How IBM can help

Maturing markets, tight capital, increasing risk and technologically sophisticated customers are just some of the pressures the insurance industry faces today. As a result, insurers will need to be more nimble, innovative and connected with their customers, offering risk advice and prevention on top of the classical, pay-after-the-damage-is-done coverage. To afford this, insurers have to work faster, more efficiently and, above all, smarter. Those that do are set to thrive; those that don’t are prone to fail. The IBM Global Insurance team delivers an insurance platform designed to provide efficiency, with built-in cognitive engagement and insight capabilities to help insurers deploy at speed. For more information about IBM Insurance solutions, visit [ibm.com](http://ibm.com/insurance).
An insurtech-infused future

The global insurance industry is at a watershed moment. Insurance leaders have witnessed the growing impact of fintechs – financial technology startups – on traditional banking and heavy investment in insurance technology (insurtechs). They are consequently attempting to identify the best approach to working with these potentially threatening technology innovators. Insurers are galvanizing themselves just in time. This executive report, based on a survey of insurers, insurtechs and venture capitalists, outlines causes, consequences and a path forward for insurers to successfully embrace an insurtech-infused future.

Into the breach

Ecosystem evolution is shattering paradigms across traditional – and even highly regulated – industries. For example, consider ride-sharing services. While commonplace today, taxi companies held cast-iron monopolies in almost all major cities as recently as five years ago. Startups such as T-Mining and Convoy are remaking shipping and long-haul transport, traditional bastions of entrenched interests and systemic inefficiencies.

Healthcare and life sciences are being recast through the impact of rapid digitization, demands for efficiency through integration and the Internet of Things (IoT).

In banking, an industry just as heavily regulated as insurance, digital disruption has impacted traditional businesses differently. Although the press has hyped the likely impact of fintech startups across broad swaths of the banking value chain, the reality of fintech engagement in the industry has been less profound.

Rather than emergent fintechs undermining banking business models, traditional banks are increasingly looking to partner with, acquire or even provide seed funding for new fintech businesses. Banks are undertaking these initiatives to help drive efficiency and improved capability and service quality for their customers. Incumbents too slow to embrace partnerships with the most dynamic startups risk losing market share to their more nimble competitors.

After a long period of slow change, the insurance industry is finally following suit. Leading insurance businesses are starting to better connect risk with customers by partnering with or being inspired by dynamic new startups – insurtechs – across the insurance sector.
Recent evidence confirms the growing importance of insurtechs to the global industry. Investment in insurtechs between 2014 and 2016 topped USD 5 billion. By 2016, more than 30 percent of global insurance customers were using insurtechs exclusively or in combination with incumbent firms to fulfill their insurance needs.

To help understand the advancing significance of insurtechs within the insurance industry, we surveyed more than 1,200 executives globally across traditional insurers, insurtechs and venture capital companies (see Methodology, page 17). This report shows that the most dynamic and successful insurance companies are those leading the insurtech charge. Eighty-one percent of C-suite leaders of outperforming businesses surveyed – based on measures of operating efficiency and gross premiums written – reported they have either invested in or are already working with insurtech businesses, compared with only 45 percent of others.

**Insurtechs are typically technology-oriented startups that use innovative technical solutions to power new insurance business models. They take advantage of inefficiencies, substituting parts or all of the insurance value chain, and often get between traditional industry players, and the customer and their risks.**
Tales of the unexpected

Almost three in four of insurance C-suite executives surveyed say they believe insurtechs are disrupting the insurance industry. Yet only 43 percent see this same disruptive effect on their own business or operating models – a discrepancy that may point to overconfidence in their innovative strength.

While opinions about the types of disruption differ, just over one third of insurtechs say their engagement with the insurance industry will be competitive, causing disruptive change. But 44 percent of insurtechs say they believe their involvement will be cooperative, with 52 percent expecting evolutionary development (see Figure 1). The breadth of a rapidly expanding insurance footprint underscores the opportunities for collaboration between insurance companies and insurtechs.

