

Learn more at www.capgemini.com/financialservices

Rightshore® is a trademark belonging to Capgemini



About Efma

A global non-profit organisation, established in 1971 by banks and insurance companies, Efma facilitates networking between decision-makers. It provides quality insights to help banks and insurance companies make the right decisions to foster innovation and drive their transformation. Over 3,300 brands in 130 countries are Efma members.

Headquarters in Paris. Offices in London, Brussels, Barcelona, Stockholm, Bratislava, Dubai, Mumbai and Singapore.

Visit www.efma.com

Acknowledgements

We would like to extend a special thanks to all of the insurance companies and individuals who participated in our Insurance Executive Interviews and Surveys.

The following firms agreed to be publicly named:

Ageas UK, Aegon UK, AG Insurance, Allianz Benelux, Allianz Seguros, Allianz Insurance plc, AOK Nordost – Die Gesundheitskasse, AVIVA plc, AXA, AXA Asia, AXA Group Direct, AXA Insurance UK, AXA Konzern AG, AXA Partners, AXA SEGUROS S.A., AXA Seguros, AXA Singapore Ltd, Bansabadell Seguros, BZ WBK - Aviva, Cardif Vita (BNPP Group), Caser Seguros, Cattolica Assicurazioni, CNP Partners Italia, Co-op Insurance, Delta Lloyd Life, Desjardins General Insurance Group, Direct Seguros, Ethias NV/SA, Generali, Generali Deutschland AG, Generali Seguros, Genworth, Grupo Catalana Occidente, Helvetia Compagnia Svizzera d'Assicurazioni SA, Helvetia Versicherungen AG, Helvetia Versicherungen Deutschland, inCube - Innovative Insurance Insights, ITERGO Informationstechnologie GmbH, KBC Verzekeringen, Liberty Seguros, Mapfre, MotionsCloud, Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, Mutua Madrileña Aseguradora, ÖKK, Pelayo Seguros, QBE Insurance Australia, QBE Insurance Group Ltd., Reale Mutua Assicurazioni Group, Reale Seguros, S.A, Santalucía Seguros, Secorex, SegurCaixa Adeslas, Seguros RGA, Signal Iduna, Skandia, SOMPO International, State Farm Insurance, SulAmérica Seguros S.A., Swiss Re, uniVersa Versicherungen, USI Insurance Services, Versicherungskammer Bayern, VidaCaixa, West Bend, Zurich Australian Insurance Limited, Zurich España, Zurich Gruppe Deutschland, Zurich Minas Brasil S.A.

We would also like to thank the following teams and individuals for helping to compile this report:

William Sullivan, Vikash Singh, and Krithika Venkataraman for their overall leadership for this year's report; Raghunandan Kothamasu, Kumaresan A, and Chris Costanzo for researching, compiling, and writing the findings, as well as providing in-depth market analysis.

Capgemini's Global Insurance network for providing their insights, industry expertise and overall guidance: Manoj Khara, Rekha Gupta, Todd Kobriger, Jan Verlinden, Pedro Amaral Ribeiro Neto, Rodrigo Bittencourt de Gomensoro, Pierre-Louis Séguin, Frank Eversz, Gunnar Tacke, Joachim Rawolle, Klaus-Georg Meyer, Thomas Klein, Uwe Korte, Eric Bourliatoux, Virginie Sakakini, Apparao Chathurvedula, Niraj Parihar, Ramesh Darbha, Christian Morlacchi, Daniele Di Maio, Michele Inglese, Raffaele Guerra, Hiroyasu Hozumi, Vinod Vishwanath, Luuk van Deel, Nuno Oliveira, Chris Stevens, Christophe Mario, Maria Teresa Martin Gimeno, Silvia Milian, Kevin Jiang, Hubert van Goor, Michael Zellner, Thomas Hillar, Asheesh Rangnekar, Christopher Ling, James Kruger, Dean Parmer, Rahul Dhingra, Anthony Pavia, David M. Smith, Alan Walker, Ankur Jain, Arthur Hill, Christopher Snyder, George Schwab, Kamal Goel, Keith Gage, Nishant Tomar, Seth Rachlin, Robin Spaulding, S. Ramakrishnan, Satish Weber, Shane Cassidy, Sharon Petrell, Vijay Amballa, and Vikesh Gupta.

Ken Kundis, Carolee Dagenais, Tamara Berry, Mary-Ellen Harn, Martine Maître, Erin Riemer, and Sai Bobba for their overall marketing leadership for the report and Creative Shared Services Team for producing the report: Kalidas Chitambar, Kanaka Donkina, Suresh Chedarada, Sambandhan Suresh, Sourav Mookherjee, Jalandhar Boddula, Chowdari Raghava Gutta, Sridhar Janga, and Suresh Sathiyarayanan.

Alain Enault and the Efma team for their collaborative sponsorship, marketing, and continued support.

©2017 Capgemini

All Rights Reserved. Capgemini and Efma, their services mentioned herein as well as their logos, are trademarks or registered trademarks of their respective companies. All other company, product and service names mentioned are the trademarks of their respective owners and are used herein with no intention of trademark infringement. No part of this document may be reproduced or copied in any form or by any means without written permission from Capgemini.

Disclaimer

The information contained herein is general in nature and is not intended, and should not be construed, as professional advice or opinion provided to the user. This document does not purport to be a complete statement of the approaches or steps, which may vary accordingly to individual factors and circumstances, necessary for a business to accomplish any particular business goal. This document is provided for informational purposes only; it is meant solely to provide helpful information to the user. This document is not a recommendation of any particular approach and should not be relied upon to address or solve any particular matter. The text of this document was originally written in English. Translation to languages other than English is provided as a convenience to our users. Capgemini and Efma disclaim any responsibility for translation inaccuracies. The information provided herein is on an 'as-is' basis. Capgemini and Efma disclaim any and all representations and warranties of any kind concerning any information provided in this report and will not be liable for any direct, indirect, special, incidental, consequential loss or loss of profits arising in any way from the information contained herein.

For more information, please visit:

www.worldinsurancereport.com
www.efma.com/wir

Please contact:

Capgemini: insurance@capgemini.com
Efma: wir@efma.com

For press inquiries, please contact:

Benjamin Pfeffer (North America and Rest of the World)
bpfeffer@webershandwick.com or +1 212 445 8137

Gemma Coleman (EMEA)
gemma.coleman@webershandwick.com or +44 (0) 207 067 0512

Mary-Ellen Harn (Capgemini)
mary-ellen.harn@capgemini.com or +1 704 490 4146

Alys Singh (Efma)
alys.pr@efma.com or +33 1 47 42 6771

www.worldinsurancereport.com

