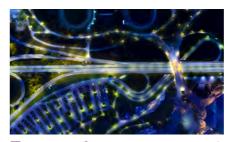


Contents



Foreword A new decade, a new epoch for InsurTech



Introduction

The auto/motor InsurTech world



Case Studies

- Buckle - OCTO - By Miles 30



The Art of the Possible 32

Principal at Anthemis, Matthew Jones' perspective on InsurTech and its future



Incumbent Corner

Ping An and Zhong An on technological innovation



Thought Leadership

Stephen Jones on technology transformation in the auto/motor market



Technology Spotlight 48

Willis Towers Watson's Radar Live solution for applying AI to motor claims



Transaction Spotlight 52

Concirrus, a marine, cargo and motor analytics This quarter's review of global InsurTech InsurTech, raises US\$20 million



Data Center

investments

56





A new decade, a new epoch for InsurTech

Dr. Andrew JohnstonGlobal Head of Willis Re InsurTech,
Quarterly Briefing Editor

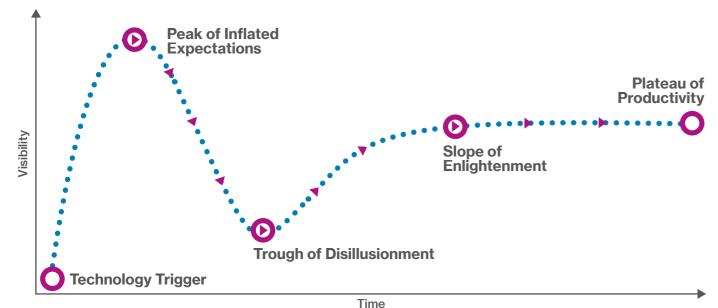
"Isn't it funny how day by day nothing changes, but when you look back everything is different?" C.S. Lewis

Ten years ago, the term "InsurTech" was coined, referencing a mass emergence of "nontraditional" start-ups engaging with the insurance industry. "The rest is history," as they say. At the older end, as almost 10-year-olds, some InsurTechs are now set to leave middle school and be propelled into the more unforgiving realms of high school and beyond. The grown-ups are going to want results, and the system has a lot less patience for play time. While many InsurTechs themselves may still be in their infancy as start-up businesses, our industry's relationship with InsurTech is maturing. Industry incumbents are becoming increasingly adept at knowing what they want, and the small number of InsurTechs that have started to pull away from the pack as winners are doing a good job of providing innovative solutions.

If the Gartner Hype Cycle below (which offers a view of how a technology or application will evolve over time) is anything to go by, this new decade could possibly oversee the migration away from the "peak of inflated expectations" where we currently are, through the "trough of disillusionment," before achieving some state of equilibrium between expectations and true output at an individual company level.

One of the major challenges we face when judging the respective successes and condition of InsurTech is that, despite robust definitions, there is simply no one such true thing or experience of what InsurTech is at an individually localized level that can then be reapplied back to the masses (as that one thing). As a term it refers to so many things, including the entire InsurTech "ecosystem" (which in its broadest sense can include those parts of incumbents that are focused on InsurTech and the investment community),

Gartner Hype Cycle



individual InsurTech businesses, a cultural renaissance reawakening in our industry of the value of technology and a nontraditional entrepreneurial cultural phenomenon, to name but a few distinctive things that the term tends to encapsulate.

Within each of the tenets mentioned previously, the ability to assess "success" is nuanced further. For example, within an incumbent's InsurTech business model, is InsurTech purely an opportunity to diversify an investment portfolio (and therefore only realized in later rounds of investment or M&A)? Is it the ability to leverage technology to reduce expenses and improve efficiency? Do InsurTechs offer the opportunity to improve the top line? Or more abstractively, can InsurTech be successful irrespective of what incumbents choose to do? Can InsurTech be considered a success if incumbents suffer as a result? These questions represent just a fraction of which factors could be deemed metrics of success or failure.

Since 2010, we predict that at least 2,000 "InsurTech" start-ups have been conceived. Circa 2010 itself, there were already a number of firms in existence that were also able to adopt the term over time, so the total number of InsurTechs that have ever existed could well be nearer the 3,000 mark. We know that of the total number of InsurTechs that were conceived post-2010, approximately 760 have raised capital in various forms, and over the past 10 years a few hundred have shut their doors. We also know that of those InsurTechs conceived after 2010 a very small percentage have been able to generate any meaningful revenue, let alone net profit.

We report on investment and noteworthy individual companies on a quarterly basis and make predictions on an annual basis. Now, we can make some broader observations looking back at the first 10 years of InsurTech's existence as well as some predictions for the next 10 years that could largely apply to the majority of InsurTech companies. Before we jump into these predictions, we would first like to show you this quarter's data highlights.

This quarter's data highlights

Perhaps unsurprisingly, this quarter has bucked the recent trend of quarter-on-quarter growth; in fact, this is arguably the most interesting data set we have ever released during the history of our InsurTech Quarterly Briefing. While not entirely responsible, COVID-19 has had an enormous impact on global markets and global InsurTech investments. Investor optimism and consumer confidence is (at least) on pause, and (re)insurers have lots of unprecedented issues to deal with in the short term, which has shifted many firms' focus. Consequently, we are reporting a 54% drop in total funding for this quarter when compared with the record highs of last quarter.

Globally, InsurTech companies did still manage to raise US\$912 million across 96 deals in Q1, but most of this was captured and completed at the beginning of the quarter. The year 2020 began on the same trajectory on which the previous year concluded. By January 3, almost US\$82 million had been raised; by February 6, that figure was just over US\$450 million. But it took until the end of March — the rest of the quarter — to double that amount. In short, almost half of the total amount raised in Q1 was raised in the first 35 days of a 91-day quarter. From March 10 to quarter-end, "only" an additional US\$108 million was raised. Again, in short, the first three days of Q1 saw almost the same amount of money raised as the last three weeks of Q1.

The observed slowdown in March coincided with several major event cancellations and sporting season suspensions amid climbing rates of COVID-19 infection. Entire cities and nation states have now been shut down or put into isolation, which has led, and in some instances forced, the (re)insurance industry into a brave new world: What was a clearly defined sold insurance risk (e.g., auto) in January was not necessarily the case in March. That being said, the InsurTech landscape is still growing against other metrics, as over 50% of deals this quarter went to early-stage companies, with this quarter having the highest number of total deals ever recorded (in a quarter) and a 28% increase from Q4 2019.

Property and casualty (P&C) InsurTechs widened their share of total and early-stage funding to over 80% compared with life and health (L&H) InsurTechs. This quarter, P&C InsurTechs raised 83% of total funding. The investment split between P&C and L&H InsurTech funding is the largest we have observed since Q3 2016. This trend persists in early stages as P&C InsurTechs raised 81% of funding at this stage, including Insurify's sizable US\$23 million Series A. Insurance-as-a-service start-ups saw notable investor interest as well with Instanda and Boost Insurance raising a Series A worth US\$19.5 million and US\$14 million, respectively. One could argue that, again, COVID-19 is a likely culprit for this stark disparity between P&C and L&H.

Start-ups with a focus on policy distribution raised the largest rounds in Q12020. As insurance moves increasingly online, companies that are able to match customers to policies are increasingly valuable. Insurance comparison platform PolicyGenius raised the quarter's sole US\$100 million megaround, followed by Digit, which raised a US\$84 million Series C. While Digit is a direct insurer, it strategically partners with car dealerships and e-commerce sites to distribute policies for auto and electronics at the point of sale. Clearcover and Gabi raised US\$50 million and US\$27 million, respectively.

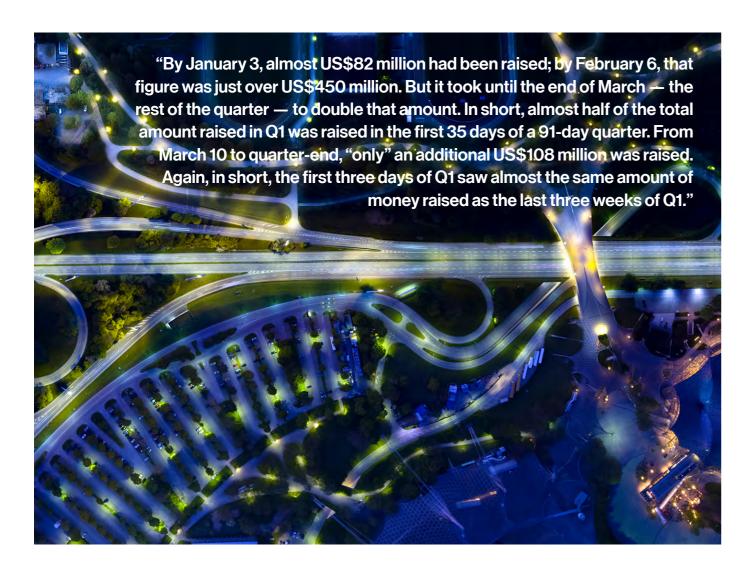
Tech-enabled claim management oversaw significant traction in an active auto insurance market. This quarter oversaw significant activity from auto manufacturers and insurers partnering to enable usage-based insurance in the U.S. We mention some of the notable ones further down in the introduction. Against this backdrop, companies improving claim management saw significant funding. London-based disaster recovery platform Tractable raised a US\$25 million Series C after a successful pilot with Ageas UK. Another London-based start-up, Concirrus, which leverages cutting-edge technology to understand driver behavior and mitigate claim losses, raised a US\$20 million Series B as it plans for international expansion and segment diversification. We feature this particular raise in greater detail in this briefing's Transaction Spotlight.

More than half of start-ups that raised investment capital this quarter were U.S.-based. As COVID-19 challenged investor confidence, we saw a softening of deals in countries outside core InsurTech markets. Whereas last quarter, deals to the rest of the world (not including the U.S.) were just over 50% across 19 countries, in Q1 2020 we saw investment concentrated to the

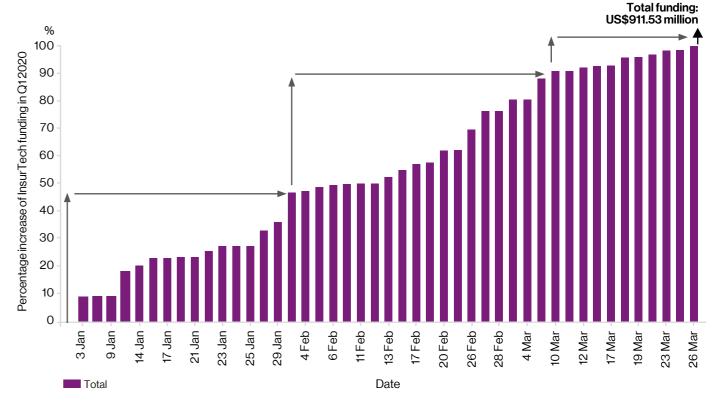
U.S., which absorbed 57% of deals, and the U.K., with 10% of deals. China recorded a six-percentage-point drop in the number of deals this quarter from Q4 2019, and a 14-percentage-point drop was recorded across Asia Pacific from Q4 2019.

The U.S. dominance this quarter is quite possibly a reflection of the delayed impact that COVID-19 has had in the U.S. until mid- to late March. It is therefore likely that the U.S.'s dominance could be dramatically lessened in Q2 and Q3 of this year when the U.S. markets begin to feel COVID-19's impact more strongly. Similarly, we might observe an uptick in the Chinese and European markets as the impact of COVID-19 (hopefully) lessens over time, ahead of the U.S.'s uptick. As such, we are seeing a stagnated delay of the impact felt in regional markets as it relates to InsurTech investment.

Finally, when compared with Q3 2019, investment from (re) insurers (and their associated corporate venture capital [CVC] vehicles) dropped an enormous 49% in Q1 2020. This generally supports the hypothesis that Seed rounds and Series A rounds are increasingly (as a participation percentage) being done by traditional investors (e.g., venture capital, private equity funds).







These funds are placing a number of smaller bets across a much wider portfolio when compared with industry investors that are investing in fewer deals but at much later stages (which are typically much larger in terms of U.S. dollars raised). This is in general driven by industry investors' desire to support proven businesses that offer a solution that supports their core business model or a model into which they wish to grow. It is increasingly less about the speculative exits of InsurTechs as it relates to industry investors. With COVID-19 creating issues that are distracting (re) insurers away from InsurTech in this quarter, the manifestation of this decreased investment activity would suggest that the case is as we have described.

It is also worth noting that COVID-19 does not seem to have had a material impact on the respective valuations of InsurTech businesses. The vast majority of the InsurTechs that successfully raised money in Q1 are predominately early-stage firms, and at an aggregate level at least, the amount raised is still substantial. This would suggest that the major impact has been at the upper echelons of the investment ladder — later-stage InsurTechs looking to raise capital from industry players or InsurTechs that are looking to use (re)insurer's balance sheets in a significant way.

It is too early to tell what long-term impact COVID-19 might have on the global InsurTech community. It would be very easy to suggest that this is the beginning of the downward slope described by us, referencing in respect of Gartner's Hype Cycle. Our view, however, is that the downward slope is going to happen naturally irrespective of factors such as COVID-19. While COVID-19 might speed up this process, it is too early, looking only at Q1 data, to say for certain that the process has now started (and will continue) without the foresight of what the rest of the year will look like.

If COVID-19 does persist for the rest of the year, we may simply observe a pushing back of what was naturally going to occur anyway. We may even see another peak of investment when "normality" resumes, before the natural slope downwards begins.

It is clear that InsurTechs as businesses will be affected by COVID-19, as most businesses will be. For those InsurTechs that are thinly capitalized, looking to raise money shortly and dependent on other businesses to distribute product or services, the next few months could be challenging. It is quite possible that COVID-19 will hasten the closing of another cohort of InsurTech firms; however, if we ever needed a reminder as an industry of the importance of technology, remote functionality, online interaction and digital processes, it is this current environment in which many of us find ourselves.

Before making our predications for the next 10 years, we will assess how InsurTech has developed and progressed over the past 10 years from 2010 to 2020.

The below, while not exhaustive, is a rundown of InsurTech as it has come to be, as a lively and energetic 10-year-old.

Player	Function	Development from 2010 to 2020
Incumbents	Investment	Most (re)insurers have at least looked at individual InsurTechs as a possible avenue for portfolio investment; this can be for pure speculative increases in value or for strategic partnership building. The (re)insurers that have been investing have done so either directly or through third-party managed vehicles. Historically these investments were at the Seed, Series A or B rounds but since circa 2018, the attention of (re)insurers has been moving steadily north toward the larger rounds - Series C, D, E and to acquisition.
	Technology strategy	The vast majority of these investments have not realized an investment return but in some cases have secured pragmatic strategic partnership support. This has also proved to be an excellent avenue for some (re)insurers to create "InsurTech PR" for their businesses.
	New units	InsurTech has squarely brought the issue of technology to every single (re)insurer in the market. Whether it be rethinking the current technology stack or reassessing how much of a budget to allot technology investment, InsurTech has been an effective tool to float technology, more generally, up the priority list for incumbent executives. It has also been a good avenue to bring two otherwise very disparate worlds together (insurance and technology).
	Strategic partnerships	A significant number of (re)insurers across the globe have started engaging in what we describe as "strategic partnerships." These are typically partnerships where the InsurTech's own business model is directly applicable to an incumbent's. Given the poor performance of speculative exits through investment, this is undoubtedly where the true value seems to be for incumbents that invest in InsurTechs. We see a number of firms outsourcing specific functions to InsurTechs. It is typically a cheaper (but riskier) option than relying on older, more established technology vendors
	Provide services to InsurTech	In a small number of cases, we have observed that InsurTechs have in fact become direct clients of our industry. Incumbents have been able to sell a variety of services, including actuarial support, paper, capacity and general consultancy.
		Over the past 10 years, many InsurTechs have been able to survive their infancy (from stealth

linoviii T anka	Individual InsurTech maturation	Over the past 10 years, many InsurTechs have been able to survive their infancy (from stealth through to start-up.) Approximately a third have been able to secure some sort of funding, and a very small percentage have secured at least one incumbent partnership and a commercial relationship with at least one customer, both B2B and B2C. While it may be the aspiration of ma InsurTechs to operate in the commercial lines space, many are still stuck in the personal lines arena. An increasing number of InsurTechs are able to secure employees with an insurance background, and a handful have become household names. Despite the respective successes of a fall InsurTechs, the vast majority have not been able to achieve the goals they targeted. In the earlied days of InsurTech, many firms wished to "disrupt" the status quo. This view, at least for the vast majority, was quickly moved into "collaborating, enhancing, enriching" and has remained there since approximately 2016.			
InsurTechs	Stand-alone SaaS operational/ service vendors	An increasing number of InsurTechs are setting themselves up to be able to license solutions across the board, serving the needs of a whole host of (re)insurers. The InsurTechs that have been able to offer software-as-a-service (SaaS) functions to a number of (re)insurers have typically been successful at establishing themselves in the market.			
	Full-stack risk originators	A very small number of InsurTechs globally have been able to attain the status of stand-alone insurance carriers; these are firms that have the ability to originate and retain risk (should they wish to), manage policies and provide claim paying services. Of these InsurTechs, the majority are operating in the personal lines space.			

Player	Function	Development from 2010 to 2020
	MGA/U partners	Compared with full-stack insurers, a much larger number of InsurTechs serve as managing general agents/underwriters (MGA/Us) — specialized insurance agents or brokers that have been granted underwriting authority by an insurer able to administer programs and negotiate contracts for an insurer. This model is well suited to InsurTechs, as MGAs typically sell specialized products in specialized markets. It is therefore almost an advantage to be small but focused. Similarly, the technology that supports this type of model can allow for multiple relationships with different insurers, allowing for a broader commercial relationship. This model continues to be in growth mode when we assess the InsurTech landscape globally.
InsurTechs	Market value (post money)	Generally speaking, InsurTechs are hugely overvalued; it has been this way since the beginning. The only real rationalization for it is that, if there are only to be a handful of winners, then each of those winners might well be very valuable one day. If we look at the technology and balance sheets, however, the market value of most InsurTechs is difficult to fathom. Another possible explanation is our industry's lack of faith in ourselves that we might actually be able to develop some of these solutions internally. Non-industry players who invest in InsurTechs have also contributed significantly to create the speculative value around the businesses that they have invested in. We now have 10 unicorns in the InsurTech world – meaning that over 10 billion US dollars of speculative company value is held by a few InsurTechs.
	Investment	As we have already noted, our industry is awash with InsurTech businesses at the moment; this is simply unsustainable over the long term. In the meantime, it is an indication that a lot of investment capital is still available and a perception that opportunities still exist for InsurTechs to enter and operate in our industry.

	Investors	A number of traditional venture capital and private equity funds have turned their attention to InsurTechs. Typically placing a broad number of small bets, most venture capital and private equity funds invest during Seed and Series A rounds. Despite, in some cases, lacking relative domain expertise (in comparison with the incumbents themselves), some investors have done a good job of branding themselves as InsurTech experts.
	Investment fund managers	A handful of InsurTech investment fund managers charge a fee to manage and invest capital on behalf of (re)insurers. A very small number are focusing all of their attention on InsurTech.
Third parties	Accelerators/ Incubators	Globally there are literally dozens of facilities that are supporting InsurTechs through the process of teething. These institutions look to allow InsurTechs space to develop their ideas, be exposed to industry experts and, in some cases, host rounds of investment. This model has been successful in attracting the attention of the InsurTech and incumbent community alike.
	Regulators/ Government	A number of governments and local regulators have reacted to the growth of InsurTech with proactivity. In a number of cases, "regulatory sandboxes" have been set up to allow InsurTechs to trial their businesses and test for unforeseeable issues. Realizing that the future of (re)insurance undoubtedly features some form of what we currently refer to as InsurTech, state entities are already acquainting themselves well with what it could all mean in real terms.
	Consortium for digitized trade	In various markets, including Lloyd's, an increasing number of consortia are looking to build affinity groups and communities around a rationale for digital trade, invariably on digital ledger technology-enabled trading environments.