For example, insurtechs such as Octo and Neos are positioned at the center of IoT applications in the industry. Sensors and telematics are already impacting operations, new products and pricing for many insurers. This could increase as IoT devices and connection technologies become more capable, cheaper and ubiquitous. Specific functions, such as marketing, claims and even pricing, are ripe for improvement for many traditional insurers. Insurtechs such as Cytora with pricing and RightIndem or ControlExpert with claims are examples. And customer, behavioral or environmental data, like that provided by Sureify, as well as gamification and add-on services like those offered by Visionarity, can provide other significant opportunities for insurtechs.

Figure 1
Insurtechs on insurtechs – how their strategy affects insurers

Source: 2017 IBM Institute for Business Value Insurtech Survey.
Note: The number for “cooperation” in the text of the report differs from the sum of numbers in the figure due to rounding.
Insurtechs are also actively engaged in innovating traditional insurance business models. Analysis of the 400 insurtech organizations surveyed provide a compelling map of where insurtech businesses are engaged in the value chain (see Figure 2).

Figure 2
Where insurtechs play in the insurance value chain in selected areas

- Policyholder acquisition: 12% insurtech responses, 18% insurer responses
- Underwriting: 13% insurtech responses, 48% insurer responses
- Policy administration: 20% insurtech responses, 40% insurer responses
- Claims management: 34% insurtech responses, 50% insurer responses
- Assistance: 26% insurtech responses, 39% insurer responses

Source: 2017 IBM Institute for Business Value Insurtech Survey.
In the area of insurance distribution, 21 percent of the surveyed insurtechs state they are creating comparison portals, nine percent have either become or are seeking to become digital insurance brokers, and five percent are positioning themselves to support insurance cross-selling activities. Twenty-six percent are creating online-only digital solutions either as risk carriers or with relationships in place to pass on risk through reinsurance.

Ten percent are engaging in peer-to-peer insurance and three percent in on-demand insurance for specific periods of time. Twenty-three percent are providing software solutions to the wider industry, two percent are facilitating data collection through IoT-connected devices, and one percent is engaged in blockchain or other types of smart contracting (see Figure 3).

**Figure 3**
Mapping insurtech activity globally

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Percentage of insurtechs following the business model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparison portals</strong></td>
<td>Online comparison of products and providers 21%</td>
</tr>
<tr>
<td><strong>Digital brokers</strong></td>
<td>Web/mobile-based policy brokerage 9%</td>
</tr>
<tr>
<td><strong>Insurance cross sellers</strong></td>
<td>Insurance at point of sale or own app 5%</td>
</tr>
<tr>
<td><strong>Digital insurers</strong></td>
<td>Online-only digital solutions 26%</td>
</tr>
<tr>
<td><strong>Peer-to-peer insurance</strong></td>
<td>Private parties for mutual insurance coverage 10%</td>
</tr>
<tr>
<td><strong>On-demand insurance</strong></td>
<td>Coverage for selected periods of time 3%</td>
</tr>
<tr>
<td><strong>Risk carrier</strong></td>
<td>Provide software solutions 23%</td>
</tr>
<tr>
<td><strong>Internet of things</strong></td>
<td>Enable data collection via smart devices 2%</td>
</tr>
<tr>
<td><strong>Blockchain and smart contracts</strong></td>
<td>Tamper-proof distributed transaction system 1%</td>
</tr>
</tbody>
</table>

Source: 2017 IBM Institute for Business Value Insurtech Survey.
A dream to some

Eighty-one percent of outperforming insurance businesses surveyed have either invested in or are already working with insurtech businesses, compared to 45 percent of all others. These insurers are embracing insurtechs for their ability to help drive new growth, promote efficiencies and accelerate innovation. Their goal is to incorporate new technologies harnessed by insurtechs that can redefine the way insurers interact and engage with customers.

Although deeply personalized insurance services have been available to the lucky few with access to high-quality brokers, for most people insurance has long been characterized by standardized products with minimal interaction. But technologies employing artificial intelligence (AI), cognitive capabilities, IoT, blockchain and cloud can fundamentally redefine the nature of policyholder engagement and render highly personalized interactions scalable and affordable. Proliferation of usage-based or other value-added services, such as hourly car insurance, mobile microinsurance and hotel rental coverage reflect this paradigm shift. To comprehensively address customer needs and aspirations, insurers are also advancing into new types of customer-centric ecosystems that aggregate insurance and non-insurance services. These include health and wellness, financial, travel and transportation, and numerous others.

