Quarterly InsurTech Briefing
Q3 2019

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Willis Towers Watson **I·I'I'I·I**

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CBINSIGHTS

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Q3 2019

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Foreword

Uni·corn /yü-n-krn/ • **n.** (pl. - **unicorns**) a mythical animal typically represented as a horse with a single straight horn projecting from its forehead.

At what point does "a group of unicorns" become an oxymoron?

Being as they are mythical creatures, it's always been a bit puzzling that unicorns are symbolic of things that are rare in the real world. We can agree, however, that "unicorn" has also become a widely acceptable term for a start-up in the software or technology industry that is valued in excess of US$1 billion. The curious truth that we may soon be facing is the existence of multiple unicorns; if some market reports are to be believed, there could be dozens of InsurTechs making unicorn status in the next 12 months. This begs the question, when something is no longer rare or even uncommon, at what point does the term "unicorn" become misleading?

It may seem like an irrelevant, or at least unimportant question to be asking, but reviewing the appropriateness of terminology helps us to assess what is going on around us: An increasing number of InsurTechs are amassing substantial valuations, and yet we are seeing relatively little value being added to our industry at scale, across the board. What might a future herd of InsurTech unicorns really represent?: a stellar cast of InsurTech businesses, or an industry that is overvalued by transient capital and/ or also being driven by a naivety of the potential impact of certain technologies? If it is the latter two points, then we may well observe a widespread InsurTech bust before long.

In our prior quarter, we went right back to basics and addressed the term "InsurTech" head-on. For many it has become a term that is entirely synonymous with the adoption of any technology at any part of the (re)insurance value chain. This has become a confusing issue for many, and one that could pose genuine threats for the industry if not properly addressed. Technology has an enormous role to play in our industry. Its usefulness in delivering results for companies and consumers alike is enormous. InsurTech, however, denotes something more nuanced.

If we were to put the 2,500 or so current "InsurTech" vendors in our universe under the more accurate definitional microscope of "the use of technology designed to squeeze out savings and efficiencies from an existing insurance model," then many would not meet the definition's requirements. A lot of "InsurTech" firms purport to do it, but most do not in reality. What we will need to be conscious of as an industry is becoming jaded and frustrated with technology more generally if InsurTech (as we know it) ultimately does not deliver a scalable return; appropriate technology's fundamental role is pivotal to our success. What we must therefore understand is that InsurTech as it is today is as much about hype and entrepreneurial culture as it is about appropriate technology for the (re)insurance industry.

Technology more broadly may well be the protector of our industry as we stave off the threat of big lifestyle branded firms like Google and Amazon. Such companies have been largely built on technology, and might one day come into our industry and be truly disruptive, but a part of self-protection lies in us not confusing some technology with all technology. If our industry can be accused of anything at the moment, it's a serious case of magpie syndrome (chasing anything that glitters) and not calling out poor InsurTech businesses when we see them.

So, what is the benefit of the term "InsurTech"? First, for InsurTechs themselves, for investment purposes at least, the term matters a lot. Firms that associate with the term typically get higher valuations when compared with their "insurance technology" cousins. Second, it has created a home for many companies — helping them to find an identity where they might otherwise be lost. Third, within incumbents themselves, the term has facilitated the carving out of internal landing pads, geared toward the quick vetting of technology in its various guises.

Those companies looking to purely profiteer from our industry's historic lack of overreliance on technology will support the "InsurTech emperor's new clothes" narrative for as long as they can. If we unshackle ourselves from the fear of questioning what this all really means, the number of arguably overvalued investments that might be made in error would hopefully be lessened. The famed unicorn will remain rare (and therefore relevant), and we can actually go about putting our time, resources and cash into things that are truly relevant. Let's seek out the true unicorns worthy of such valuations and status by not becoming sheep. In this quarter, we will be focusing on two highly value adding InsurTechs, Hippo and Root, who both boast unicorn status.