Global market- place	Geographic	Perhaps unsurprisingly, the U.S. began by dominating the InsurTech space in terms of investment activity. Over the past 10 years, the U.K., China, India, Germany and France in particular have managed to claw back some of that advantage. London is arguably the center of InsurTech businesses and development itself, and China and India are probably the best examples of markets that have been able to best integrate InsurTechs into the everyday value chain.
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The decade view: Where next for InsurTech?

Over the next 10 years, InsurTech is going to have to change given how unsustainable its current setup is, and the transitions for the next decade are already in motion.

By taking this decade-long view, we can — while recognizing that a multitude of individual threads abound that can produce a complex view of where we are at any one period of time — draw and predict broader insights that a company strategy can be built around for the longer term. These threads ultimately constitute a very large and rich tapestry, and it is only when we stand back and look at it that we can actually begin to see trends that are driving outcomes.

Our broad decade predictions are grouped into five principal factors, shown below. It is worth noting that all of these potential outcomes are heavily interlinked and essentially orbit around the perceived value that InsurTech can offer our industry relative to available resource. The below predictions take COVID-19 into account, but they have been formed after many years of research and experience. They should not be viewed as impulsive reactions to the current situation.

Principal factor one: InsurTech valuations/investments > Our predictions

- Decline in the pace of investments: Almost US\$20 billion has been invested globally into InsurTech over the past 10 years. In the short term, the pace of investment will most likely continue, but over the next 10 years, it is highly likely that those firms that make it as the winners either will have been acquired or will not be requiring any further raises. It is, however, uncertain as to what the long-term effect of COVID-19 will be on InsurTech investment appetitie.
- Plateauing of valuation: InsurTech firm valuations, in general, will plateau and in some cases, drop. We expect, however, the valuation bubble will persist for at least another year; the likelihood is we will not see a burst but rather a slow erosion.
- Fewer unicorns: Per year, fewer unicorns will be made as there is simply not enough market share for insurance technology firms globally to sustain 10 new billion-dollar-plus valued entrants annually.
- Widening gap between Series A and Series B: The number of InsurTech firms that successfully make it to a Series B will increasingly decline. While traditional investors will continue to plug the Seed and early Series A (I) space, fewer (re) insurers will be investing in these earlier rounds, as we are already seeing these industry investors (CVC vehicles) participate further and further up the investment ladder. A potential lack of participation in late Series A rounds (II) in years to come will leave a large void in which many traditional investors will simply have limited appetite to participate. We have already observed that relatively fewer industry investors are participating in the later Series A rounds and earlier Series Brounds. This is to say that there is a growing dearth of investors who are prepared to part with more than US\$7 million and less than US\$15 million for the respective equity that is usually offered at these phases. The long-term implications of this are huge as InsurTechs that require funding look to grow, and their valuations will be forced down at the very least.

Principal factor two: Incumbent and InsurTech collaboration > Our predictions

- Incumbent and InsurTech activity will be highly collaborative: We predict this will be the case whether it be through strategic partnerships, licensing relationships or InsurTechs becoming stand-alone risk-originating entities that participate in the transferring of global risk. InsurTechs that cannot function and collaborate in the broadest possible way in our community are almost certain not to survive in the next 10 years.
- InsurTech-to-InsurTech partnering and merging:
 We predict an uptick in InsurTech-to-InsurTech partnering and merging, with individual firms joining forces to provide the market with better solutions.
- A greater percentage of M&A in the InsurTech space: To date, relative to the numbers of InsurTechs that exist, there has not been a huge amount of M&A activity. This is not at all surprising given that most InsurTechs are still defining their proposition and are generally overvalued. As the market reaches some kind of agreeable equilibrium, incumbents will be able to assess much better the true costs associated with buy versus build, and an outcome of that will be an uptick in M&A.

Principal factor three: InsurTech maturation > Our predictions

- A greater percentage of InsurTechs enter the commercial lines space: This may be an evolution for some away from personal lines or an increase of first-time entrants that are better set up to write these lines of business.
- MGA to full-stack insurer: We also anticipate seeing an increasing number of current MGAs and "toolkit" platforms (program builders) being granted insurance licenses, to become full-stack digital insurers.

Principal factor four: Redefinition of success criteria > Our predictions

- Articulation of successful engagement: While the past 10 years of InsurTech have been a very interesting exploration into what a better use of technology in our industry might look like, relatively few interested parties have been able to clearly articulate exactly what "success" actually looks like (beyond improving profit margins). We expect to see that success criteria across the board will become better expressed and
- understood. This will be accompanied by stricter terms of engagement and time spent on all things InsurTech.
- InsurTechs defining their success metrics: We also expect to see InsurTechs do a better job of expressing what type of relationships they want in our industry — and what success looks like for them as well.

Principal factor five: Geography > Our predictions

- Diversification and expansion of InsurTech's global footprint: While the U.K. and the U.S. in particular have arguably enjoyed the greatest degree of global InsurTech focus and spotlighting, we do not expect this to continue to the same degree. InsurTech is becoming ubiquitous in nearly every single (re)insurance market on the planet, and we are seeing an increasing number of very high-quality InsurTechs coming out of China and India, for example, that are currently testing their capabilities in their own markets but with the view to expand globally. Arguably operating at a cost advantage, some of these InsurTechs could quite possibly enter the
- U.S. and European markets and offer very competitive solutions to rival those of their InsurTech peers.
- Pull from investment markets outside of the U.S.: Investment activity outside the U.S. is likely to continue ebbing away the U.S.'s early advantages.
- U.S. and European brain drain: We are also likely to see a brain drain out of the U.S. and parts of Europe as local regulators and governments might stifle InsurTech opportunities relative to some of the opportunities being afforded by other state regulators and market opportunities.

Few of the above predictions should come as much of a surprise as they are typical of a quickly evolving environment centered on innovation that has attracted a lot of capital and attention in a relatively short space of time. While they may not all come true in quite the way that they have been articulated, it is fair to say that the degree to which the above predictions do become evident will indicate that the InsurTech space in general is first moving down into the trough of disappointment before resurfacing to plateau. It is possible, however, that COVID-19 could create such an unprecedented environment that perhaps what has happened in the past is no indicator of the future.

At its core, innovation creates long cycles of economic waves relative to value, interest and expectation. These waves

subsequently create instability but also economic growth, which then directly influences and impacts future innovation. As InsurTech output expands and contracts (in real and speculative terms), our industry will respond with highs, lows and periods of equilibrium. The overall impact of innovative technology in our industry is a positive one; however, while the valuations of InsurTechs themselves and the value they create remain very chaotic, we will experience some volatility as the perception of risk and returns bounces back and forth. The longer the highs and equilibrium periods last, the greater acceleration of aggregate growth we will observe. Consequently, it would almost be beneficial to see a bursting of the InsurTech valuation bubble, but in the short term at least, this is unlikely to happen.

Quarterly InsurTech Briefing Q1 2020 11

The evolution of the Quarterly InsurTech Briefing series

In 2019, we chose to perform a year-long view of the (re)insurance functional chain to create a lens through which we would take a look at some InsurTechs and technological innovations that related to each core competency of the series. This "business application first" model helped us to deliver our long-standing message that technology is an enabler that, without a business application to support, has relatively little intrinsic value. It also allowed us to focus with some kind of precision on what is otherwise a very chaotic space.

In our 2020 series, we will be evolving this focus one step further by applying these functional chain principles to the four major lines of (re)insurance business: auto (motor); property; commercial; and life, accident and health. The first three briefings will therefore be property and casualty-focused (P&C/non-life), and the final briefing will be life and health-focused.

According to a report conducted by Swiss Re in 2019, total global direct premiums registered in excess of US\$5 trillion. Of that total, P&C insurance accounted for 44% (with US\$2.4 billion total global direct premiums written) and life insurance accounted for 56% (with US\$2.8 billion total global direct premiums written).

This particular briefing will focus on the global auto space as it relates to technology and InsurTech. Auto is the dominant line of business in P&C/non-life, accounting for a third of global sector premiums. Throughout the rest of this briefing, "auto" and "motor" will be used interchangeably.

This quarter, we will be featuring Buckle, a personal and commercial transportation network provider (TNC) insurance company; OCTO, an auto telematics insight provider; and By Miles, a pay-per-mile insurer.

As a new feature for the 2020 Quarterly InsurTech Briefing series, we will be speaking to an investor directly engaged in the InsurTech investment space. Each quarter we will be interviewing a different investor, asking about his or her perspectives on the industry and predictions for the future. We kick this off with Matthew Jones from Anthemis, a global venture capital fund focusing on Pre-Seed to Series C funding rounds. Matthew discusses what incumbents and InsurTechs can learn from one and other, why the industry as a whole should look to the broader technology ecosystem for insights and how technology and liability may intersect.

In this quarter's Incumbent Corner, Willis Re talks with Ping An and Zhong An. These two Chinese companies – an incumbent and an InsurTech, respectively – are leading the way in insurance

innovation in China. The piece considers the role of technology in the insurance industry and how the customer remains integral to both companies' technological developments.

This quarter's Thought Leadership comes from Stephen Jones, Willis Towers Watson's U.K. Property and Casualty Insurance



lead in the Insurance Consulting and Technology business. Stephen considers whether new is always better and how the auto insurance industry has responded to technological innovation. We will also feature Willis Towers Watson's own software, Radar Live.

Our Transaction Spotlight examines the Series B funding round of US\$20 million into Concirrus, a U.K.-based specialty lines (marine, cargo, aviation) and automotive-focused start-up. Finally, we conclude the report with a review of InsurTech market trends and transactions in the InsurTech Data Center.

While we do not have a history in this report on mentioning non-InsurTech-related current affairs, we feel it would be remiss not to acknowledge the current global pandemic we are all experiencing at a human level. While we have taken time to discuss the current, and future, impact of COVID-19 at a business level, we recognize this indiscriminate virus is creating unprecedented levels of uncertainty and concern for all of us and the broader global community. We hope that this briefing finds you and your loved ones in good health. Please stay safe and conscious of doing your utmost to curb further contagion and outbreaks.

As ever, we thank you for your continued support.





The global auto InsurTech world

This briefing focuses on auto insurance (also known as vehicle insurance, car insurance or motor insurance) for both personal and commercial business. This is the first major line of business we are assessing in the property and casualty (P&C) world for our 2020 series. Specifically, we will be assessing the various ways in which technology and InsurTech are attempting to revolutionize this major line of (re)insurance business, the extent to which they have been successful and the expectations for the future.

It is claimed that the first "motor vehicle" policies were sold in the U.K. and the U.S. in 1896 and 1897 respectively. The original policies themselves were simply doctored horse-drawn cart policies (an example of the insurance industry reacting to technological developments). The policies were Third-Party Only products, only covering damages to others' property and injuries. The first U.K. policy was issued largely as a reaction to the death of 44-year-old Bridget Driscoll after she received fatal injuries when she walked into the path of a car traveling 4 mph in London. Driscoll was the first pedestrian ever to be killed by a car.

As time passed and motor vehicle sales grew, motor vehicle fire and theft insurance policies were issued for the first time in 1902. Ten years later, the first multiline policy was written for the auto industry (combining property, liability and fire into one policy). By 1930, in the U.K. at least, a forced purchase (compulsory) car insurance scheme was launched with the Road Traffic Act. This required that all vehicle owners and drivers had to be insured for their liability for injury or death to third parties while their vehicles were being used on public roads. Nine years later, Germany issued a similar mandate.

Fast-forward to 2020, and we observe that auto insurance has become a highly commoditized product that is offered by an enormous array of (re) insurers, covering anything from basic third-party cover to fully comprehensive coverage for all manner of road vehicles.

Given that it is now a highly commoditized, well-understood risk class, the purchasing of auto insurance has become heavily influenced by price. Auto rating is often the driving force behind pricing innovation for the insurance industry. For many years, it has used multitudinous data enrichment factors around such things as vehicle provenance, vehicle features (e.g., safety features, power, weight, brand, parts cost), geographic features (e.g., road riskiness, affluence levels, mix of other road users, local propensity to make fraudulent claims), behavioral and lifestyle (e.g., class of use, vehicle in household, other driver details, occupation, education), bureaus of motor vehicle records, claim and accident histories, credit scores, demographic information, product purchase history

and so on. During this time, insurers have developed increasingly sophisticated approaches for gathering, ingesting and testing novel data sources for use in the prediction of risk.

One of the truly major technological revolutions in the auto industry (from a primary insurance-selling perspective) came about in the 1980s and 1990s in the U.K., with the introduction of the Direct Line model. Using telephonic technology, Direct Line was able to offer competitively priced auto policies direct to the consumer (the price competitivity being a direct result of telephones significantly reducing the business' running costs). While in today's technological arena, a landline telephone might not seem to be too revolutionary, at the time, this really was groundbreaking. It is also worth noting, however, that one of the major drivers of contemporary innovation in auto insurance is once again being made largely possible by telephones — or at least handheld devices that have a telephone functionality.

A further evolution of the telephone Direct Line model was to then place the auto insurance industry online — creating bespoke websites that offered products and services through direct Internet sales channels or on price comparison websites. These sites proved to be very popular as they were (are) far easier to navigate, and enabled consumers to pre-populate a significant amount of information, remembering details across multiple products and years. The price transparency aggregator, online supermarket and "people like you bought" model has forced technology into the forefront of the auto industry (at least in certain countries). This model is continually adopted in markets where it has previously not existed, and innovation has also occurred in intermediated insurance, with brokers and agencies adopting technology and innovating business models to compete with one and other and the new competitors.

With the relatively recent dawn of affordable (and portable) telematics and sensor devices that are being put into vehicles, in addition to the more readily available data, as it relates to modern vehicles and modern driving conditions, the nature of auto policies and the manner in which they are being sold have begun to evolve once more.

As handheld and telematics devices are able to offer both parties a real-time source of data, innovative pricing structures are coming into our industry that center on these individualized driving habits. Many insurers have included telematics products within existing portfolios of traditional products, and equally a significant number of insurers have built business models around the additional data that telematics provides (with a traditional annual insurance product). In addition to these, the episodic usage-based insurance pay-per-mile model can be an attractive proposition for certain segments of the market, for example, by offering an individual a potentially better-priced product because his or her car sits in a locked garage for 11 months of the year. We are also seeing a growth in ride-sharing, car-sharing and vehicle leasing insurance products, all supported by the burgeoning ubiquity of smart handheld devices.

The real-time nature of the telematics data does enable innovation in product design, which is attractive to certain market segments, but the wider use of the connected car and monitored risk data is in claim event reconstruction and reaction, and counterfraud. To get significant value from the innovation, it needs to be embedded within the insurer's processes and be relevant for mass market customers.

Given the size of the global auto market, the changing nature of the associated risks, changing consumer expectations and the types of technology that are currently in vogue with InsurTechs, it could be argued that there is no better line of business for InsurTech start-ups and contemporary technology to add value to than auto.

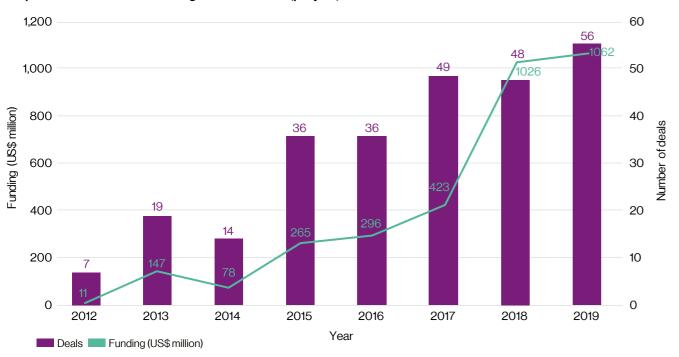
However, as mentioned previously, auto insurance is already one of the most innovative areas of the insurance industry. Insurers have often tackled the easy-to-solve issues, but the auto insurance product is relatively complicated, requiring substantial claim infrastructure and agreements. Scale is also required to meet the customers' expectations for cost while turning a profit, and also in terms of access to the quantity of historical data needed to make the most of the breadth of data collected. The industry is also one where consumers are broadly happy with the existing "once a year" product and "once a year" interaction model. Customers value simplicity and their privacy; therefore, product innovations need to have significant benefits if they are to require greater interaction.

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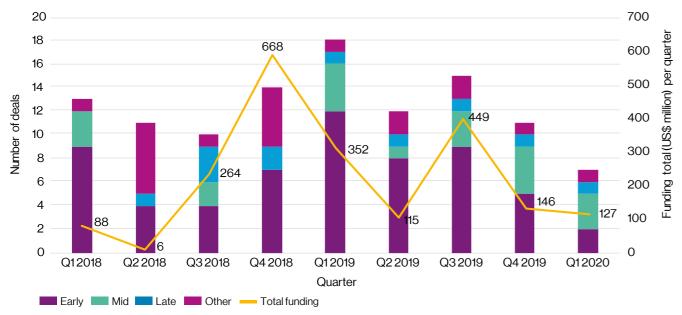
Quarterly InsurTech Briefing Q1 2020 17

Graph 1: Total deal count vs. funding in auto InsurTech (per year)



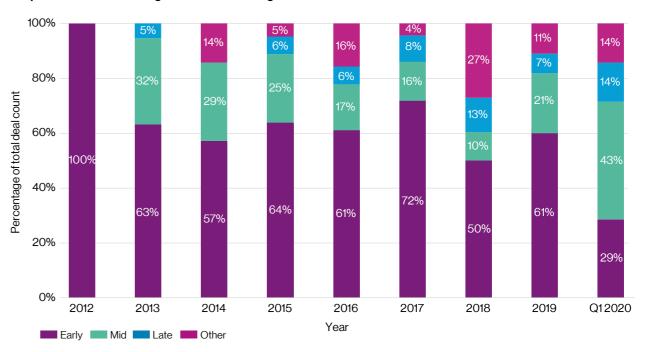
The graph above illustrates the annual investment into auto InsurTechs alongside the total deal count. As illustrated, the number of deals from 2017 has remained relatively consistent. The amount of funding, however, has experienced a number of drastic jumps year-on-year. This is in part because of significant fundraising completed by companies including Root, Metromile and CarDekho. In addition to the fact, as InsurTechs mature they are attracting bigger funding rounds.

Graph 2:2018 - 2020: Deal count of global auto InsurTech deals by stage compared with total funding received (per quarter)

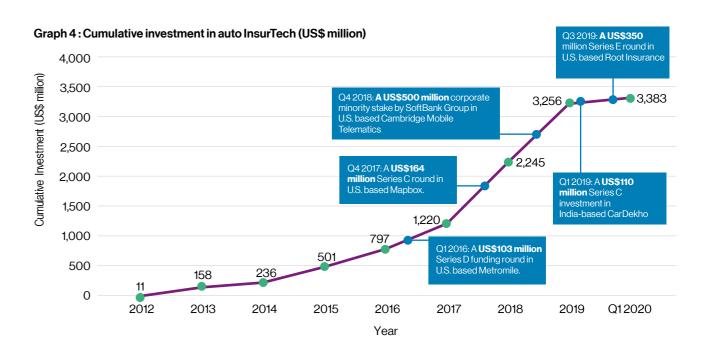


Graph 2 is a further forensic analysis of Graph 1, focusing in on the last two years to consider a quarter-on-quarter view of each stage against the total auto InsurTech funding of that quarter. The graph again indicates a relative stability in the number of deals, especially in relation to the sporadic nature of auto InsurTech funding levels. Funding levels jump from US\$6 million in Q2 2018 to US\$264 the next quarter. The round with the highest number of deals, Q1 2019, recorded a 47% drop in funding from the previous quarter. There appears to be a limited link between the number of deals versus the amount of funding received each quarter.

