# InsurTech and the Innovation Agenda

By Jamie Yoder and Javier Baixas with contributions from Eric Trowbridge

nsurance companies are very much aware of the FinTech revolution: 74 percent of respondents to a recent PwC survey¹ see FinTech innovations—in the case of insurance, InsurTech—as a challenge for their industry. There is good reason to believe that insurance is indeed heading down the path of disruptive innovation, whether it is the effect of external factors, such as the rise of the sharing economy, or the ability to improve operations using artificial intelligence (AI).

Innovative solutions are more than a "nice to have." They are increasingly table stakes for insurers to:

Meet customer needs – Social and technological trends, which have led customers to expect transparent, personalized, real-time service, are a source of external opportunity for tech-savvy insurers. The incorporation of FinTech solutions will result in a better client experience and also provide them the opportunity to have more and better touch-points in a business where interactions mainly happen in sales, billing and claims.

Market players who have been taking action and adapting their offerings to changing client demands—recognizing that one size does not fit all-will at least maintain their market position. However, this does not guarantee them a truly competitive advantage, since fast-followers can quickly replicate their innovative value propositions. Notwithstanding, by adapting FinTech solutions, incumbents have the opportunity to position themselves as leaders in more than just incremental innovation.

Better collect and process data – In parallel, and from an internal perspective, InsurTech is enabling traditional insurers to leverage existing data to generate deeper risk insights. Embracing InsurTech is helping incumbent insurers gather more insightful and higher quality data—a game changer because insurance is a business that, by its very nature, relies on risk insights. This has the promise to increase the speed of servicing, lower costs, and promote greater product precision and customization. In particular, the Internet of Things



(IoT) (e.g., sensors and drones) in particular promises efficient generation of insights from external data sources.

Improve risk assessment and underwriting - Related, InsurTech solutions are valuable when developing new approaches to underwriting risk and predicting losses. Protection-based models are shifting to more sophisticated preventive models that facilitate loss mitigation in all insurance segments. The ability to capture and analyze data from different sensors and other sources in near real time is opening the door to more proactive prevention models.

## **NEW VALUE PROPOSITIONS**

New market entrants are capitalizing on changing customer expectations, and the need to build trusted relationships is forcing incumbents to seek value propositions where user

experience, transaction efficiency, and transparency are key elements. Some of the ways forward thinking companies are achieving this include:

- **Self-directed services** As is the case in other industries, insurers are investing in the design and implementation of more self-directed services for both customer acquisition and customer servicing. This is allowing them to improve their operational efficiency while enabling the online/mobile channels that emerging segments (i.e., millennials) want. In some cases, customer-centric designs create compelling user experiences (e.g. obtaining quotes by sending a picture of a driver's license and vehicle identification number). New solutions also offer the opportunity to mobilize core processes in a matter of hours (e.g., accessing services by using "robots" to create a mobile layer on top of legacy systems), and can augment key processes (e.g., first notice of loss (FNOL)), which includes differentiated mobile experiences.
- Usage-based insurance (UBI) UBI models are emerging in response to customer demands for personalized insurance solutions. Initially, incumbents viewed UBI as an opportunity to underwrite risk in a more granular way by using new driving/behavioral variables, but new players see UBI as an opportunity to meet new customer needs (e.g., low mileage or sporadic drivers). In particular, there is increasing interest in finding new underwriting approaches based on deep risk insights, and usage-based models are becoming more relevant as initial challenges, such as data privacy, are being overcome.

Leveraging new data sources to obtain a more granular view of the risk offers a key competitive advantage in a market where risk selection and pricing strategies could be augmented, and can allow incumbents to explore unpenetrated segments. New players that have generated deep risk insights also are likely to enter these unpenetrated segments of the market (e.g., life insurance for individuals with specific diseases).

Remote access and data capture – New data sources that can be accessed remotely and in real-time can generate deep risk and loss insights. These sources include the IoT; for example, (1) drones, which can access remote areas and assess loss by running advanced image analytics, and (2) integrated IoT platforms, which include various types of sensors, such as telematics, wearables and those found in industrial sites, connected homes, or any other facilities/equipment. However, capturing huge amounts of data must be coupled with effective analysis in order to generate meaningful insights.

The ability to collect and analyze huge amounts of data will allow insurers to shift from reactive protection models to New approaches are emerging in the life market, such as using wearables to monitor lifestyle healthiness and offering rewards and/or premium discounts ...

more sophisticated, proactive and personalized prevention models thanks to a more granular view of risk. A current example of this is telematics-based pay-as-you-go coverage. New approaches are emerging in the life market, such as using wearables to monitor lifestyle healthiness and offering rewards and/or premium discounts to people who make prudent health choices.

#### RELENTLESS INNOVATION

The speed of social and technology change and non-insurance specific trends such as shared economies, self-driving cars, robotics and medical advances, are likely to continue disrupting the insurance market and at a rapid pace. In fact, while we predicted long ago that disruptive change would affect the industry no later than the middle of this decade, the pace in which it has occurred has surprised even us. In particular<sup>2</sup>:

- 1. Insurers need to become more comfortable with the implications of innovations in shared economies and smart cars. For example, even though many insurers anticipate that smart cars are likely to become more prevalent in the near future, relatively few of them appear to be planning a response. In our earlier work on the future of auto insurance, we outlined four possible risk scenarios that insurers need to consider: 1) risk shifting, 2) risk sharing, 3) risk slicing, and 4) risk reduction.3
- 2. Robotics will lead to changes in core insurance operations beyond just advice. Robo-advice based on AI leverages different approaches to support existing advisors and/or provide direct-to-consumer solutions. Early robo-advisors have typically offered a portfolio selection and execution engine for self-directed customers. The next stage in robo-advisor evolution is offering better intelligence on customer needs and goal-based planning for both protection and financial products. Advanced analytics to simulate future scenarios will help customers and advisors to align financial goals and portfolios. In general, AI's initial impact primarily relates to improving efficiencies and automating existing



customer-facing, underwriting and claims processes. Over time, its impact will be more profound; it will identify, assess and underwrite emerging risks and identify new revenue sources.4