What has become quite perplexing is the speed at which several very successful, incumbent technology vendors have rebranded themselves as "InsurTech." One cannot help but feel that this is in some way driven by a desire to be contemporaneously relevant and noteworthy in the current hype. Traditional vendors, unlike many InsurTechs, typically have an excellent understanding of our industry and would be well advised to adopt this term at their peril. The winners of the technology arms race are the slow and steady ones; those technology vendors that have been adding genuine value to our industry for decades are positioned on very strong foundations as they continue to provide answers to problems that really exist.

One could argue that, to date, InsurTech's greatest achievement has been to act like a defibrillator on the heart of the insurance industry. The sheer scale of the mooted InsurTech revolution has made people across the sector talk more positively about the use of technology; some see it as the potential savior of a broken system. This positive impact, spurred by outsiders, is now arising organically from the inside — precisely because the industry knows its own challenges better than anyone else. InsurTech has forced insurance technology issues into the purview of pretty much every single (re)insurance entity on the planet. This can only be good news for our industry if managed properly. Ultimately, our industry is waking up to the importance of technology; the most innovative things we are seeing built are now coming either purely organically from within or from very well-thought-out strategic partnerships between old and new.

To reiterate our consistent messaging, we are very excited at the prospect of what technology brings to our industry. We know better than anyone the value of its benefits and as such are realistically pragmatic. While it may seem that we are taking a dim view of the InsurTech universe, we are simply verbalizing what we are seeing and hearing in our consistent macro global observations and analysis, backed by data. Let us not be fooled: Unquestionably a good number of InsurTechs are genuinely adding value, and it gives us great pleasure to spotlight some of those companies, but if we look more broadly at what has gone into this space (time, resources, cash) and assess what has come out, there is a very large sinkhole somewhere. Approximately US$16.8 billion has been invested into 'InsurTech' in the past seven years. Who can honestly say that we have seen at least US$16.8 billion worth of value created?

On this very note, in our Q2 report foreword we visited the InsurTech billion-dollar lounge club only to find that two more seats had become occupied by Lemonade and PolicyBazaar. The very week that our last quarterly was made publicly available, another creature (not mythical or rare but extremely impressive nonetheless) took a seat in the lounge: innovative home insurer, Hippo. Raising US$100million in a Series D round led by Bond, Hippo became a unicorn. They all now sit alongside the likes of Root Insurance (while previously already a unicorn, Root now tops the unicorn scales with a US$3.65 billion valuation after a US$350 million raise this quarter), Oscar Health, Clover Health and Zhong An. We will discuss Hippo and Root's most recent transactions in much greater detail in this quarter's Transaction Spotlight.