Graph 3: Deal count across global investment stages into auto InsurTech



Graph 3 illustrates the spread of auto InsurTech deals across the three key stages (early, mid, late) and other (which encapsulates rounds such as corporate minority). Auto InsurTech funding rounds are dominated by the early stages. Barring Q12020, early-stage rounds have taken 50% or more of all the auto InsurTech deals recorded. This gives an indication as to why there appears to be limited correlation between investment amounts and number of deals. Early-stage deals can be as little as recorded US\$0.02 million recorded, which can have a limited impact on rounds topping US\$667.54 million.



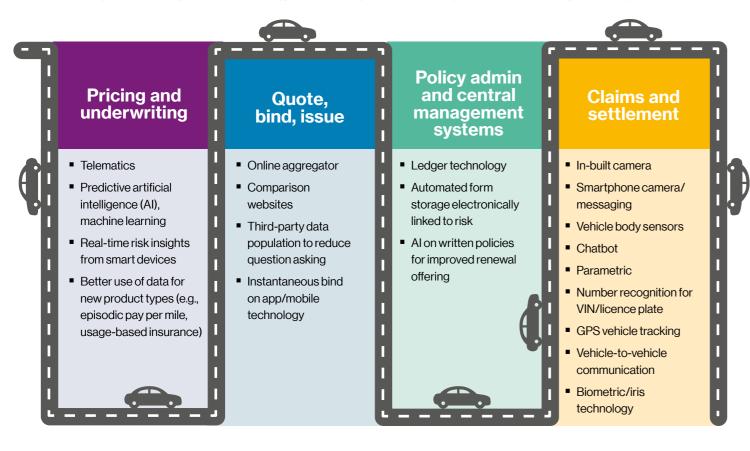
Finally, we illustrate the cumulative investment into auto InsurTechs since 2012 and some select investments that have supported the growth. The auto InsurTech sector has been responsible for seven megarounds (US\$100 million plus); two of which were for Root Insurance. (In fact, 19% of recorded megarounds have gone to auto-focused InsurTechs).



^{*}In some cases, companies have raised multiple times. Each of these raises have been included in the calculations as individual rounds.

Auto functional cycle

Here is a snapshot of the ways in which technology can be leveraged in the different parts of the functional cycle orbiting the auto risk.



1. Technology for the vehicle

Telematics

- By installing a simple telematics device in the car, insurers are able to collect and analyze data about the driver's behavior and habits, vehicle performance and predictive telematics, to name but a few.
- The insurer can reward all policyholders with lower premiums if they are prepared to reduce risk by adjusting behavior behind the wheel. For high-risk groups, this could be the difference between gaining coverage and not. As these systems are developed, telematics will likely play an increasing role within underwriting and pricing.
- Some incumbent insurers, distributors and InsurTechs have collected and analyzed detailed driving data about how, when, where and how much people drive and offer discounts to "safe" drivers. These companies have the insights to know which insureds warrant such substantial discounts. Several companies have deployed the usage-based insurance (UBI) learnings to the weightings of their traditional pricing factors to match the real-time insights that they have learned.

This includes visual data from dashcams, often with integrated telematics, and adds another level to the data available to an insurer, particularly at the point of claim.

■ Internet of things/Other sensors

- New information that is linked from the customer to the car has helped insurance companies to hyper-personalize and contextualize risk protection for individuals, rather than a broader segment.
- The users of mitigating sensors, either on the vehicle or in a smartphone, are able to detect crashes within moments of them occurring and can send immediate roadside assistance and paramedics to customers following collisions and lifethreatening crashes, through providing critical details such as location, driver identification and time.
- Sensors monitoring the drivers themselves recording such aspects as levels of distraction, fatigue and non-verbal indicators could limit the number of accidents caused by driver error, prevent claims on insurance and increase safety for all.

2. Third-party technology/data

Automated claims

• Auto claims technology is revolutionizing the system by validating claims and speeding up processing. The automotive claim process has long been strenuous, time consuming and manual — costly for both insurers and consumers and leaving room for ambiguity and human error. Traditionally, it takes one to three days after filing a claim to initiate contact with an insurance adjuster (it takes even more time if the adjuster needs to inspect the damage). Insurers can help drivers mitigate this complicated and stressful process by implementing advanced technologies that provide accurate, unbiased crash story lines. In addition to enabling insurers to settle claims more seamlessly and accurately (preventing potential fraud), these technologies aid in settling claims earlier, paving the way for better customer experiences.

Road data scrubbing

The available quantity and improved quality of road data have allowed InsurTechs and insurers alike a better view of localized risk.

Municipal data scrubbing and external data providers

■ The availability of government data and local municipal data, harnessed appropriately, can enrich an overall view of localized and portfolio risk. Companies that can seamlessly populate these types of risk metrics into the pricing and underwriting process can also provide simpler customer service by asking fewer questions. This feeds directly into improvements in the quote, bind and issue process as well as a heightened claims experience.

3. Changing buying/user habits (of vehicles and insurance)

While for most customers the standard auto insurance product is a good fit, for certain niches there are opportunities for new products.

Sharing economy

Mobility-as-a-service (MaaS), where car use is consumed as a service, is growing in many metropolitan areas. Insurers may now begin developing the auto insurance ecosystem of the future that starts at the car's dashboard.

Usage-based insurance

Today's drivers can choose the policy that best fits their needs, from a huge range of insurance companies and brokers. For the growing leasing or renting market, insurance can be offered alongside as a whole-of-life service. This whole-of-life service from car leasing firms is expected to include auto coverage automatically as manufacturers start to operate like distribution platforms.

4. Vehicles of the future

Autonomous vehicles

- Autonomous vehicles have somewhat dominated telematics in the debate concerning the future of auto insurance. There is good reason, as the development of driverless vehicles is being undertaken by companies that do not have a transport market pedigree, like Alphabet's Waymo, but that see the opportunities of providing MaaS.
- As autonomous vehicles enter the market, coverage may shift from the individual to corporates seeking liability coverage or to individual policies for each individual vehicle.

Electric vehicles

- Electric vehicles (EVs) gained mainstream momentum in the early 2010s; despite this, hurdles still exist within the EV market that prevent widespread adoption. And with the U.K. government banning the sale of new petrol and diesel cars by 2035, and other countries planning or having planned to follow suit, the push toward electric vehicles is being only more pressing.
- According to some analysis, some EV models are up to 60% more expensive to insure than their petrol or diesel counterparts. This is in part due to the specialist skills and parts that are needed to fix EVs. This additional specialistdriven expense is combined with the fact that, for many, the purchase of an EV is an environmental choice. Will the EV driver happily accept a petrol car as a replacement vehicle while he or she waits for the EV to be fixed? The reliance on electric chargers to refuel has inevitably limited the potential pool of buyers: An individual in the rural U.S. would struggle to rely on an EV as his or her main vehicle due to a limited supply of chargers. For insurance companies, though, this would have to be a factor into the pricing matrix: What if a driver gets stranded and someone needs to be sent out to rescue him or her?

Quarterly InsurTech Briefing Q12020 23

The following are examples of noteworthy auto incumbent InsurTech partnerships and investments from the past 12 months.

1. Tokio Marine uses Metromile for claims

■ Tokio Marine, Japan's largest insurance company and the U.S.'s 17th largest, uses Metromile Enterprise's claim platform. Through the deployment of the proprietary artificial intelligence technology, Tokio Marine is aiming to improve customer satisfaction and limit the number of losses experienced due to falsified claims. Customers will be able to report accidents instantly through an app and immediately trigger a First Notice of Loss (FNOL) to start the claim process.

2. Munich Re partners with The Floow

 Munich Re and telematics provider The Floow have partnered to provide The Floow's solutions and capabilities to Munich Re's insurance clients globally. Through this partnership, Munich Re's consulting offering will be able to leverage The Floow's significant data collection, refinery and scoring solutions.

3. The Zebra raises US\$38.6 million in Series C funding

- The Zebra raised US\$38.6 million in its latest Series C funding round. The round was led by Accel with participation from Silverton Partners and Ballast Point Ventures. The home and auto insurance comparison site has 1.3 million monthly website visitors and grew its revenue over 200% year-on-year to US\$37 million in 2019.
- 4. Otonomo, a motor data services platform, has announced a commercial agreement with Mitsubishi
- The agreement will provide Mitsubishi drivers access to the Otonomo platform where the driver can share information with third-party services and application providers - such as smart electric vehicle charging, parking, safety, concierge services, preventative maintenance and mapping.
- 5. Amerisure Insurance, a U.S. commercial insurance provider, has partnered with IMS
- The partnership will see IMS, a telematics solution, providing Amerisure with commercial fleet telemetry technology that collects data and delivers a driver behavior-based score for analysis for commercial fleets.

6. Gojek, the Indonesian ride-sharing company, has launched an insurance offering, GoSure

 Developed in partnership with PasarPolis, an Indonesian InsurTech, GoSure will provide smartphone users in Indonesia with access to insurance products, including motor, mobile and travel products.

Insurers and automakers: telematics partners

- 7. Ford and Liberty Mutual partner to offer usagebased insurance
- Liberty Mutual is partnering with Ford to offer driving discounts to customers who drive a Ford connected vehicle.
- 8. Allstate and Ford have partnered to track mileage
- Ford customers can share mileage data with Allstate to benefit from pay-per-mile insurance
- 9. Toyota and Nationwide partner to provide usagebased insurance
- New buyers of Toyota vehicles and Nationwide auto insurance policies will aut omatically receive an initial 10% discount if they choose to opt in to share their driving data. Once 90 days' worth of driving data has been collected, customers can receive a discount of up to 40%.

A snapshot of some global InsurTechs operating in the auto and motor space:





































































































































ROADEFEND























ROOT simple.com

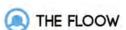






RIDECELL











































Buckle, a U.S.-based InsurTech founded in 2017, provides financial services to gig workers, beginning with personal and commercial insurance coverage in one policy for rideshare drivers of transportation network companies (TNCs). The Buckle policy simultaneously complies with commercial and consumer regulatory requirements to ensure that Buckle's members and additional insured TNC partners are comprehensively and continuously covered whether they are on duty, commuting or driving their family around during their personal time. Buckle believes that its unique combination of partnerships, technology, data, underwriting, insurance products, credit products, regulatory affairs and capital structure can drive down the cost of capital for TNCs and their independent contractors, through transparency and alignment of financial incentives.

Through a distribution partnership with Lyft announced in February, Buckle is currently writing in Georgia after a successful, stealth-mode pilot with hundreds of drivers across the state in 2019. In addition to meeting the financial needs of drivers and TNCs, Buckle's product has been admitted in 10 other states and was also built to address the issues and concerns of over 30 state insurance regulators in the emerging gig economy. Buckle has won the court bid to purchase the Gateway Insurance Company and its 47 licenses and is in the process of closing the transaction. Through an agreement with the Illinois Department of Insurance, at closing Buckle will operationalize a full-stack carrier, providing as part of the acquisition up to US\$100 million of taxi/limo capacity to its strategic partner, Atlas Financial Holdings. Later this year, Buckle anticipates launching its Buckle policy on its newly acquired Gateway carrier.

Existing rideshare offerings

Currently, a rideshare or TNC driver switches between the following:

- Requiring a personal policy when driving his or her own car but not offering rideshare or delivery services
- Requiring a commercial policy when offering his or her services as a rideshare or delivery driver

Some incumbent personal lines insurers have developed a "rideshare endorsement" that extends some coverage when rideshare (but not delivery) apps are on but generally not while en route to a pickup or with a passenger in the automobile. Such endorsements are an added expense on top of an existing personal insurance policy; they tend to be expensive and drive rideshare insurance closer to the rates typical of commercial insurance but with duplicitous coverages and charges, which is not viable in the gig economy. Additionally, because personal policies exclude commercial activity coverage, numerous regulators have viewed such endorsements as predatory to the poor as they charge more but offer no additional coverage.

Buckle has tackled this by building an insurance product specifically designed for part-time rideshare drivers and participating TNCs. Using driving records from rideshare drivers and TNC partners, Buckle provides comprehensive, costeffective coverage whether the driver's rideshare app is on or off.

Buckle's underwriting model

Buckle currently pulls on multiple sources to price the risk presented by the rideshare or TNC driver, including the following:

- Verisk Analytics provides information on the driver record, accident history and coverage history of the named drivers who are to be underwritten.
- Customer data include information that potential insureds supply as part of the insurance application process, such as address and vehicle information.
- TNC data include criminal background checks, actual driven mileage, driving behavior and star rating of insured.

Through the combination of these data sources, Buckle's underwriting logic instantly determines whether an applicant qualifies for insurance, and if he or she does, calculates the proper premium for the policy without duplication of charge or coverage. Buckle deliberately does not use credit score in any of its underwriting.

Buckle's underwriting process feeds into an OODA (observe, orient, decide, act) loop that is centered on Buckle's underwriting aperture, which ensures that only "good" drivers receive coverage — the ones who maintain good driving habits to sustain a gig economy lifestyle. Buckle applies the learnings that take place at renewal to ensure that its model adopts a continuous improvement approach, e.g., update/refine marketing channels and underwriting guidelines, as well as pricing changes as required.

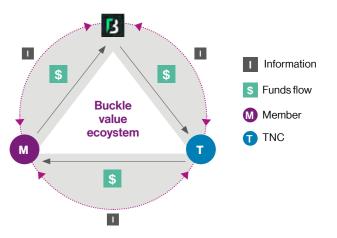
Buckle's credit model

In a partnership with Cox Automotive, Buckle has also launched a pilot lease-to-own platform in Georgia. Buckle is using financial data aggregation as part of its insurance underwriting model, as synergies build between its insurance and credit businesses.

Excess insurance strategy

Every time Buckle sells an insurance policy, its TNC partner's balance sheets get better, as risk is moved from the TNC to the independent contractors, similar to how general and subcontractors provide insurance to their customers in the construction industry. Buckle is committed to driving the cost of capital down in order to help the entire gig economy ecosystem of TNCs and their independent contractors. Through its acquisition of the Gateway Insurance Company, Buckle's excess insurance strategy helps advance this goal to help complete a virtuous ecosystem.

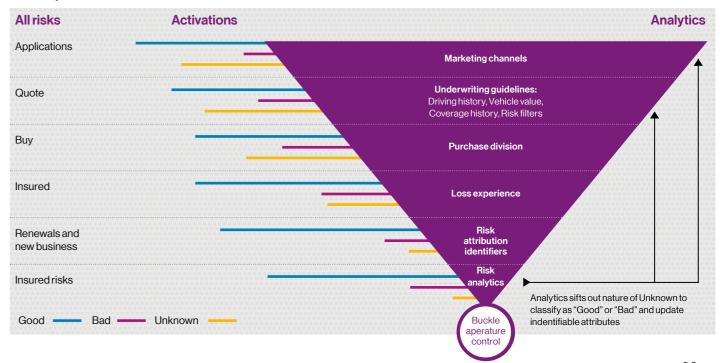
Forty-nine states have now passed legislation to explicitly address TNC insurance with the majority pulling from the National Conference of Insurance Legislators TNC Compromise Model Bill. This states that the coverage limits for TNC periods may be met by the driver's insurance, the TNC or a combination of both — typically up to US\$1 million of liability coverage in Period 2 (when the driver is on his or her way to pick up the passenger) and Period 3 (when the passenger is in the vehicle until he or she exits). Buckle's policy establishes an admitted, primary layer on a minimum financial responsibility basis in all periods and was designed to allow TNCs to address the remaining TNC Compromise Model Bill requirements through an excess policy.



Buckle is in active discussions to provide such excess layers to TNCs in order to optimize the claim experience and cost of insurance. Buckle is working to support multiple business models to address excess structure requirements, which can apply in three ways:

- TNC direct: TNC pays Buckle directly for the excess based on the actual driving of Buckle insureds or actual losses in a specific state. This may result in a simple invoicing scheme and also provides TNCs credit and a source of liquidity.
- Member direct: Buckle members pay for the excess based on actual driving.
- **TNC commercial:** Buckle provides the commercial insurance policy for a TNC for a specific state for all drivers. Buckle policies sold in a specific state reduce a TNC's insurance cost.

Buckle aperature control



Founded in 2002, OCTO offers innovative technological solutions that connect the world of mobility through advanced analytics and internet of things (IOT)-driven services. The company is a leading global provider of telematics and data analytics solutions for the auto insurance industry and is also a growing player in fleet telematics services. This includes world-class solutions to grow core businesses, including Smart Mobility solutions.

OCTO currently has 6 million connected users, holds the largest global database of vehicle telematics data — with more than 267 billion miles of driving data collected, over 473,000 crashes and billions of insurance events analyzed — and manages more than 400,000 vehicle-sharing hires per month.

OCTO's database, developed through 18 years of activity, is enriched from the data collected by connected users, who, while driving their vehicles, automatically provide data relating to the car, the driver's driving behavior context and possible accidents, along with other complex data, which are stored and analyzed based on thousands of combinations of parameters.

OCTO also provides innovative connected user services, including vehicle diagnostics, fleet management, vehicle sharing, real-time monitoring of traffic and environmental conditions to users to provide a unique digital driver journey.



Risk score and predictive modelling

OCTO has invested in the development of algorithms and analytical tools to help the company's global insurance partners maximize the potential opportunities from the connected world.

In this development of globally recognized analytical capabilities, OCTO acquired the usage-based insurance assets of Willis Towers Watson, including its market-leading DriveAbility® solution. DriveAbility® aggregates and analyzes granular telematics and insurance data to provide an industry-leading driving score and assist insurers to design, issue and bind telematics-based insurance policies. It also facilitates relationships between stakeholders, including automotive manufacturers, fleet and renting companies, telecommunication companies and insurers to present convenient, personalized insurance offers to customers using pre-analyzed driving data. OCTO's latest score version is available in selected geographies. Willis Towers Watson and OCTO have a strategic alliance to develop opportunities in insurance and other adjacent markets.

Digital Driver essentials

OCTO's Digital Driver solution is a white label product that summarizes and records values suitable for analyzing a driver's profile and combines them with other relevant indicators, such as distance covered, time of day and road type. Through the collection of telematics data, the aim is to increase customer engagement throughout the policy life cycle, bringing additional value in terms of overall portfolio risk reduction and supporting the company's pricing process. For companies managing a fleet of vehicles, the telematics data also contributes to virtual driver coaching, which can help to optimize the fleet owner's portfolio through enhanced safety and cost efficiency.

For the customer, this digital engagement is offered through two different forms: the smartphone edition, which can work as a stand-alone, and the smart tag, which works alongside the smartphone edition to offer an extra layer of safety through emergency service assistance.

With the core smartphone offering, the driver is encouraged toward safer driving behaviors due to the implementation of driver coaching functions (e.g., the detection of events that distract the user from driving and the DriveAbility® scoring), which assess the user's driving style.

By Miles is a London-based InsurTech that offers drivers real-time, pay-as-you-go car insurance by the mile through a plug-in device to count mileage. The company — launched in July 2018 and underwritten by a panel of insurers, including AXA Insurance UK Plc and La Parisienne Assurances — now has over 10,000 policyholders and has logged just under 35 million miles insured on its policies.

Connected car insurance

By Miles charges car owners a fixed annual fee to cover their cars while parked and then bills them monthly, based on the number of miles they actually drive. The product is aimed at drivers who travel 7,000 miles or fewer a year (or less than 150 miles a week) in their cars. Through using By Miles, drivers can identify the true cost of a car journey and determine whether it would be more cost effective to take public transport, a decision that has significant positive impact on the environment.

"Car insurance is a product that has barely changed in 30 years. We're offering the UK's first pay-by-mile car insurance policies, bringing fairer car insurance to lower mileage drivers.

