

Insurtech: the next frontier

Sohail Jaffer examines the impact that financial technologies are having on the insurance sector

“Traditional car insurance is unfair to low-mileage drivers”, says Metromile¹, a San Francisco-based start-up offering pay per mile insurance targeted at US consumers who drive fewer than 10,000 miles per year. Named by *Forbes* as one of the five start-ups to watch in 2017², Metromile has raised close to \$200 million from investors impressed by the simplicity and obvious popular appeal of its business model. This is based on the premise that policyholders should be charged only in direct proportion to the probability of their making a claim.

In an industry that has traditionally been vulnerable to fraud, Metromile is able to do this by using technology to calculate the likelihood of claims - and to verify the information supporting those claims - much more accurately and precisely than traditional methods have been able to do. A similar concept is also being applied in health insurance, with wearable devices being adapted to collect and analyse biometric data as a basis for calculating premiums. A simple example is the Manulife MOVE activity tracking programme in Hong Kong, which was launched in 2015 and offers individuals premium discounts based on the number of steps they take each day.

Initiatives such as the Metromile and Manulife MOVE programmes are small but important examples of the growing recognition that fintech can – and should – be as applicable to the insurance sector as it is to banking, which has hitherto accounted for the lion’s share of investment in disruptive technologies. As a note published in September 2016³ by the global asset manager, Pinebridge Investments, comments, *“unlike in many other industries, the internet has, so far, resulted in little disruption to the insurance industry. For many insurers, business models have remained largely the same during the past 30 years.”*

The data speaks for itself. Of total global investment into fintech of \$132 billion between 2010 and 2016, only \$6.6 billion was channelled into insurtech⁴. Against this backdrop, it is unsurprising that 84% of respondents to a recent PriceWaterhouseCoopers (PwC) survey⁵ believed that their customers were already conducting payments business

with fintech companies. In personal finance, the share was 60%, and in traditional deposits and savings accounts it was 49%. By contrast, only 38% of respondents indicated that their customers were using fintech operators for their insurance and wealth management.

Insurtech, however, is now catching up with fintech in the banking sector for several reasons. Pressure from new and traditional competitors is one driver of changing attitudes towards investment in insurtech by incumbent operators in the insurance industry. Like their counterparts in the banking sector, many insurers are now recognising

... disruptive technologies will pose an existential threat to long-established companies that are unresponsive to the need for change

that while technological progress creates opportunities, it can also present an existential threat to incumbents unable or unwilling to embrace change. Across the financial services industry as a whole, 88% of respondents to the PwC survey believe that part of their business is now at risk from standalone fintech companies.

For insurance companies, this existential threat comes at a time when the industry's profitability and return on capital is under pressure from a combination of weak economic growth, an increasingly demanding regulatory burden and – in some regions – heightened political risk. Low or negative interest rates, meanwhile, are exerting downward pressure on investment income. In an industry review published in April 2017⁶, Moody's forecast that investment income in the global life insurance sector may fall by between \$20 and \$40 billion in 2017. In the global non-life industry, Moody's projected a decline in 2017 of between \$5 and \$15 billion.

At the same time, however, the industry is recognising that it is hampered by legacy IT systems and distribution models which are in danger of fatally undermining its long-term competitiveness. As Dagong Europe warned in a report published in March 2017⁷, artificial intelligence, data analytics, robotics and mobile and wearable technology are all developing faster than ever. *"If not considered seriously, [innovation and technology] can leave insurers' long-established business models obsolete, unprofitable and unable to reach and serve customers and business partners,"* cautions the Dagong report.

It is this recognition that has spurred an unprecedented surge of investment into insurtech, prompting the *Financial Times* to observe in October 2016⁸ that insurance was *"no longer a sleepy backwater of the fintech world."* This was confirmed by a recent Accenture report⁹ on the rise of insurtech, which notes that *"data from CB Insights reveals that global insurtech investment totalled \$1.7 billion in 2016, with both the volume and value of deals having roughly doubled since 2014."*

The same report adds that of more than 450 deals analysed by Accenture in the insurtech space, 56% by number and 70% by value were concentrated in start-ups whose products leverage technologies such as analytics, artificial intelligence and the Internet of Things.