This quarter we report the continued inflow of capital that InsurTech is attracting; for the fifth quarter in a row, we are seeing an excess of US$1.2 billion being invested globally. In fact we report that 2019 Q3 attracted **US$1.5 billion** globally. This is the third highest quarter of global InsurTech investment to date (only 2015 Q2, US$1.87 billion [32 deals] and 2018 Q4, US$1.59 billion [63 deals] have been higher). This latest quarter boasts 83 deals across P&C and L&H lines, which marks an overall increase of 6% total investment when compared with 2019 Q2, and a total deal count increase of 20% when compared with 2019 Q2.
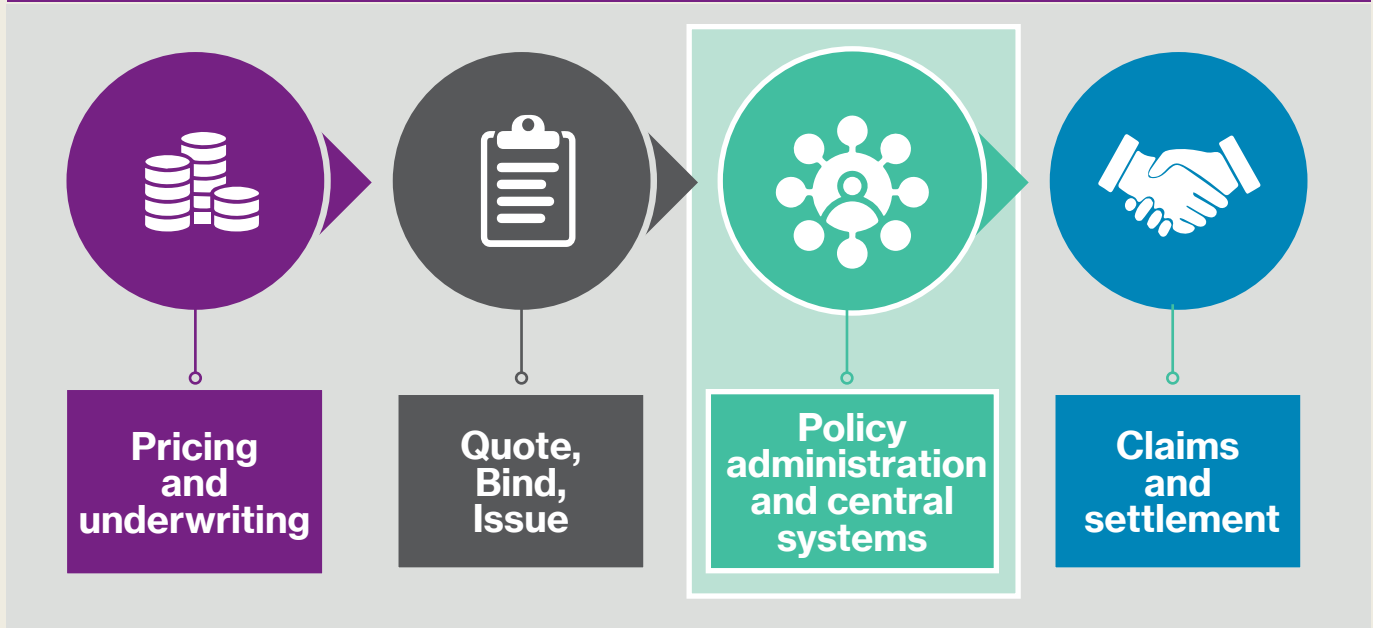
When combined with the investment totals we observed in Q1 and Q2 of this year, Q3's results actually tip 2019 to date over 2018 as an entire year: In the first three quarters of 2019, US$4.36 billion has been deployed to InsurTech companies across 239 deals. This marks a 5% increase of the total amount of investment in all of 2018. Deal activity is also on pace to surpass 2018's high based on the average number of deals per quarter in 2019.

It is also worth noting that 2019 Q3 is the first quarter since 2018 Q2 where B2B-focused InsurTechs have constituted more investment deals (as a count) than distribution-focused InsurTechs. While funding dollars are still largely going to digital distribution and full-stack start-ups, deal activity is increasingly going to B2B start-ups selling software and technology to (re)insurers or brokers. In 2019 Q3, half of all P&C deals went to B2B start-ups.

China's InsurTech landscape is growing: This quarter, China contributed 13% of total InsurTech deal activity, driven by an increase of interest in start-ups contributing to the growth of China's health insurance industry. Start-ups such as Xiaobangtouzi, Mintbao, and Duobaoyu are providing platforms for consumers to engage on health insurance coverage with consultants and brokers and access educational resources on digital channels such as WeChat. Nuanwa, which spun out of Zhong An Insurance with seed funding from Sequoia Capital China, is helping to provide technology to connect insurance companies to the health care system in China.

Strategic tech investments by (re)insurers grew to a new quarterly record: This quarter, (re)insurers participated in 43 private tech investments, the highest quarterly amount on record. The largest deals that included (re)insurers were a US$550 million Series C to Babylon Health (Munich Re Ventures) and a US$176 million Series C to SMB credit firm Fundbox (Allianz X). Only 37% of tech investments by (re)insurers went to U.S.-based start-ups in Q3, with the U.K., Germany, France, Singapore, and Switzerland all taking 7%

The insurance function chain

Pricing and underwriting	Quote, Bind, Issue	Policy administration and central systems	Claims and settlement

of deal share in the quarter.

If nothing else, this quarter marks the continued gamble many investment parties are prepared to make into InsurTech businesses, whether it be for speculative exits or for the propagation of "innovative technology" for the industry's benefit.