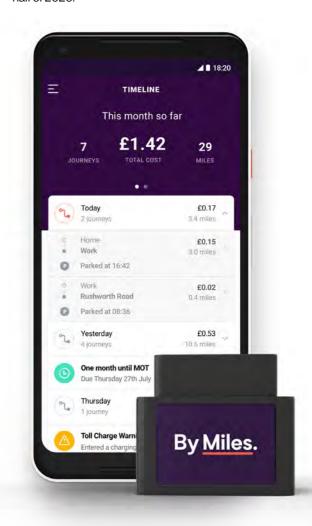
We noticed that those who don't drive as much are being treated unfairly. They're charged more to subsidise the insurance of higher mileage drivers. Every extra mile you drive adds to the risk of an accident, and we think it's only right that this is reflected in the price that infrequent drivers pay for insurance. So we're using the latest technology to stop people being overcharged for their car insurance and allowing them to see their mileage in real time. Car insurance services and models that serve us today aren't necessarily fit for the way we live our lives now, and they're certainly not ready for tomorrow. We want to make sure we're delivering a superior insurance experience for our current members, while keeping an eye on the future."

James Blackham, Co-Founder and CEO, By Miles

Open banking

By Miles is the first U.K. InsurTech to be directly authorized by the Financial Conduct Authority under Open Banking regulations. With this permission, the company will be able to use application processing interfaces (APIs) that grant them access to a wider range of financial data safely. This will mean drivers who could really benefit from the flexibility of a pay-by-mile policy can now be offered one, in instances where their traditional credit score might have suggested otherwise. It also means that the car insurance provider will be able to start offering its users a more manageable way of paying monthly statements.

The company is set to roll out its new payment services in the first half of 2020.





The Art of the Possible: An Investor's Perspective



Matthew Jones, Principal, Anthemis

Matthew is a principal at Anthemis, where he is responsible for sourcing, analyzing and executing investments as well as providing support for Anthemis' portfolio companies. He brings in-depth knowledge of the insurance sector and focuses on investments in insurance and risk-related technology. His areas of interest include analytics and data, artificial intelligence and automation, asset management, digital health, new insurance propositions, risk management and mobility. Prior to joining Anthemis, Matthew was at Swiss Re, with roles across non-life and life insurance and reinsurance, in both London and Zurich.

Anthemis is a venture investment platform founded on three guiding principles - authentic collaboration, virtuous cycle outcomes, and diversity, equity and inclusion. Since 2010, it has been at the center of a vibrant ecosystem of start-ups and institutions dedicated to reinventing financial services for the digital world. Anthemis is a committed fintech and InsurTech investor, that invests globally in Pre-Seed to Series C rounds.

Anthemis and its investing stance

What is Anthemis' approach to InsurTech investment? Do you focus on particular strands of insurance?

At Anthemis, we believe that there are opportunities to improve the industry in pretty much all lines of business (life and non-life), in personal and commercial, and across the insurance value chain, from underwriting to distribution to asset management. We have invested and will continue to invest in all of these spaces.

We also believe that there is a maturing cohort of InsurTech companies worthy of investment. While Anthemis has historically focused on early-stage venture (Pre-Seed to Series A first investments), we just announced our first close of our first venture growth vehicle, specifically focused on insurance and risk management.

What is the role of venture capital (VC) funds in innovation? Are they followers or leaders of innovation direction?

Venture investors are long-term investors: Our funds typically last seven to 10 years! This is good because some of the changes we anticipate will certainly take that long to mature and go mainstream Our investors rely on us for insights as to where the industry is headed, and we are looking far ahead into the future (well beyond current trends and industry tendencies). Because in InsurTech, as in fintech, sales cycles are long and in many cases the regulatory barriers are high, VC firms play an important role, providing the support and time new innovative companies need to get to market and scale effectively.

All that being said, we, as investors, are enablers of innovation: Entrepreneurs are the real leaders. By and large, entrepreneurs acknowledge that insurance is complex, and they have gained a respect for the industry.

From that, what role do the incumbents play in insurance innovation and the InsurTech market?

As I see it, the role of the incumbent is twofold.

A little tongue in cheek, but for some start-ups, incumbents are an inspiration. To some entrepreneurs, incumbents represent how not to do business. Incumbents' processes are often cited as a reason why start-ups won't be surpassed by the existing players, despite those players having the resources to develop similar products and technologies. Entrepreneurs frequently hold up existing processes as a counterpoint to the customer-centric, technology-focused improvements they plan to launch. Existing products are often demonstrated to venture investors as examples of poor customer value, accompanied by explanations as to what can and should be improved.

In reality, incumbents continue to shape the industry. Incumbents are prospective customers and partners for start-ups. Their demand for new technology shapes start-ups and their priorities, guiding entrepreneurs as to where they should invest their time and energy. Incumbents' risk appetite determines the speed at which new lines of business emerge, with their investments into partnership teams (and occasionally venture units) bringing new products to market.

Whatever your perspective or biases, incumbents certainly have a critical role in shaping the future of insurance.

Art of the possible

You recently attended the Consumer Electronics Show (CES), and this year the automotive market took center stage, with the likes of Toyota's Woven City and BMW's 5G-driven in-car technology being spotlighted. What can we learn from these events about the future of the auto and mobility sector?

The Consumer Electronics Show is an enormous event, attended by most household names that want to demonstrate the results of their investment in research and development. It is a first-rate opportunity to see emerging technology and a great start to the year — and has, almost by accident, become the year's first auto show.

There are three things that come to mind after this year's event:

- 1. This year, the theme across original equipment manufacturer (OEM) (and non-OEM) exhibitors was safety, which gets to the heart of insurability. It has been said before, but cars are essentially roaming computers weighing several tons, packed with sensors. Innovators are trying to understand, among other things, how data from these sensors can be used to make journeys safer. Manufacturers are attempting to differentiate themselves on the basis of safety features. This is going to filter through to insurers, whose pricing will reflect the investments being made.
- 2. The conventional narrative is that innovation in mobility disrupts cars and reduces ownership (especially in built-up urban areas). However, the alternative narrative has been ignored: A lot of rail and public transport will be disrupted. As a result, whether it's sharing a vehicle between a small group of friends or tapping into a fleet for half an hour, insurance models will need to continue to evolve, as they already have begun to do. Eventually, the distinction between public and private transport will disappear with self-driving pods.
- 3. For some mobility technology, insurance is absolutely necessary in order for some of these visions to become a reality. Take flying taxis (read: cheap helicopters?) for example. They're real, a long way from being deployed and use cases may be very niche and specific but in any case 100% grounded until the insurance question has been answered.

Where will it be in five, ten years' time?

The switch to electric is a much bigger deal than self-driving vehicles because it disrupts up to 10% of the global economy. It is arguably a less sexy, but in many ways more important, story than the one around autonomous vehicles (let's wait and see), but it will happen and the effects will be seen within five years. This time frame seems even more plausible in recent months, as climate change has become an important agenda point for many companies and governments. For example, the U.K. brought forward the ban of petrol and diesel car sales by five years to 2035 at COP26 this year. Electric vehicles have very different ecosystems and repair costs (higher now but lower in the future) and are likely to have a big impact not just on consumers but also on global supply chains.

Outside of the auto technology specifically, what do you think we can learn from the technology spotlighted at these "futuristic" events as to the technology future of the insurance industry?

In many ways, CES is a positioning exercise for companies that are looking to "own" a given space or otherwise assert some dominance or expertise in a specific sector. It is interesting to see which companies are trying to get ahead of new and emerging trends, or even which companies are trying to start new trends.

It's a good opportunity to take a step back from the conversations we have in the industry. One thing I have learned from my past two visits is that sometimes there isn't a role for the insurance industry in a given space, or that the role that is emerging for the insurance industry is different from what had previously been envisaged. Take smart home, for example. I think that some parts of the insurance industry have become fixated on the idea of the insurer being at the core of the smart home, bundling devices and selling direct to the consumer. The companies that are dominating the smart home ecosystem were exhibiting at CES — consumer electronics companies, security companies, inventors of new materials — but not insurers. That's not to say that insurance doesn't have a role, but it feels more likely to be in the background, within policies embedded into propositions led by other established brands.

The other thing I have learned is that I'm not sure that the industry knows what is coming. You could probably count the number of

Anthemis' InsurTech portfolio





























insurers and reinsurers in attendance on two hands. Don't get me wrong, insurers and reinsurers have a lot on their plate, dealing with the challenges of today. However, if engagement with emerging tech at CES is an indicator, it means one of two things: Either the industry is going to successfully resist the effect of technology for a while to come, or executives are in for one big surprise.

What impact will the rise of autonomous vehicles have on the insurance industry? Will they be a force for good? Or do they have the power to destabilize the insurance industry as we know it now?

The aims for autonomous vehicles are varied: reduced transit times, fewer accidents, lower emissions and more. The emergence of autonomous vehicles and the infrastructure that will accompany them will be one of the biggest changes that occurs in our lifetimes. Such a shift, of course, has the potential to be destabilizing, and there will be winners and losers.

In general, we suspect that there will be fewer cars and more people in cities. However, there might be a contrarian story, with car ownership particularly resilient in wealthy non-dense urban areas (for example, the South East of the U.K.), but existing OEMs may be disrupted as they don't have the competitive advantage in batteries and software.

In the short term, we expect that premiums and claims will rise, as existing infrastructure and (human-driven) cars sit alongside new ones and as autonomous vehicles continue to be tested. While the technology is expected to improve rapidly as additional miles are driven and data are gathered, there will be incidents in early deployment, and this could ignite an overreaction by insurers and regulators. In the long term, we expect that premiums and claims will reduce as driver liability is removed. Our attention is almost constantly being targeted on smartphones, and this has generated a huge amount of risk in car driving. Overall safety should improve, driven by better use of safety technology as well as improved use of the data being generated by autonomous vehicles.

Another aspect, often overlooked, relates to distribution. At the moment, you or I insure our car and we decide who to insure it with — be it a small, local insurer or a large, global one. If we don't all own a car, we can see a new reality emerge where those policies will be managed centrally by owners of fleets instead. In such a situation, we expect concentration of risk among a few key insurers, likely the largest and with the deepest pockets, who are able to interpret autonomous vehicle and fleet data.



Anthemis has made a number of investments into auto/mobility technology (Humanising Autonomy, Xapix). How do these investments reflect Anthemis' changing view of the insurance landscape? What role will risk play with increased technological engagement?

Insurance is becoming "prophylactic," focused on prevention rather than treatment. We foresee many more blurring lines separating warranty, maintenance and insurance. This will be driven by telemetry, data, parametric triggers and so on.

Specifically, we have invested, and will continue to invest, in both B2C and B2B technologies that are at the intersection of mobility and financial services.

In B2C, our guiding principle is to back companies seeking to close unique or emerging protection gaps through technology. In our B2B investments, we seek to back companies looking to: (i) affect risk (e.g., Humanising Autonomy); (ii) better understand risk (e.g., Flock); or (iii) enable better access, use and distribution of data (e.g., Xapix).

What role will liability play when the technology has control?

The traditional perspective has been for an insurer to cover the risk of a human in control of a vehicle. As new advanced driver-assistance systems (ADAS) have been developed, some insurers have attempted to create an advantage by investing to understand the safety technology at work in a vehicle. In other words, they are looking to tap into smaller, self-selected pools of lower risk.

Take our investment in Humanising Autonomy, for example. Their technology fundamentally affects the risk profile and insurability of a vehicle, whether autonomous or otherwise. The opportunity for insurers is to better understand how this technology affects the risk profile of the vehicle in question, as well as to bring more of these theoretically safer vehicles on to their books.

In the future, this shift will continue: Credit scores and occupation become less relevant, and the underwriter will be responsible for understanding the full autonomous vehicle software stack. Risk underwriting means understanding the environment (and the software and sensors that analyze it) as well as the actors in it, which are software if drivers are replaced.

Quarterly InsurTech Briefing Q1 2020 37



Incumbent Corner

Willis Re China spoke with Ping An and Zhong An about the development of the InsurTech industry in China, the role of the customer in their respective technological developments and the impact they perceive technology to have had on the Chinese insurance industry.





Digital platforms are fast becoming a way of life in China. The country has, in recent years, been at the forefront of the adoption of new and innovative technology, supported by digital incumbents — such as Alibaba (ecommerce), Baidu (Internet search engine) and Tencent (a software company) — and a regulator that supports innovation. The insurance industry in China has been very accepting to this technological drive supported by incumbents and government alike alongside the widespread adoption of technology by consumers. China has around 817 million mobile Internet users; in comparison, the U.S. has around 262 million users.

Since 2013, China-based InsurTechs have raised US\$1.8 billion; 24% of the US\$1.8 billion was raised across 2018 and 2019. The largest deal recorded was for a Chinese full-stack insurer, Zhong An: A mammoth US\$931 million was invested in 2015. (Note, the next largest deal is 47% smaller.)

Zhong An was set up in November 2013 by three titans of the Chinese technology landscape: Jack Ma (Alibaba), Pony Ma (Tencent) and Mingzhe Ma (Ping An). The purpose was to create China's first Internet insurance company. Zhong An has focused on technological innovation and applied cutting-edge technology, such as big data, cloud computing, blockchain technology, artificial intelligence and internet of things, to upgrade the existing insurance value chain. Zhong An has also launched "quirky" micropolicies, including one that reimbursed insureds when temperatures reached over 37 C. In 2017, the company debuted on the Hong Kong Stock Exchange and raised US\$1.5 billion on the first day of its initial public offering — the first public offering for an Internet-only insurer of its kind. As of 2018, it has insured over 400 million customers.

Ping An — one of Zhong An's founders, and a 10.5% stakeholder—is China's second largest insurance company but still a relatively new presence on the insurance landscape at just over 30 years

old. The company is considered to be the current leader in the incumbent Chinese insurance industry focusing on technology research and development, pursuing investments into AI, blockchain and big data to support its business proposition. Through this, the company has digitalized its auto, life and health insurance businesses and built four new online portals for auto, health, finance and real estate. For Ping An, innovation does not end with insurance: The company has reached out across verticals to build deeper connections with its customers, including a health care and medical tool, Good Doctor; Ping An Haofang, a real estate app; and Wanlitong, a shopping loyalty program.

The incumbent, Ping An, and the InsurTech, Zhong An, are inextricably linked but, of course, undeniably rivals — both competing in the same country, in the same industry. The two companies, however, have welcomed this competition. Both Zhong An and Ping An see this as an opportunity to learn from each other and facilitate development and progress within the existing insurance and InsurTech industry.

With the Chinese insurance market expected to quadruple to US\$2.36 trillion, up from US\$575 billion in 2018, by the mid-2030s — accelerating past the U.S., which is currently valued at about US\$1.47 trillion — there is huge growth potential. These two companies, while competitors, realize that this rapid pace of expansion leaves room for them both to profit.

The incumbent, Ping An, and the InsurTech, Zhong An, are inextricably linked but, of course, undeniably rivals — both competing in the same country, in the same industry. The two companies, however, have welcomed this competition.

- 1. Impact of InsurTech on the insurance industry and the Chinese market:
- Has the market focus on technological innovation been a good thing for the insurance industry?
- What impact has the InsurTech movement had on the perception of insurance in China?
- What can insurance companies learn from the technological innovation that is taking place in China and China's approach to InsurTech?

Ping An: InsurTech can trigger innovation in insurance products, through changing the customer service model of the entire insurance industry and changing the competitive landscape of China's insurance industry.

In other countries, the development of network and communication technology has opened up innovation across numerous products, increased contact between insurance companies and customers on different topics, and opened the door for insurance companies to provide customers with products and services more efficiently and effectively. The Internet and new communication technologies have brought a new business model to the international insurance industry, and with that has come new profit margins and business growth. We therefore believe that the insurance industry's focus on technological innovation is a favorable thing for the insurance industry.

In China, InsurTech has eliminated the pain points of traditional insurance. We cannot just focus on growth in simply number of policies and premiums. How to transform from outside expansion to endogenous growth has become an important issue for insurance companies.

Take Ping An property and casualty insurance as an example.

In 2019, Ping An used technology such as intelligent robots and image recognition to reshape our business processes. With the improvement of scientific and technological capabilities, Ping An has applied artificial intelligence to the full value chain of our insurance business, and has implemented face recognition, voice interaction and other technologies to achieve intelligence across sales, risk control and management. Examples include:

■ Ping An's "Intelligent Underwriting" system accurately provides customers with their optimal insurance solution.

The inquiry success rate for the auto insurance solution has been increased from 27% to 68.9%, and the fastest order is within eight seconds. This smart process has reshaped the underwriting process, and 99% of the business processes are paperless. The technology won first prize for outstanding information technology cases from the China Banking and Insurance News.

- "Smart Document Recognition" realizes the easy entry and classification of documents for underwriting and claims, with an annual usage of over 20 million times. The optimal character recognition (OCR) technology won the first place in the ICDAR SROIE competition.
- "Smart flash claims" achieves automatic damage determination of 15 exterior parts of the car, accounting for about 25% of the total case volume, with an accuracy rate of over 90%.

The elimination of pain points and further advances in InsurTech have led to usage upgrades. Technological innovations represented by artificial intelligence are driving investment into the era of automation and intelligence. The accelerated development of InsurTech has provided a direct drive for the digital transformation of the insurance industry. We expect that "technology + data" will reconstruct the insurance ecosystem.

On the one hand, the participants in the insurance industry are becoming more diverse, and the rules of the industry will gradually be rewritten. Many InsurTech start-ups use technology as a starting point to change traditional high-cost, low-efficiency business links, and constitute an important driving force for the insurance technology ecosystem.

On the other hand, the core driving force behind the insurance technology ecosystem comes from the rapid development of big data and artificial intelligence. At this stage, voice processing, image recognition and intelligent robots have only begun to be applied in the areas of intelligent interaction with customers, fraud detection and claim processing. The next step is to introduce these technologies into product design and pricing, personalized risk assessment and other aspects.

"We expect that 'technology + data' will reconstruct the insurance ecosystem."

Incumbent Corner continued

Zhong An: In recent years, with the integration of insurance and technology, a Chinese model of InsurTech with high-growth characteristics has gradually morphed. As Ping An suggested, in the future, driven further by science and technology, the characteristics of insurance market, business model and competition pattern may be redefined.

First, we believe that 5G technology will definitely change the insurance industry. No financial service has yet to effectively apply 5G, and the insurance industry may be the first to do so. The dimensions of video and apps based on 3G and 4G technologies are static, while 5G will provide a dynamic connection to the Internet. This brings opportunity for the insurance industry in the future. Insurance pricing can be more accurate, process management will have more channels and solutions, and post investigation and claim settlement will be supported by more dimensions.

Second, with the development of technology, the transformation of the insurance industry made by science and technology will step into the unknown. At present, many Internet insurance products are still in the form of products, rather than the entire business process or the company's operational structure being digitized to complete the full digital transformation. In other words, these Internet products

may look like digital products, but they actually may not be digitalized at the middle or back end.

When the insurance technology development starts from the outside and moves to the inside, a digitalized middle platform will become the starting point for more and more insurance companies to realize important strategic and digital transformation.

Third, we agree with Ping An that the deep integration of technology and insurance will change the current business model and competition pattern of the industry. For us in the future, we believe we will see more cross-industry, pan-security competition: This is no longer the competition between insurance companies, but the competition between technology companies that have the ability to provide protection.

In fact, through the application of insurance technology brought by digitalization, insurance companies can do more interesting things in the future. For example, if we take insurance as the starting point, and complete the transformation from insurance to security, we can cover more people who do not have insurance needs but have security needs (i.e., those who are in high-risk or vulnerable groups).

2. How has your company paved the way for China's growing InsurTech scene?

Ping An: We understand that the driving force brought by technological innovation is unstoppable. In recent years, we have continuously increased investment in scientific and technological innovation. As Zhong An mentioned before, we have not just focused on digitizing the front end, but we have unwaveringly laid out cutting-edge technologies; continued to promote technological innovation and intelligent and databased operations; and reengineered insurance business processes to improve service and efficiency. This also enables customers to prevent and control problems in advance while reducing potential losses.