C-suite executives from outperforming insurance businesses say that engagement with insurtechs can improve and extend the quality of their customer or policyholder engagement. Fifty-six percent reported that insurtechs present an opportunity to improve their own organization’s customer relationships. But even the most dynamic of traditional insurers are underestimating the benefits insurtechs can bring to the insurance industry compared to insurtechs themselves (see Figure 4).
Insurtechs and the venture capitalists who fund them are looking to accelerate a shift of the industry away from traditional insurance products toward personal risk management, micro-products and insurance-as-a-service. These can be employed by individuals to manage their own risk, rather than pay full premiums for insurance companies to manage it for them.

Eighty percent of insurtech leaders say that insurtech proliferation is accelerating an industry-wide shift of insurance toward preventive advice and other forms of risk management services. Eighty-two percent of venture capital leaders agree. Although services that allow clients to better manage their own risks may reduce their willingness to buy traditional insurance products, expansion of risk-management services are likely to increase the market for risk management as a whole. While C-suite executives of outperforming traditional insurance companies understand the opportunity, they are reluctant to translate this into strategy: 68 percent recognize the risk-management impact of insurtechs on the industry, yet only 51 percent state that it has the same impact on their own strategies.

Friendsurance rewards responsibility

Berlin-headquartered insurtech Friendsurance, with a base of over 130,000 customers, employs a peer-to-peer insurance model. Customers with the same type of insurance are able to connect with each other and encourage friends and acquaintances to join them. Under the Friendsurance model, if no claims are made by customers or any of their connections, they receive a cashback of up to 40 percent of the paid premium. Because individuals in an insurance pool know each other, responsible claims behavior is not only encouraged but rewarded. To enhance policyholder engagement, Friendsurance has created a simple online portal and agile operations that constantly seek to optimize experience and improve customer satisfaction and loyalty.
Similar views are held in relation to the impact of insurtech entrants on the proliferation of insurance microproducts, such as insurance “by the hour,” or for specific items, activities or events. Insurers, venture capitalists and insurtechs all agree on a high insurtech impact, yet not even outperforming insurers’ strategies reflect this so far (see Figure 5).

**Figure 5**

*Impact of insurtechs on accelerating the shift toward personal risk management and microproducts*

Insurtechs will turn insurers into personal risk managers in the next 3-5 years

<table>
<thead>
<tr>
<th>Source: 2017 IBM Institute for Business Value Insurtech Survey.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insurtech</strong></td>
</tr>
<tr>
<td><strong>VCs</strong></td>
</tr>
<tr>
<td>Outperforming insurers</td>
</tr>
<tr>
<td>Outperforming insurers’ strategy</td>
</tr>
</tbody>
</table>

Insurtechs will drive the rise of microproducts in the next 3-5 years

<table>
<thead>
<tr>
<th>Source: 2017 IBM Institute for Business Value Insurtech Survey.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insurtech</strong></td>
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</tr>
<tr>
<td>Outperforming insurers</td>
</tr>
<tr>
<td>Outperforming insurers’ strategy</td>
</tr>
</tbody>
</table>

Although services that allow clients to better manage their own risks may reduce their willingness to buy traditional insurance products, expansion of risk-management services are likely to increase the market for risk management as a whole.

Desjardins achieves improved customer loyalty through damage prevention

Quebec-based insurer Desjardins and California-based insurtech Roost Home Telematics are partnering on Alert, a new solution that helps prevent water damage in the home. The Alert mobile app lets clients receive early notification of water leaks, which can improve transparency, control and pricing accuracy between policyholder and insurance provider. With the added level of protection for their home, customer retention and loyalty are also expected to increase. 

10
Similar to banking, rather than fighting insurtech insurgents, many major insurers are leaning on insurtechs as test environments for new innovations to help them break through organizational and cultural intransigence to accelerate business models and other forms of innovation. An additional benefit is that negative market reaction to specific insurtech products, services or use of data does not hurt the insurer’s own brand.