It is not just start-ups that are pumping record volumes of investment into insurtech. A number of the world's leading insurance companies have also either established wholly-owned subsidiaries dedicated to innovation across the fintech space, or venture capital units focused on supporting start-ups. Allianz X, for example, describes its mission as identifying, building and globally scaling new business models related to insurance, asset management and assistance services. *"Our ideas and companies have the potential to reshape markets and change the world around us,"* Allianz X says¹⁰.

Some of the fintech and insurtech units established by long-established insurers are clearly aiming to emphasise the cultural differences between these new operations and their rather more conservative parent organisations. Aviva, for example, is concentrating its fintech investment in its 'digital garage' located in London and Singapore. Its Chief Digital Officer was quoted in the *Financial Times* in January 2016 as saying that his team was being encouraged to *"break every rule in the book and not feel constrained by traditional ways of doing things in the industry"*¹¹. For a company that traces its roots back to 1696, that is quite a statement.

It is important to put these initiatives in perspective, however, because according to Accenture, insurance companies' investment in digital technology continues to lag well behind banks'. In its analysis of over 200 insurance companies and 80 retail banks, Accenture found that only 26% of insurers were providing monetary or non-monetary support to digital start-ups; just 17%, meanwhile, have established an in-house venture capital fund or equivalent investment vehicle targeting the digital or technology space.

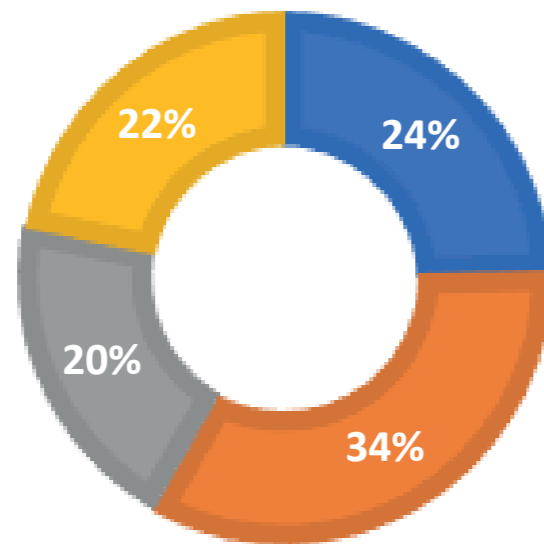
Figure 1. The InsurTech eco-system



Source: Celent, InsurTech: a quick round-up report, May 2016

Figure 2. Traditional insurers perceive start-ups to be less of a threat than existing competitors

- Startups from outside insurance
- Established companies within insurance
- Established companies from outside insurance
- Startups within insurance



Source: Accenture, *The rise of InsurTech*, 2017

Recent investment volumes into insurtech have done little more than scratch the surface of what may be required, particularly in some of the fastest-growing regions where penetration of insurance products remains low by global standards. Asia is regarded as an especially exciting prospect, with Swiss Re forecasting that the region's non-life insurance premiums will rise by 5% annually over the coming decades, with life premiums expanding by 6% a year¹².

This potential has not been lost on investors in the insurtech space. *Forbes* recently described investment flows into insurtech in Hong Kong and Singapore as a 'tidal wave'¹³, while India is also drawing investment into innovation in insurance from companies attracted by the penetration rate of just 3.44% in 2015-16.

Although this is projected to rise to more than 4% in 2017¹⁴, the world's largest democracy remains very under-insured by global standards. The opportunities for technology to play a guiding role in the development of insurance in India has encouraged Swiss Re to establish an insurtech accelerator hub in Bangalore, complementing fintech initiatives by the Indian government such as its recently-launched unified payments interface.

Initiated in July 2016, the Indian accelerator hub is the first of its kind established by Swiss Re anywhere in the world, and focuses on identifying and supporting innovative products and services ranging from data analytics for predicting health patterns to artificial intelligence for smarter customer engagement¹⁵.