Policy administration and central management systems in focus

As discussed in the forewords of our previous two quarterlies, this year we are performing a long-term review of technology's relevance and applicability to the four major cornerstones of the (re)insurance functional chain. In Q1 we looked at how certain technologies have demonstrably improved the process of pricing and underwriting. In Q2 we examined the different technologies and InsurTech businesses influencing the streamlining and improvement of the Quote, Bind, Issue process. In Q3, we are assessing the different ways in which technology is attempting to improve the process of policy administration and the revolutionary central management systems that are set to improve the efficiency and health of (re) insurance entities.

It is worth noting that while policy administration and central management systems might not be the most exciting topic, it is arguably the most important part of function chain. This functionality is the core component around which all other technologies can support a (re) insurance entity. It is here that policies sold come to life for (re)insurers. Obviously, a major part of this function is to appropriately house policies for easy access, time duration and general system management. But with appropriate technology, these policies can bring so much understanding to the (re)insurers who have issued them. From these policies, and the data stored inside them, (re) insurers can really understand the pricing sensitivities of the market, the strength of their products, the health of

their own portfolio and how to engage better with their clients. This part of the process is truly the backbone of any (re)insurance entity, so while blockchain-enabled drones might be more fun in the short term, using technology to optimize policy administration and central management systems is ultimately a much better use of time and resources.

The InsurTech businesses featured in this quarter are U.S-based BriteCore, a cloud-based fully-managed policy administration system, U.S-based Risk Genius and Canada-based ProNavigator, both of which provide services around managing policies, acquiring/populating data, and supporting intelligent navigation through insurance company systems.

In this edition's Fireside Chat, James Kent, Willis Re's global CEO, and Franck Pinette, Willis Re's managing director of the International Life and Health practice, speak with Philip Walker. Philip is the CEO of iptiQ Americas, part of Swiss Re. iptiQ is a digital end-to-end platform, providing a bespoke life and health service supported by a product suite as well as a property and casualty insurance platform for a modern market.

We will also feature Willis Towers Watson's own software, Unify – an end-to-end business process automation tool that allows users to integrate and automate disparate systems.

This quarter's Thought Leadership comes from Jason Rodriguez. Jason is data science lead in the Insurance Consulting Technology practice (ICT Americas) of Willis Towers Watson. He talks to us about the importance of policy administration for all (re)insurers.

As previously mentioned, our transaction spotlight examines the recent raises, and unicorn trampolining statuses of Hippo and Root Insurance. Finally, we conclude the report with a review of InsurTech market trends and transactions in the InsurTech Data Center.

Quarterly InsurTech Briefing

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1. Introduction

The theme of this Quarterly Briefing is **policy administration and central management systems** — the spine of every risk-bearing (re)insurance entity on the planet. Across the globe this component of the (re) insurance function chain is known by various names and includes a range of functions. Broadly these can be broken down into document management systems (DMS), content management systems (CMS), customer relationship management (CRM) and enterprise content management (ECM). To be clear, we are discussing the part of the insurance function chain that pertains to the management of policies and customer data from the point of (re)insurance policy issuance to the point of a policy either being renewed, exhausted or resulting in a claim/ attempted claim — the life cycle of a written insurance policy.

More specifically we are looking at the technologies that can make this process as effective as possible for (re) insurance entities and consumers of insurance alike. Technology — much like for Quote, Bind, Issue — has allowed policy management to become an end-to-end seamless process. Technology can wrap around and support each component part of the process. Technology can also be part of a broader platform that allows for interconnected specialisms — bringing together individual component modular capabilities that are linked together to provide a (re)insurance entity the best in class solution(s).

Most insurers and reinsurers require multiple systems to do a multitude of different tasks in this part of the functional chain. Connecting these different requirements can be an enormous challenge, especially when legacy systems form part of a firm's core system. Many (re) insurance companies across the globe have one of two things (pre-true digitization): a very old legacy system that was once acquired or built to provide multi-tenant functionality, or a series of systems that have been forced together as part necessity. This latter Frankenstein approach rarely optimizes the true efficiency of each system.

Both layouts mentioned above are usually the vestiges of system requirements changing; no one dedicated technology team that regularly maintains and seeks new systems; mergers and acquisitions; and most commonly, the speedy outdating of technology. The effects of lumpy antiquated technology typically result in slow, incomplete insights, systems that cannot speak to one another and a huge amount of duplication — none of which is helpful to a contemporary (re)insurer.