A recent IBV study concluded, “As a result of the many ‘micro-disruptions’ in the global insurance industry created by insurtechs and others, the most dynamic organizations are already responding by applying digital technology to insurance functions, operations, and current and potential policyholder engagement.” Indeed, technological micro-disruptions are creating an ever-expanding fragmentation of the traditional insurance value chain, making it easier for insurtech businesses to form and participate (see Figure 6).

Digital Risks offers insurance flexibility for entrepreneurs

London-based insurtech startup Digital Risks offers insurance-as-a-service solutions primarily targeted to startup companies in the technology, advertising and film sectors. The pay model is monthly, with highly flexible coverage that can be switched on and off as needed. Digital Risks’ protection ranges from equipment and employer liability to cyber security. For the latter, the company’s goal is to use penetration testing to develop dynamic risk models based on the robustness of a company’s security.
Bought by Many defines and offers micropolicies to dedicated communities

London-based insurtech Bought by Many operates a peer-to-peer (P2P) business in which the company aggregates and channels discounts from existing insurers to groups of individuals with highly specific insurance needs. Bought by Many’s business model uses search results and social media to form hubs of people with specific niche interests or needs. These can include extreme sports or travel insurance when the insured possesses a specific medical condition. Once niche hubs or communities are defined and risks assessed, Bought by Many can offer insurance to these clearly defined communities through third parties. With its rapidly expanding data and experience, Bought by Many recently began writing its own insurance policies for specific communities with the financial backing of Munich-based reinsurer Munich Re.¹³

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**Figure 6**

*Micro-disruptions and the insurance industry value chain*

<table>
<thead>
<tr>
<th>Marketing and product development</th>
<th>Policyholder acquisition</th>
<th>Underwriting</th>
<th>Policy administration and asset management</th>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blockchain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloud</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI/Cognitive computing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contextual mobility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer analytics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drones</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Geospatial data</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Internet of Things</td>
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<tr>
<td>Mobile</td>
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<tr>
<td>Social</td>
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</tr>
<tr>
<td>Telematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Weather data</td>
<td></td>
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</tbody>
</table>

*Source: IBM Institute for Business Value analysis.*
C-suite executives from traditional insurance companies and leaders of insurtechs say they believe greater collaboration between insurtechs and insurers, in the form of closer partnering arrangements or acquisition, can yield significant benefits for both (see Figure 7).

**Figure 7**
*Driving alignment between insurers and insurtech - traditional insurers’ best response to insurtechs*

<table>
<thead>
<tr>
<th></th>
<th>Insurtech responses</th>
<th>Insurer responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner with them</td>
<td>64%</td>
<td>58%</td>
</tr>
<tr>
<td>Acquire them</td>
<td>43%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Source: 2017 IBM Institute for Business Value Insurtech Survey.

**Nauto goes beyond usage-based insurance**

California-based startup Nauto provides an automotive data platform designed to make driving safer and fleets smarter. Its AI-powered systems include an after-market dual camera that can augment any vehicle or fleet with sophisticated safety and networking features. Over time, the Nauto data platform can promote safer driving by recognizing unsafe driving behaviors, such as looking the wrong way while driving. Insurers can use Nauto to handle claims faster and provide fairer customer pricing.14
A nightmare to others

Almost 60 percent of the global insurance C-suite executives surveyed believe that insurtechs are already driving innovation across the insurance industry. Seventy-seven percent of venture capitalists agree. The impact of insurtechs on the insurance industry could be set to expand. For insurers, the goal is to become a part of new relevant platforms – ideally based on open standards – to orchestrate new concepts and ideas. Using their own brand and capabilities, and with the help of agent and broker networks, insurers can aim to remain life companions for their customers. Insurers that do not embrace the power of insurtech solutions may find themselves under increasing threat. This threat may not only come from insurtechs themselves, but also from entrepreneurial insurers that leverage insurtech services to expand offerings and deepen policyholder engagement across channels, geographies and lines of business.

In the end, it may not matter whether specific insurtechs survive in the long term or themselves become victims of disruption – the ideas they bring into the world of insurance are here to stay.