We are still continuing to develop in the field of InsurTech innovation:

 In terms of product design, we are constantly trying to integrate big data, artificial intelligence, blockchain and the internet of things into insurance. In particular, the development of 5G, which Zhong An mentioned earlier, and the internet of things can solve many historic problems, such as risks that were previously difficult to assess, risks that were difficult to control and losses that were difficult to determine, thus turning these situations from uninsurable to insurable and greatly promoting the development of insurance business in these situations.

2. In terms of insurance underwriting, you can use OCR technology to achieve intelligent entry of information, use document classification technology to perform automatic acquisition, use image recognition technology to achieve online and unmanned aerial vehicle inspection, and improve the inspection during the underwriting phase.

"The driving force brought by technological innovation is unstoppable."

Zhong An: Zhong An always sees "insurance + technology" as a twin turbo and is committed to applying cutting-edge technology to all parts of the insurance value chain to improve the efficiency of the insurance market. We are also committed to filling the existing insurance market with innovative products and solutions powered by science and technology, exploring cutting-edge technology and empowering industry institutions to achieve win-win results.

Without technology, Zhong An's insurance business would not be so unique; without the support of the insurance business, Zhong An's technology capability would not be so convincing. Over the past six years, Zhong An has acquired business innovation ability, cross-industry partner connections, big data user profiles and risk control as well as a flexible, agile and iterative system. This enables the company to quickly respond to market demand, flexibly connect with partners and continuously provide customized insurance products for users. These capabilities are Zhong An's unique competitive advantage in the field of InsurTech and the driving force for us to achieve long-term business growth.

3. Customer centricity has been a key part of both your companies' development. What technology have you used to ensure that technology is at the forefront of this customer engagement?

Ping An: An example of this for us would be our Good Car Owner app. This has a "Car Assistant and Safety Manager" to provide car owners with one-stop car owner ecosystem that includes a range of more than 70 services, including refueling, parking, annual service, driving and road rescue.

At the same time, through the integration of resources across the motor ecosystem, we have partnered with more than 25,000 maintenance outlets, 17,000 garages and more than 38,000 4S (sale, spare parts, service and survey) car dealers; built a service platform covering "car insurance, car service, car lifetime" around the needs of car owners; and created a multi-scenario car service ecosystem for 200 million private car owners across the country.

By the end of 2019, the Ping An Good Car Owner app had more than 90 million registered users and more than 25 million monthly active users, ranking it first in China's list of automotive tools.

Zhong An: Based on the underlying technical capabilities of blockchain, big data, cloud computing and artificial intelligence, we closely integrate data intelligence with the whole value chain of insurance, and we are focused on achieving our company mission of "technology driving financials and running insurance with warmth."

Al technology is enabled across our insurance value chain. For example, our intelligent insurance consultant "Zhong An Genie" can give users insurance suggestions within 30 seconds, and the system can serve up to 300,000 users per day.

At present, our underwriting and claim settlement automation rates are 99% and 95%, respectively; 85% of online customer service sessions are handled by robots. The total volume of online sessions has increased by 235%. By humans and computers cooperating, we are able to serve our customers more efficiently.

In order to achieve these numbers, we have, based on 1.13 million insurance questions and 4 million real people, established an insurance knowledge base with more than 100,000 volumes of data. It is the first insurance proactive risk recognition model in the industry, with an accuracy rate of more than 97%. In addition, we have connected this knowledge base with our core system so as to connect more insurance services; improve the speed and quality of new product configuration; and then bring accurate, consistent and fast user experience — similar to Ping An's motor ecosystem and delivering on the need to have digitalization across the insurance chain.

Moreover, data intelligence is also applied to our car insurance claims. Based on Al video recognition, users complete the loss assessment and determination responsibility by uploading video evidence all online. This use of intelligent video to determine the loss can be completed in as quickly as three minutes.

"Our underwriting and claim settlement automation rates are 99% and 95%, respectively; 85% of online customer service sessions are handled by robots."



Thought Leadership



Incremental gains fuel technology transformation in the motor market

As a product that millions of people around the world buy, motor/auto insurance intuitively offers a fertile breeding ground for InsurTech innovation and efficiency gains. That doesn't mean that "new" is always better. In markets of scale, being just "better" can often make a significant difference to profitability.

Stephen Jones is the U.K. Property and Casualty Insurance lead in Willis Towers Watson's Insurance Consulting and Technology business.

If we were to believe everything that's been said or written about automotive technology developments in recent years, we'd now all be relaxing in driverless, shared-ownership cars. And motor/auto insurance products, and the coverages they provide, would be very different.

Yet in a number of markets, the motor insurance product has proved resilient against certain kinds of transformation. In many ways the traditional annual product is and remains a good fit for a significant number of consumers in markets such as the U.K., which has boasted for many years now a cohort of incumbent insurers that have been making the most of available technology and innovation for over three decades.

Why is that? For starters, it's extremely familiar to motorists, many of whom have purchased the product for many years in succession — and with familiarity comes comfort. Insurance is, at its very core, about providing consumers with comfort and reassurance. The product is also arguably very affordable to the majority, especially to those mass market customers who have accrued high levels of no claim discount/bonus-malus entitlements. The coverages and terms under the product are generally well understood. Moreover, most customers buying the product do not believe that they will need to interact with claim services on any frequent basis, and those who have already done so possess the experience to do so again. In addition, as cars have increasingly become a utilitarian commodity rather than a luxury item in the developed economies, and as many families increasingly have access to a pool of more than one car, discretionary claiming for minor damage has become less important, as has the impact of being deprived of a car while it is repaired.

Making the business case

So where, you may ask, does InsurTech fit in and where are these breeding grounds for innovation that I referred to above? For that, we need to look under the bonnet (hood) of the market a bit.

Numerous surveys have shown that consumers do not necessarily enjoy their interactions with financial services providers and with their insurers in particular. To the vast majority, insurance is a "grudge purchase." Technology developments have enabled the incumbents, based on the familiar annual policy form, to respond to this. Motor insurance is increasingly self-administered through digital channels, increasingly marketed and sold through price comparison or similar mechanisms that retain customer and risk details for easy re-quote, and that facilitate shopping for the most competitive provider, to provide a customer experience that is infrequent, simple and quick, with the added reassurance of a competitive price. Customer experience has therefore already been a natural area of focus for technological innovation and disruption in many markets.

Equally, the competitive nature of the mass market is exacerbated by margins and expenses that are relatively low compared with other insurance products, especially considering that it is a "full-service" product (i.e., there are significant elements in the claim handling process — for example, insurers have to repair the vehicle, not just pay out a cash settlement). Automated claim processes, including the use of digital images, to expedite claims are among the most visible ways in which applications of technology are helping to reduce costs and provide streamlined services.

It would be fair to say that our global industry continues to aim to develop, adapt and respond to the broader growing changes witnessed in our day-to-day working environments where the traditional offering has not been quite so resilient or embedded (most noticeable perhaps outside of the U.K.). This is true for both incumbents and hopeful entrants into this space (self-identifying InsurTechs). For example, the rise of the gig economy and sharing economy worker, and the associated requirements in a number of markets, has given rise to a fresh review of what a sound combination of technology and product applicability can offer. As a result, incumbents and InsurTechs alike have been seeking to provide products that mirror changing working patterns.

There lies an opportunity, and a challenge, to make use of technology to achieve a win-win scenario for provider and consumer. As the general public becomes increasingly accustomed to (and trusting of) insurance products that reflect changing behaviors in a more seamless manner, this opportunity to innovate will continue to grow. The usage-based insurance model and sharing economy model are two such cases that we have profiled with real-life examples in this quarter. In the U.S., for example, we are already observing that a small handful of InsurTechs have been able to carve out a place for themselves in an otherwise competitive market on the grounds that they are offering a well-priced solution, readily delivered, that focuses on changing behavior.

While there are areas and markets across the globe in which genuine innovation is taking place supported by technological developments, the U.K. and other mass markets that already have a rich history of delivering highly demanded products (often delivered virtually) remain relatively steadfast to outsider disruption. As such, in these markets the case for disruptive product forms has a high hurdle to jump from a customer perspective, especially if those new product forms entail perceived invasions into personal privacy; necessary physical interventions to vehicles; occupancy of mobile phone screens; or demand for more frequent, involved or repeated interaction with insurers.

Logically, therefore, the motor insurers' focus related to deploying emerging technologies has and will continue to be on operational efficiencies and customer experience across the various policy life stages, while seeking competitive advantage in those areas of excellence very specific to insurance, such as granular risk analytics, portfolio and underwriting footprint management, and controlling claim indemnity spend.

Genuinely new product forms enabled by technology, on the other hand, will logically be focused on new and existing niches, such as drivers facing affordability challenges because of risk characteristics or poor experience, or small segments requiring genuinely novel covers, such as temporary, car sharing or occasional private hire cover. As the markets for these covers are niches, and by definition, small, then the economics of such propositions will be challenging where products attract small premiums, have high proportionate expense burdens, create significant anti-selection risk or lack an affordable mass distribution mechanism supported by brand awareness.

Emerging success factors

Picking our way through the maelstrom of activity and hype around the deployment of emerging technologies in the motor market, which we might associate with InsurTech, we've observed what many of the more successful and forward-looking insurers have been doing to address critical success factors both globally and in local markets. This is not an exhaustive list, and the scale and scope of each element in individual geographic markets will inevitably vary, but it illustrates how what's going on behind the scenes from a technology standpoint is as important in motor right now as the more headline-grabbing, public-facing developments.

- Insurers that have been able to move away from legacy systems — or integrate them into updated IT infrastructures to adopt more modern micro-services ecosystems have created the operational agility that provides a competitive advantage in increasingly dynamic and data-rich markets.
- Those who have automated and simplified internal processes and structures through coherent, committed and wide-ranging automation and digitization programs have supported this agility by increasingly enabling rapid decision making. At the same time, the efficiency cost savings generated have enabled greater price competitiveness within more transparent digital distribution environments, such as price comparison websites, enabling higher new business volumes. This, in turn, has created a virtuous circle of reducing expense ratios as fixed overheads are spread across a larger portfolio.
- Some companies are facilitating a "digital direct" customer model in which customer data are collected once only and aligned across multiple products. Among other things, this means that data enrichment is used to enable low- or no-questions underwriting, customers can self-administer policy adjustments and renewals, claim progress can be tracked online, and multiple products and product prices are visible in one place.
- Forward-thinking insurers are investing in the understanding of emerging vehicle technology in order to understand risk mitigation systems and repair complexity issues. Current applications include understanding how keyless entry is changing the vectors of attack for car theft and the changing risk profile of electric vehicles, which are expanding to the point where they will represent a material exposure segment, while also keeping a watchful eye on developments in autonomous vehicles and semi-autonomous driving aids.
- They are investing in data enrichment, data liberation and broader data infrastructure and strategy, to truly enable a fully data-driven decision-making framework.
- They are developing a mature, pragmatic and commercially prioritized deployment of advanced analytics techniques, such as machine learning, with these deployed within sophisticated real-time pricing, agile portfolio and underwriting management, and claims analytics.

Such examples demonstrate that the opportunities for insurers to use technology in enhancing products and reducing costs are significant (but that, among incumbent insurers, reducing costs typically offers more bang for the buck than product proliferation).

That's not to say that preparing for future market disruption isn't, or shouldn't be, on motor insurers' radars. However, to a large extent, the key success differentiators that have emerged so far for most motor insurers around InsurTech are linked to accelerating operational improvements and customer experience rather than the creation of material segments of novel product forms. Incremental technology gains may not attract the headlines or seminar sessions, but they continue to yield material benefits for motor insurers.



Technology Spotlight



Radar Live is a real time insurance rules and model deployment solution that builds on, and completely integrates with, Willis Towers Watson's analytical software Emblem, Classifier, Radar Base and Radar Optimiser. Its use is now being broadened to areas such as claims, harnessing models developed by analysts and data scientists and deploying them in real-time to existing administration systems.

For many years insurers have improved pricing effectiveness using statistical models and machine learning. As approaches have become increasingly sophisticated, model management and algorithm deployment have become significant success factors for insurers. As a result the case for enterprise pricing solutions has grown stronger. The market-leading solution of choice for many insurers is Willis Towers Watson's Radar.

Insurers are going through significant transformation driven by rising customer expectations and a new wave of digital-first competitors disrupting the market. Consumers now demand instant 24/7 services, combined with the ability to self-serve, benefit from fast-track claim processing and receive unparalleled customer support.

As claim teams travel on the road toward increasing automation and Al decision support, they are discovering a need to turn proofof-concept models into solutions that can be deployed and that fit into existing — and automated — claim processes. This makes our Radar suite of tools a compelling choice. Our suite is increasingly being deployed in underwriting and claims to provide predictive models to improve operational decision making and unlock smart automation by enabling teams to create a successful proof-ofconcept model and then apply it in real time to their claim process with high availability and capacity required of even the largest insurers. The suite also enables the monitoring, combining and updating of the models in a fully controlled and secure deployment environment, which is important to ensure the continued efficacy of claim predictive models.

We view our Radar suite as part of an integrated ecosystem encompassing: Radar enterprise analytics platform with decision engine and real-time rules execution, data liberation capabilities (voice, unstructured data and image) with third-party data inputs and robotic process automation. The graphic shows how Radar Live can be deployed within an environment encompassing a variety of different elements; in addition, Radar Live can be integrated directly into the claim system to provide sub-seconddecision support, or alternatively Radar Live can be implemented as a stand-alone batch processing or smart dashboarding solution where the need for real-time response directly within the claim system is not required.

We know that insurers that deliver a rapid response to customer claims can have a decisive advantage. Radar Live can be leveraged in multiple ways within the Claims function to offer:



More control: Accuracy and efficiency Provides claim triage, automation and decision support using predictive modeling, machine learning and unstructured data



Intelligent intervention

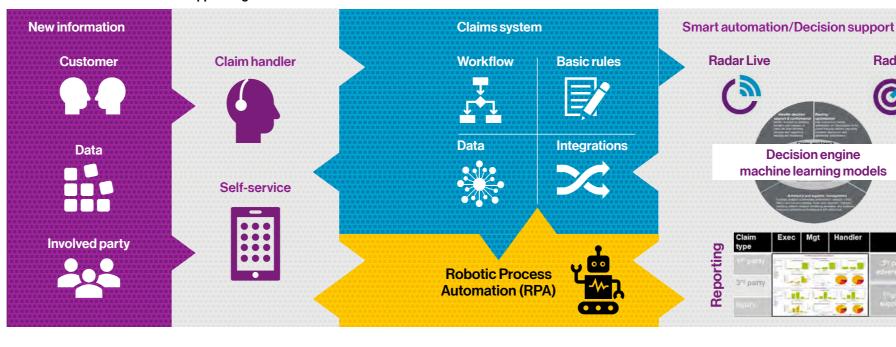
Helps triage, route, estimate and automate claim processing, and arms your teams and experts with deep analytical insight and decision support



Rapid decisions

Integrates with your claim platform so your predictive models (e.g., triage, fraud, intelligent routing) can run in real time

Framework for real-time decision support engine



Case study: Fraud detection

Among the numerous users of Willis Towers Watson's Radar Live software, one insurer saw the opportunity to deploy the software in wider areas of its business. The insurer deployed the solution to provide improved capability to detect, prevent and manage increasingly complex claim fraud in real time. We supported the client to enhance this solution.

Combining our claim and analytics experts, we held workshops with the client to understand its particular fraud risks, issues and emerging trends in its region in order to develop models that would target these areas.

We collected and transformed structured and unstructured data from the client's underwriting and claim records together with data from its claim suppliers and third-party data providers.

A significant amount of data processing and factor engineering was undertaken, including identifying key topics in the unstructured data (text/claim handler notes) and several hundred variables relating to each individual claim.

Radar Live

Decision engine

machine learning models

We then developed a range of machine learning models for real-time deployment on Radar Live, including:

- Four supervised models trained to identify and leverage the highest predictive factors
- An unsupervised model to identify claims with unusual characteristics
- A network model to show linking among potentially fraudulent claims, policies and involved parties
- An expert model, leveraging our knowledge and international best practice of fraud

From this ensemble of models, we developed a fraud scoring output per individual claim.

Based on initial tests, Radar Live was able to increase the insurer's fraud detection rate by more than 100%.

Suppliers

Third-party data

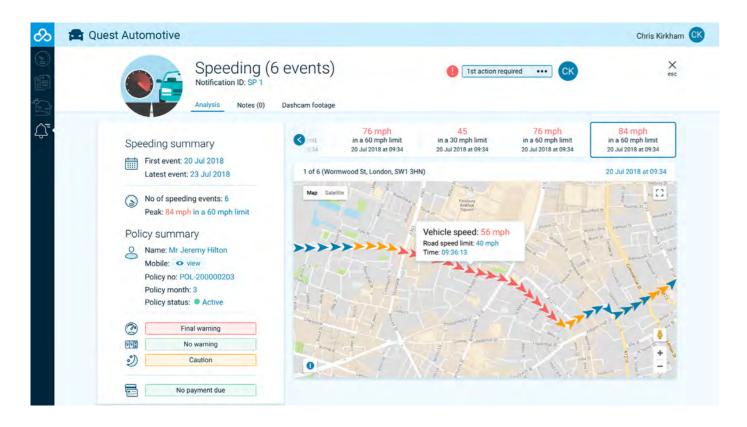
Quarterly InsurTech Briefing Q1 2020 51



Transaction Spotlight



Concirrus, a U.K.-based specialty lines (marine, cargo, aviation) and automotive InsurTech, raised US\$20 million in a Series B funding round led by AlbionVC in February 2020. The funding, which also included participation from current investors IQ Capital and Eos Venture Partners and several angel investors, takes Concirrus' total funding to US\$35 million.



Concirrus now boasts many large industry clients, including Hiscox, Beazley, Sedgwick, North, Sopp+Sopp and Skuld. Concirrus has also been actively developing a number of new products for its Quest platform, which are all largely predicated on the same business thesis: using the appropriate data as they relate to contemporary risk indicators to weight decisions around pricing and underwriting — for example, using behavioral data in conjunction with demographic data to better predict losses in the shipping industry.

One further recent development is Concirrus' automotive application. This platform is Concirrus' big data aggregation and analytics platform that uses vast data sets from Concirrus' verified partners and applies proprietary machine learning algorithms to identify driving behavior that correlates to claims.

Concirrus has found that corner braking, speed, rural exposure or night driving are far better indicators of risk than where a driver lives, or the value of the vehicle driven. By combining driver behavior data from telematics and video devices with traffic patterns, local weather and anonymized national collision data, Quest Automotive provides a clearer view of risk to the insurance market and fleet operators. Quest Automotive bridges the gap between fleet operators and insurers to enable a collaborative approach to managing risk.

With a clear, real-time understanding of driver behavior and its impact on risk, (re)insurers can select risk more effectively and reengineer their traditional insurance models. Working closely with the fleet operator, they can take a more proactive approach to encourage safer driving behavior in real-time to reduce collisions, and in the unfortunate event that a collision occurs, they can act quickly to mitigate losses.

Automated active risk management

With Quest Automotive, insurers and fleet operators are automatically alerted to risky driving behaviors by insureds, such as speeding, fast cornering and tailgating. With this information, insurers and fleet operators can implement automated real-time intervention processes to coach drivers on the dangers of risky driving and proactively reduce collisions. Failure to change driver behavior and/or lack of an effective risk management program could result in automated increases in policyholder premiums. Quest Automotive also helps insurers and fleet operators to implement policies for rewarding improvements in behavior, such as reduced premiums or other incentives, to reduce collision frequency and severity.

Automated First Notification of Loss (FNOL)

Using dynamic, real-time data from vehicle sensors, telematics, video and other relevant data sets, Concirrus' Quest Automotive platform can deliver automated data-driven collision reports within minutes. This enables the insurer to act immediately to take control of the claim process and mitigate potential losses, including proactively contacting the policyholder to ensure that vital information is gathered at the scene; securing the use of preferred suppliers for repairs, hire cars and legal proceedings; and minimizing unnecessary delays in the supply chain. It is estimated that a 48-hour delay in reporting a collision can cost an insurer an additional GB£3,000; however, through Quest Automotive's automated collision reports, this unnecessary cost is avoided.