Modern day systems that are making positive headway to solving the (re)insurance company dilemma must ultimately do three things: provide solutions, offer tools, and ingest and export relevant data. Not only must a system do these three things, it should do these three things in unison. The solutions and tools must leverage data that are ingested. The tools must make it possible to ingest data. The solutions must make appropriate sense of all ingested data for (re)insurance companies to run healthy businesses and maximize customer engagement.

On the topic of customer engagement, these systems should provide a (re)insurer with the ability to give consumers what they want — not what the system is blindly programmed to give. Our industry does not have a strong track history of really engaging with consumers and finding out exactly what it is that they want; technology and new strategic approaches can change all that now. In finding the right system to support a business, we have long held the view that such a business should prioritize its decision around the following: first, consumer requirements; second, a sound business model; and third, appropriate technology. Historically many firms have bought the technology first without serious consideration for the first two points.
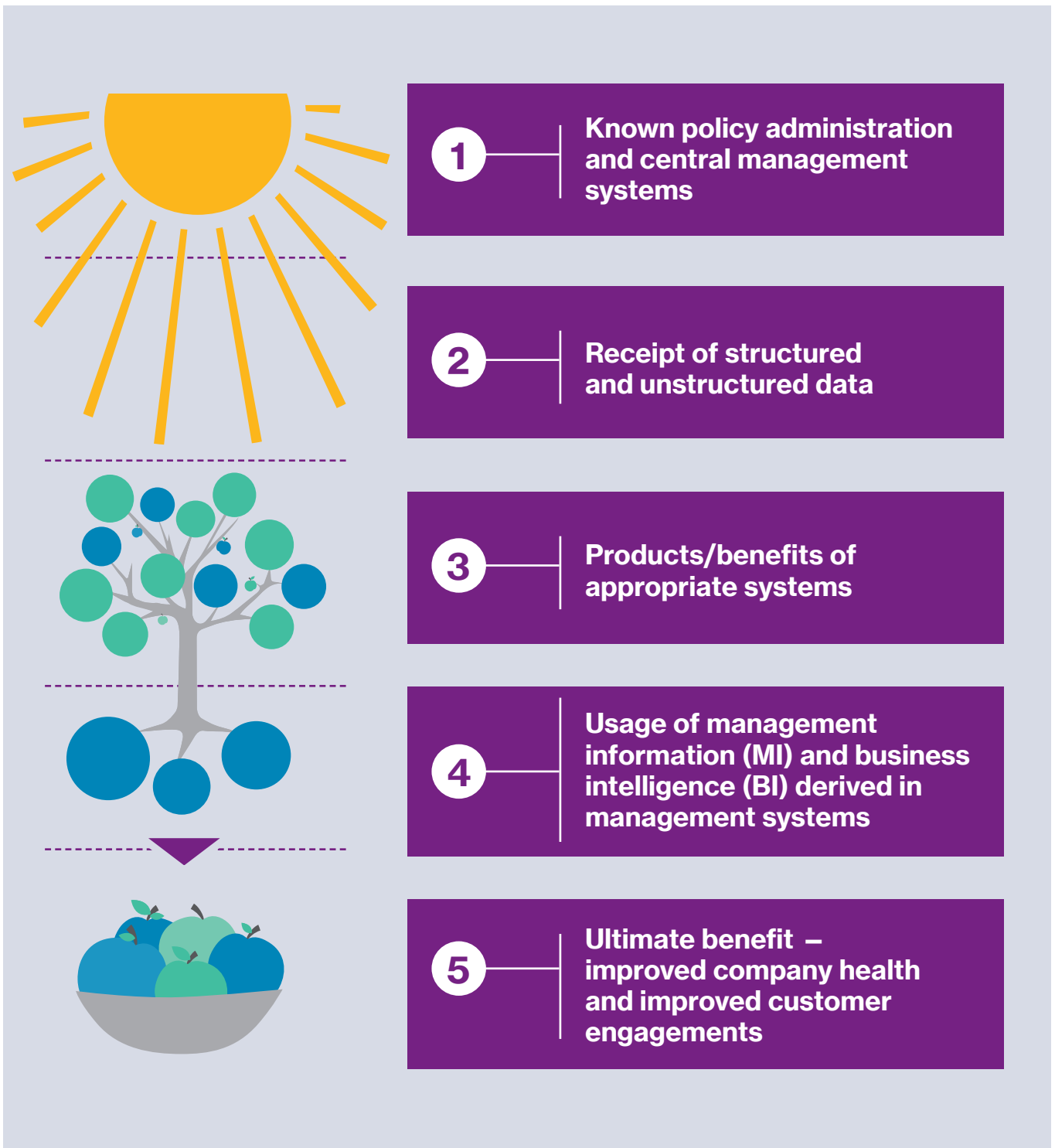
The benefits of an atomized modular system are of untold significance to a (re)insurance entity. Having the ability to drill truly into each component of the central nervous system of a company in this way allows firms to fully extract every single drop of juice from the data and information they are gathering; not only can the technology that is most beneficial to a business be obtained, firms can now forensically analyze each part of the functional conveyor belt and make sure that each piece is fit for purpose for deriving optimized results. This approach is truly "plug and play."