It is China, however, which perhaps has the greatest potential within the emerging market universe for insurtech. Robust economic expansion twinned with the emergence of an aspirant middle class has already underpinned explosive growth in the Chinese insurance market, which has doubled in size over the last six years. With penetration still less than half of the US rate, however, Oliver Wyman forecasts a compound annual growth rate (CAGR) of 13% up to 2020, turbocharging an increase in gross written premiums (GWP) from CNY2.4 trillion in 2015 to CNY4.5 trillion (US\$700 billion)¹⁶.

Already, a number of innovative investors have anticipated the potential growth of the Chinese insurance industry. In June 2016, for example, the Chinese web services giant, Baidu, teamed up with the Shanghai-based China Pacific Property Insurance to form an alliance that will use big data to explore new models for auto insurance product design, risk control and operations¹⁷.

China's largest insurtech start-up, however – and the largest initiative of its kind in the world – is Zhongan, an on-line insurer founded in 2013 by Alibaba, Ping An and Tencent Holdings. By late 2016, Zhongan was reported to have attracted more than 400 million customers.

In its analysis of the outlook for insurtech in China, Oliver Wyman suggests that the growth posted by Zhongan in recent years may be little more than the tip of the iceberg as far as expansion potential is concerned. With online distribution accelerating, and with operators like Ping An and PICC adopting telematics and preparing to launch usage-based insurance (UBI) products, Oliver Wyman sees insurtech premiums soaring from CNY250 billion (US\$37 billion in 2015) to over CNY1.1 trillion (US\$174 billion) by 2020.

In the Middle East and South East Asia, meanwhile, so-called Takafultech, or the application of technological investment to Shariah-compliant insurance, may also be ripe for development. Indeed, innovation may be a prerequisite for the longer term survival of Shariah-compliant finance. As Bashar Al Nator, Global Head of Islamic Finance at Fitch, commented in May 2017, *“fintech is necessary for Islamic finance to maintain and grow its market share as failure to keep pace with such developments could impact the competitiveness of its players. Fintech could help in promoting standardization, harmonization of Islamic finance products and integration.”*

Blockchain: the tipping point for fintech?

Globally, however, it is widely believed that the most significant technology-based game-changer for the insurance industry, and for the broader financial services sector, will be the distributed ledger technology, Blockchain. Ernst &

Young puts the possible long-term impact of Blockchain in striking perspective when it says that it has now reached a comparable stage of development to the level that the worldwide web had reached in 1996¹⁸.

McKinsey believes Blockchain has the potential to underpin the insurance sector by supporting its growth, increasing its effectiveness and reducing costs by automating key processes. One way in which its use could achieve all three is by addressing the problem of fraud, which has bedevilled the industry for centuries. Today, according to McKinsey, an estimated 5% to 10% of all claims are dishonest, with the FBI estimating that fraud costs US non-health insurers more than \$40 billion a year¹⁹.

Technology could help insurers to trim these losses. As a Deloitte analysis comments, *“smart contracts powered by a blockchain could provide customers and insurers with the means to manage claims in a transparent, responsive and ir-refutable manner. Contracts and claims could be recorded onto a blockchain and validated by the network, ensuring only valid claims are paid²⁰.”*

More broadly, McKinsey observes that issues of scalability, security and standardisation may mean it is several years before blockchain can deliver on its potential. *“Blockchain is a technology ready for exploration by insurers,”* McKinsey advises. *“But its exploitation is still a long way off. This is because blockchain is functioning as a distributed system and, thus, its value mostly depends on collaboration with competitors, suppliers or others.”*

Looking to the long term, it is thought that while disruptive technologies will pose an existential threat to long-established companies that are unresponsive to the need for change, they will bring considerable benefits to the consumers that are ultimately the lifeblood of the banking and insurance industries. This is why fintech and insurtech appear to enjoy the full support of regulators. *“Fintech will democratise financial services,”* said Mark Carney, Governor of the Bank of England, at a recent conference²¹. *“Consumers will get more choice and keener pricing. SMEs will*

get access to new credit. Banks will become more productive, with lower transaction costs, greater capital efficiency and stronger operational resilience.”

These and other benefits, Carney added, explain why the Bank of England has already taken a number of steps to encourage fintech’s development. Those who are slow to follow the lead of influential bodies such as central banks – both in fintech and in insurtech – risk marginalisation and obsolescence. ■

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