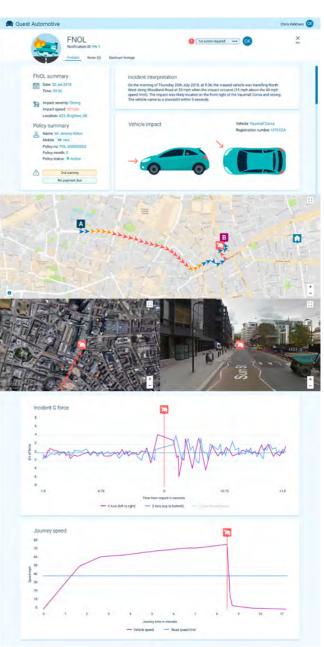
Competitive premiums

Insurers and/or fleet managers can gain a more accurate understanding of their real-time fleet risk, through a granular understanding of the market variables to which they are exposed. From this, insurers can offer more competitive premiums to fleet operators whose risk profile indicates effective risk management processes. Fleet managers are, thus, encouraged to adopt practices that work to reduce their potential premium.

Concirrus overview

Founded in 2012, Concirrus is capitalizing on the growing use of artificial intelligence and machine learning to process and analyze vast quantities of data to understand the underlying behaviors of risk.

&Quest Automotive



Quarterly InsurTech Briefing Q12020 55



Funding in Q1 2020 drops 54% from Q4 2019's record funding quarter

Despite this drop in funding, InsurTech companies still raised US\$912 million across 96 deals, a 28% increase from Q4 2019. Compared with Q1 2019, Q1 2020 reported an 10% increase in deal count and a 37% decrease in funding. Q1 2020, unlike Q4 2019, only reported one megaround (US\$100+ million) with PolicyGenius raising a US\$100 million Series D round in January 2020.

Q12020's 96 deals is the highest number ever recorded by this publication and provides further evidence to the continuing trend of growing number of deals quarter-on-quarter. Q12017 was the last quarter to record fewer than 50 deals; the average number of deals since Q12018 has been 75 per quarter.

The impact of COVID-19 was felt on investments. The first three days of Q1 saw almost the same amount of money raised as the last three weeks of Q1. By January 3, almost US\$82 million had been raised; by February 6, that figure was just over US\$450 million. But it took until the end of March — the rest of the quarter — to double that amount. Almost half of the total amount raised in Q1 was raised in the first 35 days of a 91-day quarter. From March 10 to quarter-end, "only" an additional US\$108 million was raised.

Q1 2020 overview

- More than half of start-ups that raised this quarter were U.S.-based. Whereas last quarter, deals to the rest of the world (not including the U.S.) were just over 50% across 20 countries, in Q12020, investment was concentrated to the U.S. The country recorded 57% of deals and the U.K. absorbed 10% of deals. China recorded a six-percentage-point drop in the number of deals this quarter from Q4 2019, and 14-percentage-point drop was recorded across Asia Pacific from Q4 2019.
- Unchanged from last quarter, the U.S. has been responsible for 54% of all deals and 67% of all funding since 2012, solidifying the country's status as the dominant InsurTech nation. Despite recent quarters seeing an increase in competition from foreign markets, COVID-19 has largely reduced deals in countries outside core InsurTech markets.
- The Czech Republic was the only country to reverse this trend by recording its first ever public InsurTech deal this quarter. This was a US\$1.3 million corporate minority stake by Societe Generale Assurances in Mutumutu, a lifestyle-based platform for behavioral life insurance.
- Seed and Series A funding dropped slightly to US\$223 million in Q12020, down from US\$244 million in Q42019 — a 9% decrease. Early-stage deal count rose by three percentage points from Q42019 to 51% of all deals in Q12020. Early-stage funding, as a percentage of total funding, increased by 12 percentage points from Q42019.

• Mid-stage deal count dropped by 11 percentage points and funding increased by nine percentage points from Q4 2019. Late-stage deal count dropped two percentage points and funding dropped a significant 26 percentage points from Q4 2019. Only one of Q1 2020's late-stage deals was completed in March 2020 – a Series D round in India-based BankBazaar. All the other five deals were completed in the first half of the quarter.

P&C widens its share of total and early-stage funding to over 80% compared with L&H. The difference between P&C and L&H funding is the largest since Q3 2016. This trend persists in early stages as P&C InsurTechs raised 81% of funding at this stage, including Insurify's US\$23 million Series A.

- Of the 96 transactions this quarter, 75% went to P&C-focused InsurTechs and raised 83% of the total funding.
- Of early-stage deals, P&C took 81% and L&H 19% (compared with 69% and 31% in the previous quarter).
- The largest P&C deal of the quarter, and only megaround went to PolicyGenius. Insurance-as-a-service start-ups saw notable investor interest as well with Instanda and Boost Insurance each raising a Series A worth US\$19.5 million and US\$14 million, respectively.

L&H start-ups secured 25% of the deals in Q1 2020 and 17% of the funding.

- Compared with Q4 2019, this quarter saw a 31% decrease in the number of L&H deals and an 84% decrease in the amount of L&H funding.
- The quarter's biggest L&H raise went to Justworks, a small business HR and payroll management tool, in a US\$50 million Series Fround

Start-ups with a focus on policy distribution raised the largest rounds in Q1 2020, accounting for 38% of all funding raised and six of the largest 15 deals.

- Insurance comparison platform PolicyGenius raised the quarter's sole US\$100 million megaround, followed by Digit, which raised a US\$84 million Series C. Clearcover and Gabi each raised US\$50 million and US\$27 million, respectively.
- B2B-focused starts-ups accounted for 55% of deals in Q1 2020. The number of recorded B2B deals in Q1 2020 was a 121% increase from Q4 2019. Distribution-focused start-up deals, while accounting for the big raises in Q1 2020, dropped by 23% from Q4 2019.
- In Q12020, 11% of P&C InsurTech deals went to insurers, 35% to distribution-focused companies and 54% to B2B-focused companies. This marks a complete shift in focus from Q4 2019 indicated by a 28-percentage-point decrease in the number of distribution-focused deals and a 26-percentage-point increase in B2B-focused deals from Q4 2019.

In Q12020 L&H deals, 8% were for insurers, 59% for B2B-focused companies and 33% for distribution-focused companies. This reflects the trend witnessed with P&C InsurTechs: a 180 degree change of focus from Q4 2019 to Q1 2020. From Q4 2019 to Q1 2020, there was a 21-percentage-point increase in the number of B2B-focused start-up investments and an 18-percentage-point drop in distribution-focused companies.

Q1 2020 recorded six deals of US\$40+ million, a 45% drop from Q4 2019's record high.

Five of these deals occurred in the U.S. and one in India. There
was only one L&H deal over US\$40 million – Justworks. The six
deals accounted for 42% of the quarter's total funding.

The largest deal of the quarter was a US\$100 million Series D round in PolicyGenius, an online insurance comparison platform. The round had participation from AXA Venture Partners, KKR, MassMutual Ventures, Norwest Venture Partners, Revolution Ventures, Susa Ventures and Transamerica Ventures. PolicyGenius has now raised US\$151 million.

The next five biggest were:

- A US\$84 million Series C investment in Digit Insurance, a direct insurer that also strategically partners with car dealerships and e-commerce sites to distribute policies for auto and electronics at the point of sale. This round had participation from A91 Partners, Faering Capital and TVS Capital and takes the company's total funding to US\$189 million. The company was the only non-U.S. company to feature in the top six largest investments this quarter.
- A US\$51 million Series B investment in Unqork, a no-code, software-as-a-service (SaaS) platform that digitizes the client life cycle. The round had participation from Aquiline Capital Partners, BlackRock, capitalG, Goldman Sachs and World Innovation Lab. The company has now raised US\$160 million.
- Justworks, a U.S.-based HR and payroll solution, raised US\$50 million in a Series E round. The round has participation from Bain Capital Ventures, FirstMark Capital, Index Ventures, Redpoint Ventures, Spark Capital, Thrive Capital and Union Square Ventures and takes the company's total funding to US\$143 million. The company was the only L&H company to raise over US\$40 million this quarter.

- A US\$50 million Series C round in Clearcover, an insurance comparison company. The Series C round had participation from American Family Ventures, Cox Enterprises, IA Capital Group and OMERS Ventures. The company has now raised US\$107 million.
- Albert raised a Series B US\$50 million. The company, which provides financial advice for free, had participation from American Express Ventures, capitalG, Portag3 Ventures, QED Investors and Undisclosed Investors. Albert has now raised US\$70 million.

Strategic tech investments by (re)insurers drops off slightly from Q4 2019 by 8%.

When compared with Q3 2019's record, Q1 2020 recorded a 49% drop in investment into private tech companies by (re) insurers.

- U.S.-based technology dominated this quarter, attracting 73% of (re)insurer investments, up a massive 31 percentage points from Q4 2019.
- U.K.-based and China-based firms received 5% of (re) insurer investments, down eight percentage points and three percentage points, respectively, from Q4 2019.

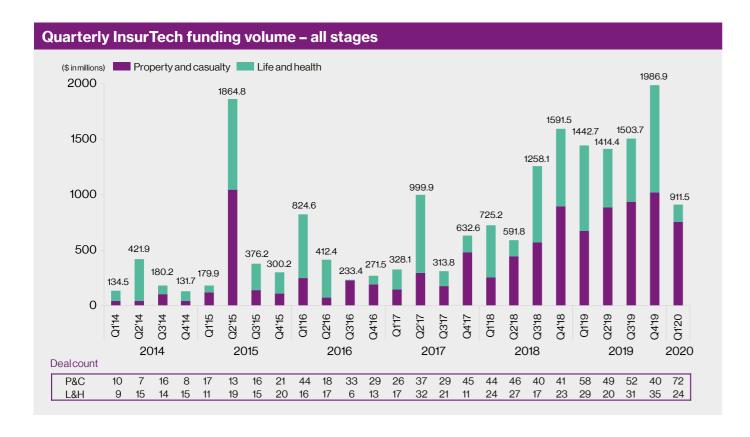
(Re)insurer partnerships dropped off slightly to 30 from Q4 2019's record high of 33.

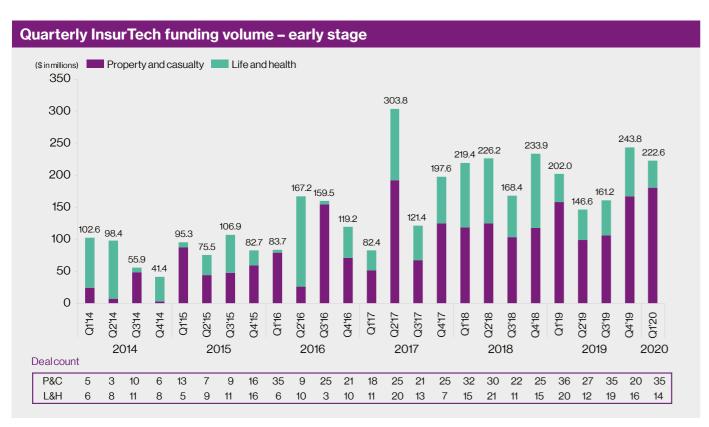
Select partnerships included:

- Farmers Edge, a global leader in decision and digital agriculture, and Fairfax Brasil have partnered to bring customized, datadriven crop insurance to growers in Brazil.
- Berkshire Hathaway Homestate Companies has partnered with CLARA analytics, an Al provider of intelligence technology in the commercial insurance space, to advance its workers' compensation claims operations.
- Chaucer, the international specialty (re)insurance group, has partnered with London-based Insurtech Artificial Labs to deliver a new underwriting platform for high-volume specialty products.
- TransRe has partnered with Allphins, an energy InsurTech firm, to create a data analytics platform for offshore energy reinsurance business.

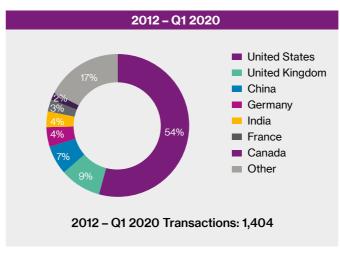
Quarterly InsurTech Briefing Q1 2020 59

InsurTech by the numbers



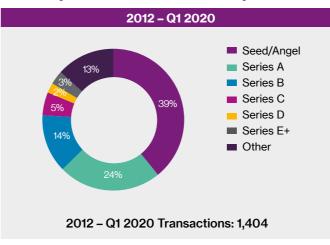


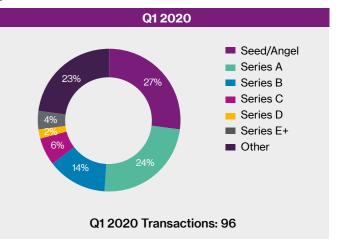
Quarterly InsurTech transactions by target country



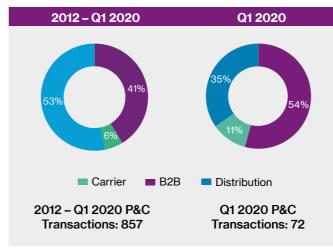


Quarterly InsurTech transactions by investment stage

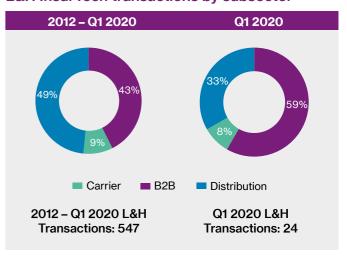




P&C InsurTech transactions by subsector



L&H InsurTech transactions by subsector



Q1 2020 InsurTech transactions - P&C

		Fundin	g (\$M)		
Date	Company	Round	Total	Investor(s)	Description
1/3/2020	Clearcover	50	107	 500 Startups American Family Ventures Cox Enterprises Greycroft Hyde Park Angels IA Capital Group Lightbank OMERS Ventures Silicon Valley Bank Undisclosed Investors 	Clearcover's API-first approach enables customers to have great insurance at affordable rates.
1/3/2020	Corvus Insurance Agency	32	46	 406 Ventures Bain Capital Ventures Hudson Structured Capital Management Obvious Ventures Telstra Ventures 	 Corvus Insurance Agency provides software solutions. The company offers insurance software applications for commercial insurance brokers and buyers.
1/8/2020	Click-Ins	1	2	Insurtech Israel Jerusalem Venture Partners Plug and Play Accelerator Shlomo Group	Click-Ins uses multidisciplinary technology based on a combination of AI, Deep Learning, photogrammetry, 3D modeling, applied mathematics, and computer vision to identify damage to a vehicle with just the click of a digital camera.
1/8/2020	Neodigital	_	-	Alstin CapitalCoparionDeutsche RuckversicherungSchneiderGolling & Cie	 Neodigital is an online insurance portal that distributes private liability, accident and household products via independent brokers in Germany.
1/9/2020	ePayPolicy	-	-	Serent Capital	 ePayPolicy provides an end-to-end solution with integrations into agency management systems allowing agencies, MGAs/wholesale brokers and premium finance companies to get up and running with electronic payments in days, reduce the number of paper checks they process while simplifying their accounting reconciliation with automated data entry.
1/10/2020	Digit Insurance	84	189.5	 A91 Partners Anushka Sharma Cornerstone Faering Capital Fairfax Financial Holdings TVS Capital Virat Kohli 	 Digit Insurance is a tech-driven insurance start-up based in Bengaluru, India. The company seeks to build simple and transparent solutions, focusing on car, travel, mobile, jewelry and bicycle insurance.
1/10/2020	Digit Insurance	0.49	189.5	 A91 Partners Anushka Sharma Cornerstone Faering Capital Fairfax Financial Holdings TVS Capital Virat Kohli 	Digit Insurance is a tech-driven insurance start-up based in Bengaluru, India. The company seeks to build simple and transparent solutions, focusing on car, travel, mobile, jewelry and bicycle insurance.
1/14/2020	Blueprint Title	8.5	8.5	 Greycroft Liberty Mutual Strategic Ventures Mucker Capital Santander InnoVentures Tribeca Early Stage Partners 	Blueprint Title has developed an insurance platform to streamline the residential real estate closings for buyers, sellers and real estate services, professionals. The company's platform offers a modern approach to title insurance and closing by providing communication, document review, transparent pricing and easy loan processing, enabling homebuyers to understand the closing process, homebuilders to save money and hassle and mortgage bankers to simplify closing and make proactive communication.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions - P&C

		Fundin	g (\$M)		
Date	Company	Round	Total	- Investor(s)	Description
1/15/2020	Insurify	23	31.7	Giorgos Zacharia Hearst Ventures MassMutual Ventures MTech Capital Nationwide Ventures Rationalwave Capital Partners Undisclosed Investors Viola Group	 Insurify is an insurance quotes comparison platform and virtual insurance agent. Insurify's AI analyzes millions of records, identifies patterns and builds models to match to a customer's profile. Based on these models, Insurify provides a personalized quote list to help users make the most confident decision about their coverage and perform apples-to-apples compairson of competitive, top-rated carriers. Insurify's Facebook Messenger chatbot also helps users unlock discounts and advises on the most appropriate coverage and companies for their needs.
1/15/2020	Just Auto Insurance	1.2	1.2	 Undisclosed Investors 	 Just Auto Insurance provides pre-paid, pay-per- mile car insurance.
1/15/2020	Battleface	-	_	Fintech Ventures FundGreenlight Re InnovationsTangiers Group	 Battleface specializes in insurance services for travel to remote, unstable or dangerous parts of the world. The company's tech-driven platform is designed to service a growing number of contractors, explorers, journalists, humanitarian workers, freelancers and similar who are underserved by traditional insurance solutions.
1/15/2020	Cape Analytics	-	31	Cincinnati Financial CSAA Insurance Group Data Collective Formation 8 Khosla Ventures Lux Capital Montage Ventures Nephila Capital Promus Ventures Rev1 Ventures Rich Boyle State Auto Labs State Farm Ventures The Hartford XL Innovate	Cape Analytics uses AI and geospatial imagery to provide instant property intelligence for buildings across the United States so insurers can more accurately assess a property's risk and value.
1/19/2020	MakuSafe	1.5	659	Angel Capital Association BrokerTech Ventures Colin Hurd EMC Insurance Group Global Insurance Accelerator Next Level Ventures Undisclosed Investors	 MakuSafe provides workforce wearables for hazard management and business intelligence. Its wearable devices track employee behavior to eliminate unnecessary risks and to provide greater insight into productivity.
1/21/2020	FinChatBot	-	0.62	Compass CapitalNV FintechKalon Venture PartnersRichard Marsden	 FinChatBot develops a chatbot platform, Holly, an artificial intelligence available on all platforms. FinChatBot aims to increase insurance companies' conversion rates while also gathering more information about their potential customers.
1/22/2020	Nanyan Information	14.47	31.23	BlueRun Ventures BOC International SIG Asia Investments Starr Companies	 Nanyan Information is a Shanghai-based online insurance service company that operates 618保险平台, a platform that offers cloud architecture, cloud storage and cloud computing solutions for insurance cozpanies.
1/22/2020	Вотарр	7.3	16.97	AssetPlus Investment Management DS Asset Management Hana Capital Hana Life Hana Ventures ICB Ideabridge Partners KB Investment KB Securities Korea Credit Guarantee Fund LOTTE Accelerator PIA Investment Management SJ Investment Partners The Square & Company	Bomapp is a platform that lets users compare and sign up for various types of insurance with ease and comes with other features, including direct help from agents and emergency call outs. Users can monitor their insurance policies, compare insurance products and receive personalized product recommendations. The app also provides insurance planners' personal profile and career information to allow customers to choose their own planner.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions - P&C