Bâloise Assurances gamifies telematics to improve driving and lower premiums

Because auto insurance can be an on-ramp to acquiring first-time customers, auto insurance ecosystems tend to lead in innovation. For example, Luxembourg-based insurer Bâloise Assurances is partnering with telematics startup Motion-S. The Motion-S device-agnostic telematics platform receives driving data from multiple sources and measures exposure to risk using 17 measurable contributory factors. Beginning with the two companies’ “Game of Roads” 2015 marketing campaign, users could use an app to evaluate their driving, discover their scores, improve their weaknesses, win 24-hour events and collect achievement badges. Game of Roads formed the basis for “GoodDrive,” launched in 2017, the first telematics-based insurance in Luxembourg offering substantially cheaper rates to less experienced drivers. The GoodDrive ecosystem has the potential to expand to other partners, such as fleet managers and organizations interested in driving education and safety.
Recommendations for insurers: It’s all about flexibility

Increase customer interaction value
Touchpoints with customers are opportunities to engender trust, loyalty and satisfaction. This means interacting more often, and providing value to the customer. Embrace insurtech philosophies around customer-centricity, experience and usability. Think about customers holistically – what they want, what they need, what they aspire to. Determine how you can contribute to a broader, more compelling experience, and by so doing, expand wallet share.

Improve agility and flexibility in product development
Simply providing venture capital for an insurtech is not an adequate strategy. Consider your value chain and how insurtech strategies and activities can impact how, when and where you do business, including the products and services you sell. Mine social conversations to analyze customer trends and patterns. Learn from other industries and work to dramatically shorten product introduction cycles. Look beyond traditional risk coverage to introduce innovative packages of products and services.

Give up to get back
Reevaluate the philosophy that you need to own the entire insurance value chain; insurers will not be able to develop everything on their own. Actively seek collaboration partners and opportunities not only with insurtech businesses, but with other parties – perhaps in other industries. Develop or become part of one or more compelling insurance platforms as part of the new ecosystems. Keep or build the role of “life companion” for customers by aggregating brands, products and services of many startups and industry players, leveraging relevant capabilities and know-how.
Recommendations for insurtechs: Scale to succeed

Identify scalable niches
Size matters in insurance, and not just for risk carriers. Differentiation and distribution scale create winners. Join digital hubs to expand reach to scale more quickly. Seek to work with reliable insurance platform providers, both on the technology and the business side, with international or global capabilities, if necessary.

Look beyond insurance
Traditional insurers tend to focus solely on insurance, shunning “adjacent spaces,” whether within the industry – such as providing non-coverage products and services – or without. Look for opportunities to inhabit these spaces both for content and distribution.

Create “insurtech inside”
Form a building block that is easy to integrate into the insurance value chain. “Insurtech inside” can incorporate insurance into broader services, such as warranty coverage with a product sale that includes customer support or customization.
**Recommendations for regulators: Direct disruption**

*Prepare for technology*

Some technologies, such as IoT and blockchain, will open completely new ways of doing business. Think through how new technologies might disrupt existing processes, allowing the industry to keep reasonable control of the current business and products, thus minimizing issues to customers.

*Think in ecosystems*

The industry is becoming more varied, including not just traditional insurers, but also various full and partial insurance platforms. Consider broadening the regulatory scope by certifying platforms, ecosystems and an aggregated mixture of products, services, brands and processes for the benefit of customers.

*Create partnerships for better oversight*

With technological change accelerating, relevant expertise goes beyond insurance specifics. Collaborate with technological compliance specialists, such as SGS and TÜV, to certify distinct parts of new insurance processes such as cloud, security, blockchain, IoT or risk platforms to help increase transparency.
Key questions

- How is your company – culture, technology, processes and people – preparing to participate in an ecosystem-based insurance economy? How do you plan to leverage data, knowledge and new products and services?
- How do you plan to interact with open platforms? How will this enable you to scale and manage compliance in the eyes of all stakeholders (clients, partners, regulators and employees)?
- What new products and value-added insurance services do you plan to introduce or use to compete?
Methodology
In cooperation with Oxford Economics, the IBM Institute for Business Value surveyed 1,201 business executives globally in the third quarter of 2017; four hundred of these were leaders of insurtech companies, 601 were traditional insurers, and 200 were venture capital firms that invest in the insurance industry. All participants were asked a range of questions centering on insurtechs and their impact on disruption and innovation in the insurance industry.

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