- 3. Connected health, combined with other InsurTech trends, will help revitalize life insurance. We anticipated in one of our first Future of Insurance reports that sensors will change insurers' ability to predict, prevent and mitigate risk.<sup>5</sup> In fact, connected health and P4 Medicine (predictive, preventive, personalized and participatory) is now a reality. For life and health insurers, sensor technology is helping to monitor policyholders' health. Devices can alert them to early signs of illness and help them receive timely treatment.
- 4. Insurers haven't explored blockchain technology deeply enough, but existing proofs of concept (POCs) and emerging start-ups are already producing relevant use cases. In our experience, insurers have less understanding of blockchain that other financial services companies, and many have practically no understanding of the technology at all. However, blockchain already offers considerable

opportunity across the insurance value chain. For example, reinsurers6 are now concentrating on improving operational efficiency and security with blockchain solutions, including smart contracts and related innovations that have the promise to significantly change how companies maintain the privacy and security of non-public information.

### DEVELOPING AN INSURTECH MINDSET

Although many insurers claim that FinTech lies at the heart of their corporate strategies, this has not necessarily translated into action. Relatively few have explored partnerships with FinTech companies and even fewer have a more active participation in ventures and/or incubator programs. Surprisingly, many insurers have not made FinTech a key element of their strategy at all. This inaction is putting their business at risk of falling behind their competitors and significantly reduces opportunities to innovate.

Insurers must start by addressing their innovation needs and assessing how prepared the organization is to cultivate innovation. Once there is a clear idea of the organization's strategic goals and a suitable appetite for change, insurers can start planning how to maintain awareness of promising new trends and potential future scenarios. Lastly, insurers must decide how they plan on interacting with technology start-ups and their plan for linking to the InsurTech industry.

## BRIDGING THE CULTURAL GAP

The difference in management and culture is one of the major impediments when insurers and technology companies work together. Insurance is an inherently risk averse industry while technology startups inherently take risks many other companies would not. Despite these differences, most insurers understand that an innovative mindset—typically the possession of external talent—is the key to driving breakthrough innovation. Moreover, InsurTechs are learning to leverage incumbents' expertise in risk and regulation to solve complex problems and scale new solutions.

Interestingly, while incumbents are much more concerned about cyber risk than new entrants, emerging InsurTechs often struggle to address regulatory challenges that frequently are part of incumbents' business as usual. And, differing perception of cyber and regulatory challenges is one of the main areas of potential discord between established insurers and new players. Accordingly, both cyber risk and regulation are an essential part of the innovation agenda. This requires including appropriate cyber-risk and regulatory specialists in the development of the enterprise innovation model.

#### FINAL THOUGHTS

Even though InsurTech is currently in its infancy, innovative new business models are emerging. The unique value proposition of InsurTech is in the shift from complexity and long tails to real-time, easy-to-use, configurable, customized and cost-friendly products and services, all available via mobile and real-time technology.

In a fast paced digital age, insurers are balancing InsurTech opportunities with the challenge of altering long-standing business processes. While most insurers have embraced change to support incremental innovation, bigger breakthroughs are necessary in order to compete with the new technologies and business models that are disrupting the industry.

In order to remain in the race, insurance leaders' innovation agenda should include the following:

- Scenario planning—what are the potential future scenarios and their implications?
- Real-time monitoring and analysis of the InsurTech landscape.

- Determining how to promote enterprise innovation, including combining different approaches of accelerating and enabling execution.
- Augmenting the organization with new and different types of talent.
- Cyber security and regulation.

Taking effective action in these areas will inform how the company approaches innovation, any talent gaps that may exist, and the most promising opportunities. Most importantly, the resulting insights can help insurers translate knowledge of disruptive forces into strategic, actionable plans for competitive innovation.

PwC senior manager Eric Trowbridge also contributed to this article.



Jamie Yoder is a PwC US Insurance advisory leader. He can be contacted at jamie.yoder@pwc.



Javier Baixas is a director with PwCStrategy&. He can be contacted at javier.baixas@strategyand.

#### **ENDNOTES**

- 1 Available at https://www.pwc.com/gx/en/industries/financial-services/fintech-survey/blurred-lines.html. Our findings in this article are based on the survey and a recent follow-up report, which is available at https://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html.
- 2 For more on InsurTech and the innovation agenda, please see our Innovating to Grow report at http://www.pwc.com/us/en/insurance/publications/insurance-in-
- 3 Please see the Top Insurance Industry Issues in 2015 section on the potential impacts of autonomous vehicles on the insurance industry at http://www.pwc. com/us/en/insurance/publications/top-insurance-industry-issues-2015.html.
- 4 For more on AI in insurance, please see the eponymous section in Top Insurance Industry Issues in 2016 at http://www.pwc.com/us/en/insurance/publications/ top-insurance-industry-issues-2016.html.
- 5 For more on reinventing life insurance, please see the eponymous section in Top Insurance Industry Issues in 2014 at http://www.pwc.com/us/en/insurance/publications/assets/pwc-top-insurance-issues-reinventing-life-insurance-2014.pdf
- 6 For more on blockchain and reinsurance, please see our recent report on the subject at http://www.pwc.com/ax/en/industries/financial-services/publications/ blockchain-the-5-billion-opportunity-for-reinsurers.html