		Fundin	g (\$M)		
Date	Company	Round	Total	Investor(s)	Description
1/22/2020	Yuanbao Technology	-	-	 Baika Venture Capital KunYuan Asset Tianjin Qingyan Lushi Investment Management TusStar Zhongguancun Development Group 	Yuanbao Technology provides Internet security products and solutions for insurance companies.
1/23/2020	Socotra	15.2	34.2	8VC Brewer Lane Ventures MS&AD Ventures Nationwide Ventures Portag3 Ventures Undisclosed Angel Investors Undisclosed Investors USAA	 Socotra is a cloud-based, productized insurance core platform that enables carriers to easily and efficiently manage complex interactions throughout the lifecycle of policies, whether single line, single state or multi-line, multi-country. The platform supports underwriting, policy administration, claims, billing, reporting and more.
1/25/2020	EasySend	0.05	0.09	 F10 FinTech Incubator Global Insurance Accelerator Microsoft 365x Israel Oracle Startup Cloud Accelerator Pitch in the Dark Plug and Play Accelerator SAP.iO Foundry Tel Aviv 	 EasySend is a no-code SaaS platform builder that enables banking and insurance enterprises to quickly convert paper forms into compliant digital processes with deep-analytics and digitize the complete customer journey, including account signup, client onboarding, customer support and claims processing all through a simple drag-and- drop interface.
1/29/2020	Gabi	27	39.1	A.Capital AngelList Burst Capital Canvas Ventures CMFG Ventures Correlation Ventures Mubadala Capital Northwestern Mutual Future Ventures Project A Ventures Securian Financial Group SV Angel	Gabi helps users find the least expensive home and car insurance plans. Gabi is able to scan a user's existing plan and offers comparable options.
1/29/2020	Slope Software	1	1.12	Cofounders Capital MetLife Digital Accelerator Undisclosed Investors	 Slope Software is an actuarial financial projection modeling software company. It uses an easy, point-and-click interface to create variables, build models and stack assumptions – pulling data from regular spreadsheets or text files and outputting fully customizable reports right in the program.
1/29/2020	Cachet	-	-	Barclays Accelerator	 Cachet provides a trustee data layer between gig economy platforms and financial service providers. It aggregates data across platforms to assist insurance companies in pricing and personalizing coverage.
1/30/2020	PolicyGenius	100	151.1	AXA Venture Partners Fika Ventures Karlin Ventures KKR MassMutual Ventures Norwest Venture Partners Otter Rock Capital Revolution Growth Revolution Ventures Susa Ventures Switch VC Transamerica Ventures Undisclosed Investors	PolicyGenius is an online insurance platform. Through its highly tailored Insurance Checkup, users can discover their coverage gaps and read about solutions for their exact needs. The company provides a place to shop online for life, long-term disability, renters and pet insurance through its highly accurate quoting engines that offer side-by-side comparisons of tailored policies.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions - P&C

		Funding (\$M)			
Date	Company	Round	Total	 Investor(s)	Description
2/4/2020	Obie	2.8	3.03	FundersClub Innovation Fund America Liquid 2 Ventures MetaProp Soma Capital Undisclosed Investors Y Combinator	Obie connects commercial real estate brokers, investors, offering materials, transaction documents, and analytical tools all in one place. The Obie collaborative environment is the most efficient way to streamline the transaction process while utilizing mobilized technology.
2/5/2020	Boost Insurance	14	17	Coatue Management Conversion Capital Glenn Hubbard Greycroft IA Capital Group Markel Nephila Capital Norwest Venture Partners State National Companies Tusk Ventures	Boost Insurance focuses on distribution and product-focused InsurTech start-ups and provides access to an API-driven platform that provides modern insurance data exchange for insurtech startups.
2/6/2020	Laka	4.7	6.22	500 Startups Creandum Financial Conduct Authority LocalGlobe Startupbootcamp InsurTech Tune Protect Undisclosed Angel Investors	 Laka is a London-based insurtech startup that provides bike insurance coverage. Its insurance product, which offers theft, damage, travel, race and emergency cover, is designed to help cyclists recover quickly. The company operates a "community-based" model, with 80% of premiums used to support other Laka members who damaged or lost their bike and only 20% is kept to keep Laka running.
2/6/2020	Goodcover	2	2	 BoxGroup Fuel Capital Liquid 2 Ventures Transatlantic Holdings Undisclosed Angel Investors Y Combinator 	 Goodcover operates as a managing general agent which means it writes the policy, sets the pricing and builds its own risk assessment model, but partners with insurance carriers to hold the back- end capital and write on their book.
2/10/2020	OnSiteIQ	4.51	6.51	Anthemis Bullpen Capital MetaProp MetaProp NYC	 OnSiteIQ is an online platform that allows construction companies to inspect a site through 360-degree imagery to track progress and perform safety analysis.
2/10/2020	Collision Management Systems	-	1.64	• BGF	 Collision Management Systems reduces insurance and claim costs by making connected vehicle data actionable. The company delivers these savings by providing telematics data aggregation and real-time crash detection and risk management software solutions, all on a hardware agnostic software-as-a-service platform.
2/11/2020	Briza	0.15	3.15	 500 Accelerator 500 Startups Alon Neches Leaders Fund Louis Beryl Mike McDerment Sharon Ludlow Sid Sankaran 	Briza provides an insurance-as-a-service API that enables instant quoting, binding and issuance of commercial insurance policies.
2/13/2020	Tinubu Square	16.3	36.3	 BPI France Fonds Stratégique d'Investissements Gimv Long Arc Capital 	Tinubu Square provides SaaS technology solutions for credit and surety insurers, trade finance banks and export credit agencies. The company's solutions integrate data analysis, advanced decision support and process automation to enable the above-mentioned clients to enhance the effectiveness of their risk management.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions – P&C

		Fundin	g (\$M)		
Date	Company	Round	Total	Investor(s)	Description
2/13/2020	Talage	5	6.59	Acceleprise Battle Born Ventures Broker Tech Ventures Calibrate Ventures Global Insurance Accelerator Hallador Investment Advisors Merus Capital Western Technology Investment	Talage provides a digital marketplace for small business insurance. The company's platform allows small businesses to fill out a digital application, receive multiple quotes and purchase the optimal policy.
2/14/2020	N2uitive	1.3	1.3	Cascade Seed FundUndisclosed Angel Investors	 n2uitive offers a platform for secure digital insurance interview statement recording, storage, indexing and reporting.
2/17/2020	Concirrus	20	35.13	AlbionVC Eos Venture Partners Imperial Innovations IQ Capital Partners Touchstone Innovations	Concirrus is a London-based InsurTech company that aims to transform businesses by using technology to collect, manage, and organize information from a range of products and machines connected via the Internet. Its secure and scalable cloud platform enables users to connect any data source or device, draw any data type and issue commands as required.
2/18/2020	Briza	3	3.15	 500 Accelerator 500 Startups Alon Neches Leaders Fund Louis Beryl Mike McDerment Sharon Ludlow Sid Sankaran 	Briza provides an insurance-as-a-service API that enables instant quoting, binding and issuance of commercial insurance policies.
2/18/2020	JaSure	-	-	Santam	 JaSure is an on-demand insurance app that allows users to get insured on the go. The instant insurance product means assets can be added in minutes and turned off again whenever they are no longer at risk.
2/20/2020	At-Bay	34	53	 aCrew Capital Khosla Ventures Lightspeed Venture Partners LocalGlobe Munich Re Ventures Shlomo Kramer 	 At-Bay provides cyber insurance for the digital age. At-Bay continuously analyzes, models, and predicts cyber risk to deliver a comprehensive risk management program to clients and partners with brokers.
2/20/2020	AgencyKPI	3.58	6.58	Undisclosed Investors	 AgencyKPI develops an integrated business intelligence platform designed to address and manage the overabundance of data produced by incompatible software and legacy systems across the insurance industry.
2/25/2020	Collective Benefits	4.3	4.3	 Delin Ventures FbStart InsurTech Gateway Stride.VC Undisclosed Angel Investors 	 Collective Benefits is an insurance technology platform that provides benefits for gig economy workers. It works with both companies with on- demand workforces, and individual freelancers to provide bundled insurance products.
2/25/2020	Covered Insurance Solutions	-	6.13	Ozmen Ventures Petra Capital Partners Radian Group Rapid City Economic Development Partnership Undisclosed Investors	Covered Insurance provides a smarter, simpler and more convenient insurance marketplace platform that is focused on streamlining consumers' insurance transactions and experiences.
2/26/2020	Unqork	51	160.2	Aquiline Capital Partners BlackRock Blue Seed Collective Broadridge Financial Solutions capitalG Goldman Sachs GS Growth Undisclosed Investors World Innovation Lab	Unqork is a no-code, software-as-a-service (SaaS) platform that digitizes the client lifecycle and enables financial services and insurance companies to bring complex, regulated products to market without writing a single line of code. The company's patent-pending technology includes advanced calculations, decisions, UI design and workflow for risk assessment and digitization layered on top of legacy IT systems.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions - P&C

		Fundin	g (\$M)		
Date	Company	Round	Total	Investor(s)	Description
2/26/2020	Digital Risks	13.42	16.42	Atami Capital Beazley Beazley Investments BGL Group Concentric EarlyMarket London Co-Investment Fund Nire Capital Seedcamp	Digital Risks is a digital-first insurance provider for technology and media businesses.
2/26/2020	Agentero	0.05	0.05	BrokerTech Ventures	 Agentero provides a platform for independent insurance agents. Its software gives them access to predictive pipelines and data analytics tools.
2/26/2020	Broker Buddha	0.05	4.55	BrokerTech VenturesPlug and Play VenturesVertex Ventures	 Broker Buddha's online submission platform converts static PDF insurance applications into digital forms. It streamlines the insurance application process by saving returning clients' information.
2/26/2020	CogniSure	0.05	0.05	BrokerTech Ventures	 CogniSure utilizes cognitive AI to gain insights from unstructured data. It organizes and digitizes insurance documents.
2/26/2020	ConsumerOptix	0.05	0.8	BrokerTech Ventures Undisclosed Investors	ConsumerOptix is an InsurTech and fintech consumer engagement company. It provides Accelerate, a platform that delivers personalized media and provides psychographics-driven employee benefit enrollment.
2/26/2020	Loss Run Pro	0.05	0.05	BrokerTech Ventures	Loss Run Pro automates the loss run process for insurance agents. It digitizes the process, connecting insurers directly to their agent.
2/26/2020	MakuSafe	0.05	6.59	Angel Capital Association BrokerTech Ventures Colin Hurd EMC Insurance Group Global Insurance Accelerator Next Level Ventures Undisclosed Investors	MakuSafe provides workforce wearables for hazard management and business intelligence. Its wearable devices track employee behavior to eliminate unnecessary risks and to provide greater insight into productivity.
2/26/2020	ProNavigator	0.05	2.37	BrokerTech Ventures GreenSky Capital Innovation Grade Ventures MaRS Investment Accelerator Fund Undisclosed Angel Investors	ProNavigator has built an Al-powered chatbot specifically for the insurance industry ProNavigator's product helps insurance companies and insurance brokers capture, qualify and connect with leads in realtime.
2/26/2020	Talage	0.05	6.59	Acceleprise Battle Born Ventures BrokerTech Ventures Calibrate Ventures Global Insurance Accelerator Hallador Investment Advisors Merus Capital Western Technology Investment	Talage provides a digital marketplace for small business insurance. The company's platform allows small businesses to fill out a digital application, receive multiple quotes and purchase the optimal policy.
2/26/2020	TrustLayer	0.05	0.2	BrokerTech Ventures Undisclosed Investors	TrustLayer helps companies collect, verify and manage certificates of insurance to increase compliance and decrease risk. The TrustLayer platform makes certificate management workflows more efficient and secure by using blockchain technology to track documents between companies.
2/26/2020	Wunderite	0.05	0.05	BrokerTech Ventures	Wunderite provides an online platform that automates insurance applications. It collects data to provide transparency to stakeholders and actionable insight to decision makers.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions - P&C

		Fundin	g (\$M)		
Date	Company	Round	Total	 Investor(s)	Description
2/27/2020	Tractable	25	59.83	 Andy Homer Entrepreneur First Georgian Partners Greg Gladwell Ignition Partners Insight Partners Scott Roza Stuart Bartlett Tony Emms Zetta Venture Partners 	Tractable develops AI for accident and disaster recovery. Its AI solutions use photos to automate damage appraisal, allowing insurers to improve accuracy, reduce turnaround time and deliver a revamped customer claims experience. Tractable has processed hundreds of thousands of auto insurance claims, positively impacting people's lives across Europe, North America and Asia.
2/27/2020	omni:us	13	37.25	7Percent Anthemis CommerzVentures European Commission Investionsbank Berlin Michael Schmitt MMC Ventures Plug and Play Accelerator Talis Capital Target Global Unbound Uniqa Ventures Viola Ventures	omni:us offers an Al-driven solution that is able to process digital insurance documents by classifying them and extracting the valuable data points.
2/27/2020	Arturo	8.02	8.02	 American Family Insurance American Family Ventures Crosslink Capital Plug and Play Accelerator 	 Arturo is an Al property analytics company that delivers structured data observations and predictions for residential and commercial properties for use in the property and casualty insurance, reinsurance, lending and securities markets.
2/27/2020	Aventus	3.35	3.35	Downing Ventures Notion Capital Outward VC Triple Point Investment Management	 Aventus provides an operating system that enables insurance businesses to digitally distribute an aggregated collection of services.
2/27/2020	puntored	-	-	Adobe Capital	 puntored enables small retail stores to offer services such as lottery sales, cell phone data recharging, as well as cash withdrawals, micro-insurance and international calls.
3/9/2020	Omniscience	12	12	 Guardian Life Insurance Company of America Langdell Investments Plug and Play Accelerator Plug and Play Japan Plug and Play Ventures RGAx TransLink Capital 	 Omniscience is commercializing distributed datamining systems that came out of U.S. government intelligence and military research projects to help companies with brand perception, product safety and reliability, risk management, sales targeting and regulatory affairs. The company combines internal and external data sources to extract insights using its proprietary algorithms.
3/9/2020	CyberCube	5	40	 ForgePoint Capital Hudson Structured Capital Management MTech Capital Symantec Ventures Undisclosed Angel Investors 	CyberCube delivers cyber risk analytics for the insurance industry. Its software-as-a-service platform helps insurance companies make better decisions when underwriting cyber risk and managing cyber risk aggregation.
3/9/2020	Albert	50	70	 500 Accelerator 500 Startups American Express Ventures Bessemer Venture Partners capitalG CFSI Catalyst Fund Financial Solutions Lab Plug and Play Ventures Portag3 Ventures QED Investors Undisclosed Investors 	Albert provides financial advice for free. Albert connects to all user accounts, provides real-life recommendations, including repaying credit card debt with a low-interest loan, getting renter's insurance, or setting up the right retirement planand lets users take action directly from the app.
3/9/2020	Relay Platform	2.2	2.24	 Insurance Accelerator NFP Ventures Plug and Play Accelerator Plug and Play Ventures 	Relay is a reinsurance collaboration platform that helps carriers better manage and place reinsurance. Relay accelerates the placement process, eliminates redundant efforts and alerts users to the latest placement opportunities and trends.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions - P&C

		Funding	g (\$M)	_	
Date	Company	Round	Total	Investor(s)	Description
3/10/2020	Instanda	19.5	19.5	 Assembly Capital Partners Microsoft ScaleUp Plug and Play Accelerator 	 Instanda is a management tool that empowers insurers, brokers and MGAs to build and launch any insurance product within unprecedented timescales, and then distribute and self-manage it online, globally.
3/10/2020	Coterie Applications	6	10.76	Greenlight Re Innovations Intercept Ventures RPM Ventures The Hartford Undisclosed Investors	 Coterie offers API-based commercial insurance that aims to make buying, changing and renewing insurance easy.
3/11/2020	BankBazaar	-	109	Amazon Eight Roads Ventures Experian Ventures Mousse Partners Sequoia Capital Sequoia Capital India Walden International	BankBazaar is a neutral online marketplace that gives users instant customized rate quotes on loans and insurance products. Users can instantly search for, compare and apply for loans, credit cards and insurance products on the site.
3/11/2020	Qoala	-	1.5	 Flourish Ventures Genesia Ventures MassMutual Asia MDI Ventures SeedPlus Surge 	Qoala offers online insurance with automated claims, fraud detection and personalization tools.
3/12/2020	Akur8	8.98	8.98	 BlackFin Capital Partner Kamet MTech Capital Plug and Play Accelerator 	 Akur8 is an Al pricing tool that helps insurers make predictions based on historical data.
3/13/2020	Aclaimant	5.57	8.53	 Mercury Fund Moderne Passport Royal Street Ventures Undisclosed Investors 	 Aclaimant has developed a platform to engage the employee, employer and insurance carrier in making workplace incidents everyone's responsibilities.
3/17/2020	Alude	0.15	0.15	Y Combinator	 Alude provides a platform for real estate agents to automate their work and provide a better service to their clients. The system automates the process of background checks, document collection, insurance purchasing and online signing.
3/18/2020	Insgeek	25	47.41	Fosun Kunzhong Capital Guozhong Venture Capital Management Hecai Fund Huasheng Capital Legend Holdings SIG Asia Investments Undisclosed Investors	Insgeek is an online insurance platform focused on SMEs.
3/19/2020	Trov	1.4	100.2	Anthemis Baloise Group Guidewire Group Guidewire Software Munich Re Ventures Oak HC/FT Partners Sompo Holdings Suncorp Group Undisclosed Angel Investors Undisclosed Investors	Trov powers digital insurance solutions for businesses in the finance, insurance, mobility, and retail sectors, enabling the new ways people live, work and move.
3/20/2020	Hi Marley	8	16.75	True Ventures Underscore.VC	 Hi Marley offers an intelligent conversation platform specifically designed for the insurance industry. The Marley platform enables insurance companies to communicate with their customers through messaging and deliver a fast and easy customer experience. It's built for insurance, with industry-specific artificial intelligence and functionality. The platform has flexible APIs and requires zero integration to get started.
3/23/2020	DealerPolicy	14	30	MTech Capital Undisclosed Investors	 DealerPolicy enables car-buying customers the opportunity to purchase insurance by connecting them with licensed insurance agents while at the dealership or after they arrive home with their car. The company delivers these benefits through a combination of partnerships with car dealers, a growing insurance carrier network and access to licensed agents.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions – L&H

		Fundin	g (\$M)		
Date	Company	Round	Total	- Investor(s)	Description
1/8/2020	Summary Medical	0.08	0.08	gBETA Global Insurance Accelerator	Summary Medical is developing an Al-enabled software service that will summarize documents for the insurance industry.
1/14/2020	Ringmaster	5	5	Edison Partners	 Ringmaster Technologies provides cloud-based solutions aimed at modernizing the quoting and administration processes for brokers, agencies, third-party administrators, MGUs and carriers of stop loss policies.
1/14/2020	Gentem	3.79	3.94	 500 Accelerator 500 Startups Great Oaks Venture Capital Hustle Fund Social Starts Susa Ventures Undisclosed Investors Village Global Vulcan Capital 	Gentem offers instant claim reimbursements for physicians.
1/17/2020	Pawlicy Advisor	1	1.1	Defy Partners Entrepreneurs Roundtable Accelerator	 Pawlicy Advisor is a pet insurance broker that connects pet owners with ideal plan by analyzing options on the market and each pet's breed- specific health risks.
1/24/2020	Simply Benefits	0.8	0.8	Undisclosed Investors	Simply Benefits provides software that allows employees to manage health insurance benefits.
1/28/2020	Justworks	50	143	 Bain Capital Ventures Daring Journey Ventures FirstMark Capital Index Ventures LocalGlobe Redpoint Ventures Spark Capital Thrive Capital Union Square Ventures 	Justworks provides new businesses with a solution to set up manage and payroll and offer large-company benefits while ensuring legal compliance. The dashboard allows companies to make it easy to fill out forms such as the I-9 and offers direct deposit and processes payments for contractors (a free service), salaried employees and hourly workers. On the platform, companies can also offer full medical, dental and vision coverage and process payments, files required taxes, files for workers mcomp and handle other legalities for its users.
2/10/2020	FNZ	-	-	Caisse de depot et placement du Quebec General Atlantic Generation Investment Management H.I.G. Europe Management Buyout (MBO) Temasek	FNZ provides technology, transaction and custody services to life insurers, banks and asset managers, enabling them to develop and distribute financial products and services to customers.
2/11/2020	Proformex	0.5	7.08	Undisclosed Angel InvestorsUndisclosed Investors	 Proformex is a life insurance policy management system that ensures life insurance contracts are actively managed each year.
2/12/2020	Careship	-	11.39	 Ananda Impact Ventures Atlantic Labs Axel Springer Plug & Play Christophe Maire Creandum Johannes Reck Spark Capital 	Careship helps families find a home-based caregiver for their loved ones by using a matchmaking algorithm to find qualified personnel, while advising on insurance benefits and coordinating all the moving parts in these arrangements.
2/13/2020	Mutumutu	1.3	1.3	Plug and Play AcceleratorSociete Generale Assurances	 Mutumutu is a start-up from Czech Republic that develops a lifestyle-based platform for behavioral life insurance.
2/14/2020	Friday Health Plans	21.07	80.68	Eduardo Cruz Leadenhall Capital Peloton Equity Undisclosed Angel Investors Undisclosed Investors	Friday Health Plans focuses on overall simplicity to offer low prices so more people can afford health insurance.

Note: Blue font denotes current round investors.

Q1 2020 InsurTech transactions - L&H

		Fundin	g (\$M)		
Date	Company	Round	Total	- Investor(s)	Description
2/18/2020	Emerging Therapy Solutions	2.98	9.28	Telegraph Hill PartnersUndisclosed Investors	 Emerging Therapy Solutions provides analytical software tools and outsourced services to insurance providers and other payers to manage expensive cell and gene therapies.
2/26/2020	Goldfinch Health	0.05	0.05	BrokerTech Ventures StartUp Health	 Goldfinch Health helps health care payers, companies and patients navigate surgery and recovery. It aims to lessen the need for opioids by supporting consumers during the disability period and their return to work.
2/27/2020	Anagram	9.1	17.93	Healthy Ventures KEC Ventures Launchpad Digital Health ManchesterStory Group Rogue Venture Partners Synchrony Waterline Ventures	 Anagram provides real-time price transparency and streamlined insurance benefit processing for the purchase of health care services.
2/27/2020	GoHealth	4.8	54.8	Centerbridge PartnersNorwest Equity PartnersSeyen CapitalUndisclosed Investors	 GoHealth is an online portal for finding health insurance coverage. The company helps consumers compare health insurance quotes and purchase individual coverage online, through agent networks, or directly through a health insurance company.
2/28/2020	Nuanwa Technology	_	13.99	Kuanping CapitalLighthouse CapitalLongfor CapitalSequoia Capital China	 Nuanwa Technology provides health insurance technology services for insurance companies and Internet platforms, including product customization, risk management, underwriting, claims, operation systems, health management and other health insurance technology services.
3/3/2020	Ladder	37.5	103.55	8VC Allianz Life Ventures Barney Schauble Brewer Lane Ventures Canaan Partners Lightspeed Venture Partners Northwestern Mutual Future Ventures Nyca Partners RRE Ventures Thomvest Ventures World Innovation Lab	Ladder is a digital life insurance provider.
3/4/2020	Health iPASS	-	11.28	Beverly Capital FCA Venture Partners Fifth Third Bank HealthX Ventures Healthy Ventures MPG Equity Partners OCA Ventures QED Investors Waterline Ventures	Health iPASS provides a patient revenue cycle platform that aims to improve the patient experience from appointment to payment by giving providers the tools to simplify the check-in process and streamline time-of-service and residual balance, patient payments. The solution automates a host of front- and back-office financial management tasks, such as appointment reminders via SMS and email, patient check-in and intake forms, verification of insurance benefits, and automatic posting of demographic and payment information into a medical practice management system.
3/12/2020	PolicyMe	2.4	2.45	 Accelerator Centre HCS Capital Partners Innovate Financial Health Undisclosed Investors Westdale Properties 	 PolicyMe offers customized and automated advice on life insurance.
3/17/2020	Viveo Health	2.2	2.2	Ain HanschmidtAnders AndersonTallink Grupp	 Viveo Health combines its telemedicine service with insurance by the company, with very experienced management. It has a cooperation network across Estonia that can help to identify the losses of insurance clients and assist them in self-diagnoses.

Note: Blue font denotes current round investors.

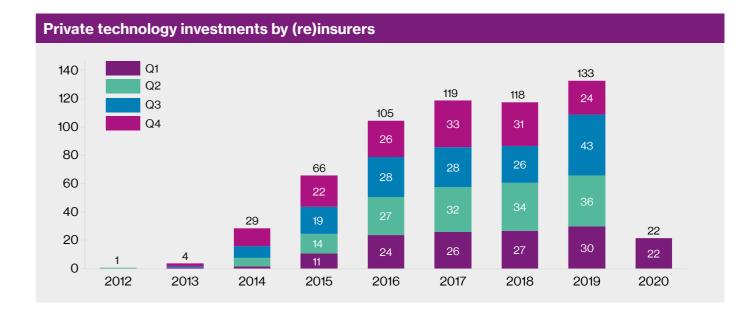
Quarterly InsurTech Briefing Q1 2020 71

Q1 2020 InsurTech transactions - L&H

		Fundin	g (\$M)		
Date	Company	Round	Total	Investor(s)	Description
3/17/2020	GIGI	0.15	0.15	Y Combinator	 GIGI offers financial solutions for those without ESI/PF benefits, including savings, financial education and more. It also offers health insurance.
3/17/2020	Virgil Insurance	0.15	0.15	Y Combinator	 Virgil Insurance is an online broker that helps seniors buy Medicare-subsidized inpatient, outpatient and prescription drug insurance. It provides a platform that compares the prices of insurance offerings and connects the user with the best offer.
3/25/2020	Clareto	1.5	4.53	Health Catalyst Capital Management NRV Undisclosed Investors	 Clareto is a digital health and InsurTech company that seeks to commercialize use cases and pursue market opportunities, with an initial focus on modernizing life insurance underwriting.
3/26/2020	Yixin Technology	12.72	12.72	Yichuang Zhida Zhuhai Lingxian Hulian Zhuji Xincheng Investment Development Group	 Yixin Technology is an intelligent insurance service provider.

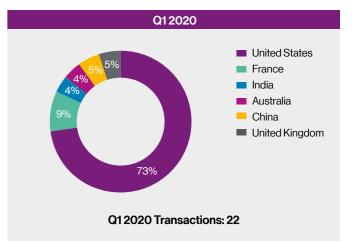
Note: Blue font denotes current round investors.

Private technology investments by (re)insurers

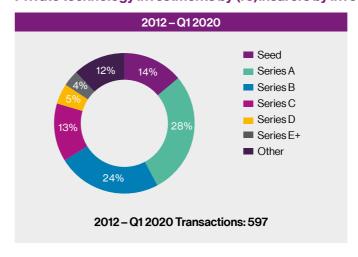


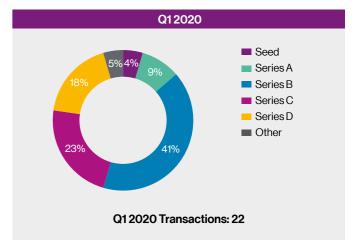
Private technology investments by (re)insurers by target country





Private technology investments by (re)insurers by investment stage





Private technology investments by (re)insurers

		Fundin	g (\$M)		
Date	Company	Round	Total	(Re)insurer investor(s)	Description
1/3/2020	Clearcover	50	107	American Family Ventures	 Clearcover's API-first approach enables customers to have great insurance at affordable rates.
1/3/2020	Fussen Group	-	14.42	 Ping An Ventures 	Fussen Group is a developer of dental digital imaging equipment, medical IT, clinical medical treatment and dental supply chains.
1/14/2020	Blueprint Title	8.5	8.5	Liberty Mutual Strategic Ventures	Blueprint Title develops an insurance platform to streamline the residential real estate closings for buyers, sellers and real estate services professionals. The company's platform offers a modern approach to title insurance and closing by providing communication, document review, transparent pricing and easy loan processing, enabling homebuyers to understand the closing process, homebuilders to save money and hassle and mortgage bankers to simplify closing and make proactive communication.
1/15/2020	Insurify	23	31.65	MassMutual Ventures Nationwide Ventures	 Insurify is an insurance quotes comparison platform and virtual insurance agent. Insurify's Al analyzes millions of records, identifies patterns and builds models to match to a customer's profile. Based on these models, Insurify provides a personalized quote list to help users make the most confident decision about their coverage and perform apples-to-apples comparison of competitive, top-rated carriers.
1/15/2020	Lydia	45	74.33	 CNP Assurances 	Lydia allows retailers, independent professionals and entrepreneurs to put their credit cards and cash in smartphones by connecting them to a Lydia account and generating an eCheque to scan.
1/15/2020	U-Nest	1.5	3.95	Northwestern Mutual Future Ventures	 U-Nest is a savings app that helps families set up 529 college savings plans in under five minutes.
1/16/2020	Phenom People	30	63.02	AXA Venture Partners	Phenom People uses CRM best practices and applies them to talent acquisition resulting in the development of a talent relationship marketing platform.
1/29/2020	Gabi	27	39.1	CMFG Ventures Northwestern Mutual Future Ventures	Gabi helps users find the least expensive home and car insurance plans. Gabi is able to scan a user's existing plan and offers comparable options.
1/30/2020	PolicyGenius	100	151.05	AXA Venture Partners MassMutual Ventures Transamerica Ventures	PolicyGenius is an online insurance platform. Through its highly tailored Insurance Checkup, users can discover their coverage gaps and read about solutions for their exact needs. The company provides a place to shop online for life, long-term disability, renters and pet insurance through its highly accurate quoting engines that offer side-by-side comparisons of tailored policies.
2/14/2020	MotoRefi	8.6	13.3	CMFG Ventures	MotoRefi seeks to provide easy, transparent auto refinancing. Its secure, digital platform makes it easy for customers to see exactly how much they can save and complete the refinance process quickly.
2/20/2020	At-Bay	34	53	Munich Re Ventures	At-Bay provides cyber insurance for the digital age. At-Bay continuously analyzes, models and predicts cyber risk to deliver a comprehensive risk management program to clients and partners with brokers.
2/21/2020	Jestocke.com	1.85	3.63	 MAIF Avenir 	Jestocke.com operates an online marketplace connecting home owners who have space with tenants looking for storage.
2/25/2020	IngeniousIO	1.5	5.5	American Family Ventures	Ingenious IO has developed an Al-driven platform that transforms documents into data intelligence giving owners, builders, project managers, general contractors, engineers, architects and other professionals real-time visibility into every inch of their project.
2/26/2020	LinkSquares	14.5	23.97	MassMutual Ventures	LinkSquares is Al-powered contract analytics software designed to help legal and finance teams work smarter by simplifying contract management, analysis and reporting.
2/26/2020	Qure.ai	16	16	MassMutual Ventures	Qure.ai has developed an artificial intelligence-based system to identify abnormalities in head CT scans.
2/27/2020	Arturo	8.02	8.02	American Family Ventures	 Arturo is an artificial intelligence property analytics company that delivers structured data observations and predictions for residential and commercial properties for use in the property and casualty insurance, reinsurance, lending and securities markets.
3/2/2020	InDebted	9.24	9.99	MassMutual Ventures	 InDebted is a debt recovery agency that provides software, aimed at small to medium business customers, that is already operational in the Australian market and boasts the recovery of millions of dollars for thousands of businesses. The start-up's success rate of recovery is well above the industry average.

Private technology investments by (re)insurers

		Fundin	g (\$M)		
Date	Company	Round	Total	(Re)insurer investor(s)	Description
3/9/2020	Omniscience	12	12	Guardian Life Insurance Company of America RGAx	 Omniscience is commercializing distributed data-mining systems that came out of U.S. government intelligence and military research projects to help companies with brand perception, product safety and reliability, risk management, sales targeting and regulatory affairs. The company combines internal and external data sources to extract insights using its proprietary algorithms.
3/10/2020	Cognism	12	28.8	AXA Venture Partners	Cognism is an end-to-end sales-acceleration solution that provides sales organizations with a more efficient way to prospect. Delivered as a software service (SaaS), with its data asset and compliance engine, Cognism is helping to enrich CRM records and stream leads into the funnel and is using artificial intelligence to surface opportunities and identify customer trends.
3/23/2020	iCapital Network	146	180.1	Ping An Ventures	iCapital Network is an online platform that enables qualified investors to search and analyze hundreds of private fund managers and gain direct access to buyout, growth equity, real estate, mezzanine, infrastructure, real assets and venture funds. Its secure online portal makes it possible for top performing fund managers to aggregate commitments from a network of independent wealth advisors, family offices and individual qualified purchasers.
3/25/2020	Sepio Systems	4	10.5	Munich Re Ventures	Sepio Systems helps organizations protect themselves against the use of malicious peripheral devices as attack vehicles.
3/26/2020	Lessonly	22	36.1	AXA Venture Partners	Lessonly makes easy-to-use training software for growing businesses. With simple tools to build, share, and track lessons and courses, Lesson helps get teams up to speed and keep them there, no training background required.

Quarterly InsurTech Briefing Q12020 75

Q1 2020 strategic (re)insurer partnerships

Date	Company	(Re)insurer investor(s)	Description
1/6/2020	Uber	• Farmers	 Farmers Insurance has partnered with Uber to offer commercial automobile insurance to ride-sharing drivers in a total of 14 states and the District of Columbia.
1/9/2020	Concirrus	• Hiscox	 Hiscox has signed a multi-year deal to use Concirrus' behavior-based data analytics platform Quest Marine Hull. This will enable Hiscox to enact analytics-based underwriting, analyze existing portfolios in greater detail, and assess vessels within a prospective account and calculate an expected loss based on factors like port risk and time at sea.
1/13/2020	Oscar	 Cigna 	 Cigna, a leading U.S. health service company, and Oscar, a technology-driven health insurance company, announced an exclusive partnership to jointly provide commercial health solutions to small businesses.
1/14/2020	Human API	 John Hancock 	 John Hancock has announced a strategic collaboration with Human API, a health data platform, to offer consumers a simple and easy way to share access to their electronic health records (EHR) in real time.
1/15/2020	Farmers Edge	Fairfax Brasil	 Farmers Edge, a global leader in decision and digital agriculture, and Fairfax Brasil have partnered to bring customized, data-driven crop insurance to growers in Brazil.
1/16/2020	Getsafe	 Hiscox 	Getsafe, a Germany-based digital contents MGA, has partnered with Hiscox for its U.K. launch.
1/16/2020	Slice	• Sompo	Slice Labs Inc., an on-demand insurance platform, and Sompo Holdings have released an enhanced version of the travel insurance product TravelJoy in Thailand.
1/17/2020	Clara Analytics	Berkshire Hathaway Homestate	 Berkshire Hathaway Homestate Companies has partnered with CLARA analytics, an Al provider of intelligence technology in the commercial insurance space, to advance its workers compensation claims operations.
1/22/2020	Azuga Zubie	 Nationwide 	 Nationwide has partnered with Azuga and Zubie to offer customers advanced telematics systems with fleet management and GPS tracking capabilities.
1/23/2020	FRISS	EMC Insurance	 EMC Insurance Companies, a U.Sbased P&C, and FRISS, a global provider of insurance fraud detection solutions, announced a partnership that will see EMC adopt FRISS' hybrid detection engine to automatically flag suspicious insurance claims.
1/28/2020	InsuranceBee	Hiscox	 InsuranceBee and Hiscox have launched an insurance agent partner program. The program will give independent agents instant access to general liability, professional liability and business owner's policies and will cover more than 180 professions.
1/29/2020	Bold Penguin	• biBerk	 Bold Penguin has partnered with biBerk, a member of the Berkshire Hathaway Group, to address growing demand for workers compensation coverage. Under the agreement, agents and brokers that use the Bold Penguin platform will be able to triage, quote and bind commercial insurance coverage through an API integration.
2/3/2020	Artificial Labs	 Chaucer 	Chaucer, the international specialty (re)insurance group, has partnered with London-based Insurtech Artificial Labs to deliver a new underwriting platform for high-volume specialty products.

Date	Company	(Re)insurer investor(s)	Description
2/5/2020	Allphins	 TransRe 	 TransRe has partnered with Allphins, an energy InsurTech firm, to create a data analytics platform for offshore energy reinsurance business.
2/10/2020	ClassPass	 AXA Singapore 	 AXA Singapore has announced a strategic partnership with ClassPass, a global fitness aggregator, to provide wellness solutions to its customers.
2/11/2020	Leakbot	 Hiscox 	 Hiscox has partnered with U.K. based InsurTech LeakBot to leverage the InsurTech's leak detection system.
2/19/2020	Notion	 Nationwide 	 Nationwide has partnered with Notion to offer customers with smart home technology a monitoring service that allows them to detect when a leak or a smoke alert occurs.
2/21/2020	Ford Motor Company	 Nationwide 	 Ford Insure and Lincoln Motor Company Insure, powered by Nationwide, have partnered to offer drivers a means to secure usage-based insurance coverage.
2/24/2020	Toyota	 Nationwide 	Nationwide has partnered with Toyota to offer insurance based on telematic insights.
2/28/2020	Ford Motor Company	Liberty Mutual	 Liberty Mutual Insurance has partnered with Ford to bring usage-based insurance to connected vehicles.
3/4/2020	Ford Motor Company	Allstate	 Allstate has partnered with Ford Motor Company to allow customers to share data with the Allstate's UBI program.
3/5/2020	Dialogue	Canada Life	 Canada Life announced a partnership with Dialogue Technologies. Canada Life will make virtual health care a standard benefit for employers with Canada Life group benefits plans.
3/5/2020	Horangi	Tokio Marine	 Tokio Marine Insurance Singapore has partnered with Horangi, a Singaporean cybersecurity start-up, to provide cybersecurity services to the insurer's clients.
3/10/2020	Carpe Data	• Zurich	 Zurich has partnered with Carpe Data, a U.Sbased company that offers a claims monitoring system, to improve claims processing efficiency and help in the detection of insurance fraud.
3/12/2020	Microsoft	Swiss Re	 Swiss Re and Microsoft have announced a strategic partnership to further advance insurance innovation and extend financial protection to more people globally.
3/13/2020	Eigen	• ING	 Eigen Technologies, a U.K. start-up that offers natural language processing (NLP) technology, and ING announced a partnership to establish "best-in-class NLP models" that are fully geared toward data extraction in the financial industry. ING invested US\$5 million in a Series B-II round in March 2020.
3/18/2020	Flipkart	Aegon Life	 India-based e-commerce company Flipkart has partnered with Aegon Life Insurance. Under the partnership, Flipkart will sell Aegon's policies via its own platform.
3/25/2020	Risk Genius	Guy Carpenter	 Guy Carpenter has entered into a strategic partnership with RiskGenius on the detection and qualitative analysis of silent cyber exposure.
3/27/2020	Tractable	 Ageas UK 	 Ageas has announced that it will use Tractable's AI solution to help policyholders assess car damage and make repair estimates within minutes.
3/27/2020	dacadoo	 Manulife 	 Canadian insurer Manulife has partnered with dacadoo, a Swiss-based digital health platform provider, to enhance its digital offerings in Asia.

Quarterly InsurTech Briefing

Additional information

The Quarterly InsurTech Briefing is a collaboration between Willis Re, Willis Towers Watson Insurance Consulting and Technology and CB Insights. Production is led by the following the individuals. For more information, or to discuss the results of this report, please direct inquiries to InsurTech@willistowerswatson.com.

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