Once a policy has been issued to a customer, the now policyholder (individual, collection of individuals and/or organization) has the manner of its relationship between risk and capital catalogued within the (re)insurance entity itself (e.g., terms and conditions, time to expiry). The simplest thing a firm can do at this point is to keep these policies in an unstructured vault (in a filing cabinet or as a stack of papers on someone's desk, for example), catalogued by name, territory, line of business and date of expiry.

Technology that has been able to support the process of simple cataloguing has existed for decades. Nearly every (re)insurance firm worldwide uses at least very basic policy administration systems and central management systems to keep account of what it has agreed to pay to whom in the event of a claim. We have as an industry, however, not always fully appreciated the true value of the information stored in all of this client data — especially when we observe, analyze and derive insights at scale. This has created in some instances a culture of poor data integration, information that is very difficult to extract, siloed decisions in certain functions/geographies and expensive clunky software that does not offer compartmentalized specialisms.

These issues work themselves back up the functional chain and ultimately impact on underwriting — leading to the underperformance of writing profitable risks and perfecting price discovery in any market.

We are at the dawn of something truly incredible, however; affordable technology is allowing every iota of data relating to policies sold to be stored, augmented and able to provide the basis for what a (re)insurer can do to provide best in class customer engagement, improvements to products sold, fine-tuning of price, portfolio risk management and appropriate reserving ratios — to name but a few direct benefits.

1 Known policy administration and central management systems

2 Receipt of structured and unstructured data

3 Products/benefits of appropriate systems

4 Usage of management information (MI) and business intelligence (BI) derived in management systems

5 Ultimate benefit — improved company health and improved customer engagements

1   Known policy administration and central management systems

A sample of well-known industry policy administration systems:

eurobase international group

DXC.technology

EBIX

SSP.

DatumSolutions
ECM · BPM · Cloud Solution and Service Provider

effisoft
Risk & Insurance / Reinsurance Solutions

acturis
CONNECTED THINKING

MORNING DATA

Xchanging
inspiring innovation

BriteCore

websure

SAFECAPE
SOFTWARE SOLUTIONS

Trace isys
Business Solutions

APPLIED
POWERING THE BUSINESS OF INSURANCE

2   Receipt of structured and unstructured data

In order for policy administration systems and central management systems to run properly, they must contain a DMS that concurrently is able to fulfill the following tasks:

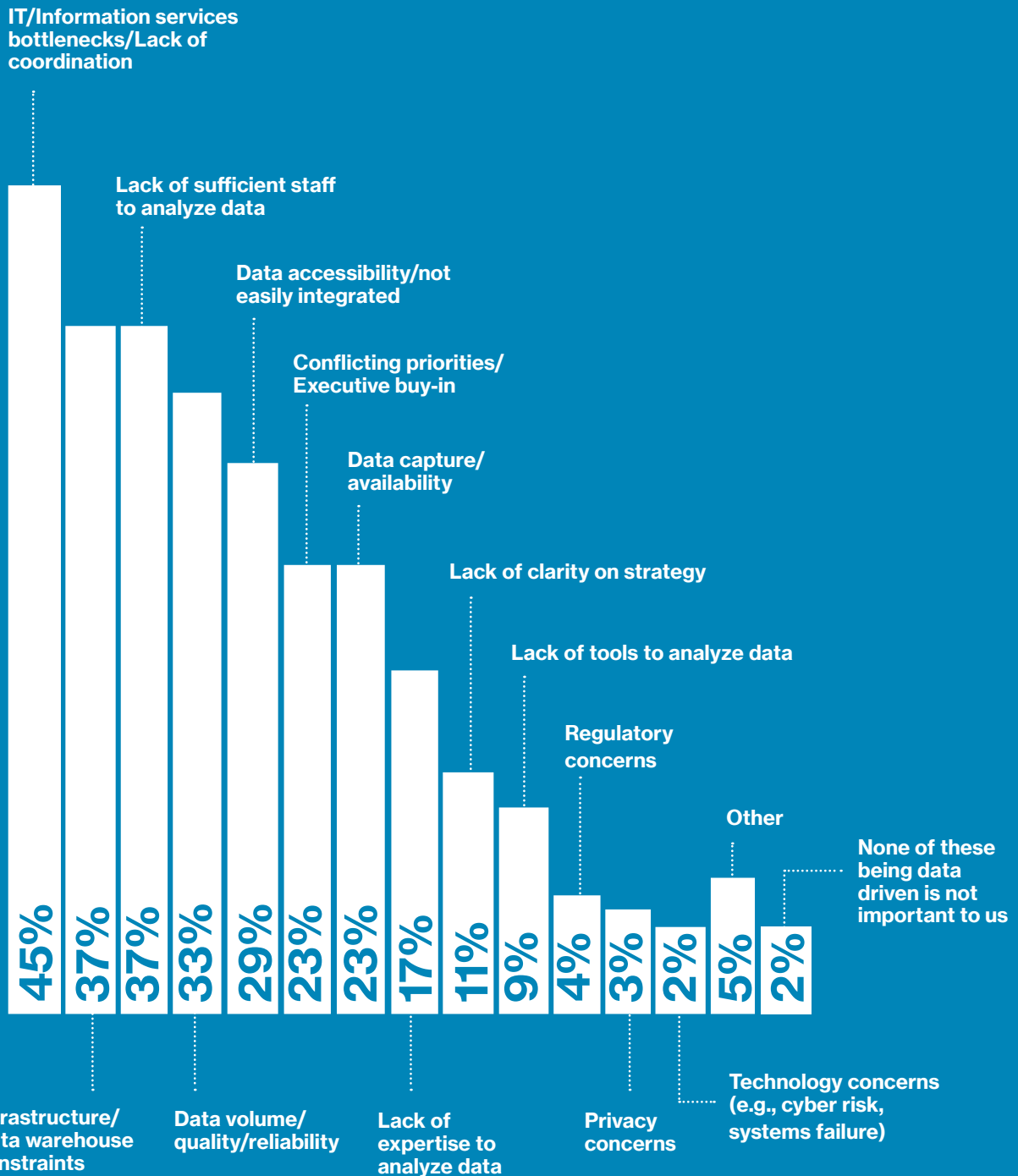| Consistency of document storage | Easily navigable record retention | Cloud based | + | Drive mandated data entry into common systems/ platforms | Enforce standards to achieve effective data delivery | Allow for adoption and growth |

The appropriate receipt of structured and unstructured data can be achieved by natural language reading/ processing, scripted data paths and other types of character indexing. Sentiment analysis and latent semantic indexing are two of the text mining techniques that can help (re)insurers unlock the hidden value of unstructured text data, improving prediction accuracy and creating decision-making engines that more closely match human performance.

One of the biggest challenges for insurers in becoming more data-driven is getting access to a sufficient volume of reliable data in a usable form. The most usable form of data is a table where each row represents an observation (e.g., a policy, a vehicle, a submission, a claim) and each column contains understandable and useful attributes of those observations or an outcome. Data in this form are commonly referred to as structured data.

What are the biggest challenges preventing a company becoming more data-driven?
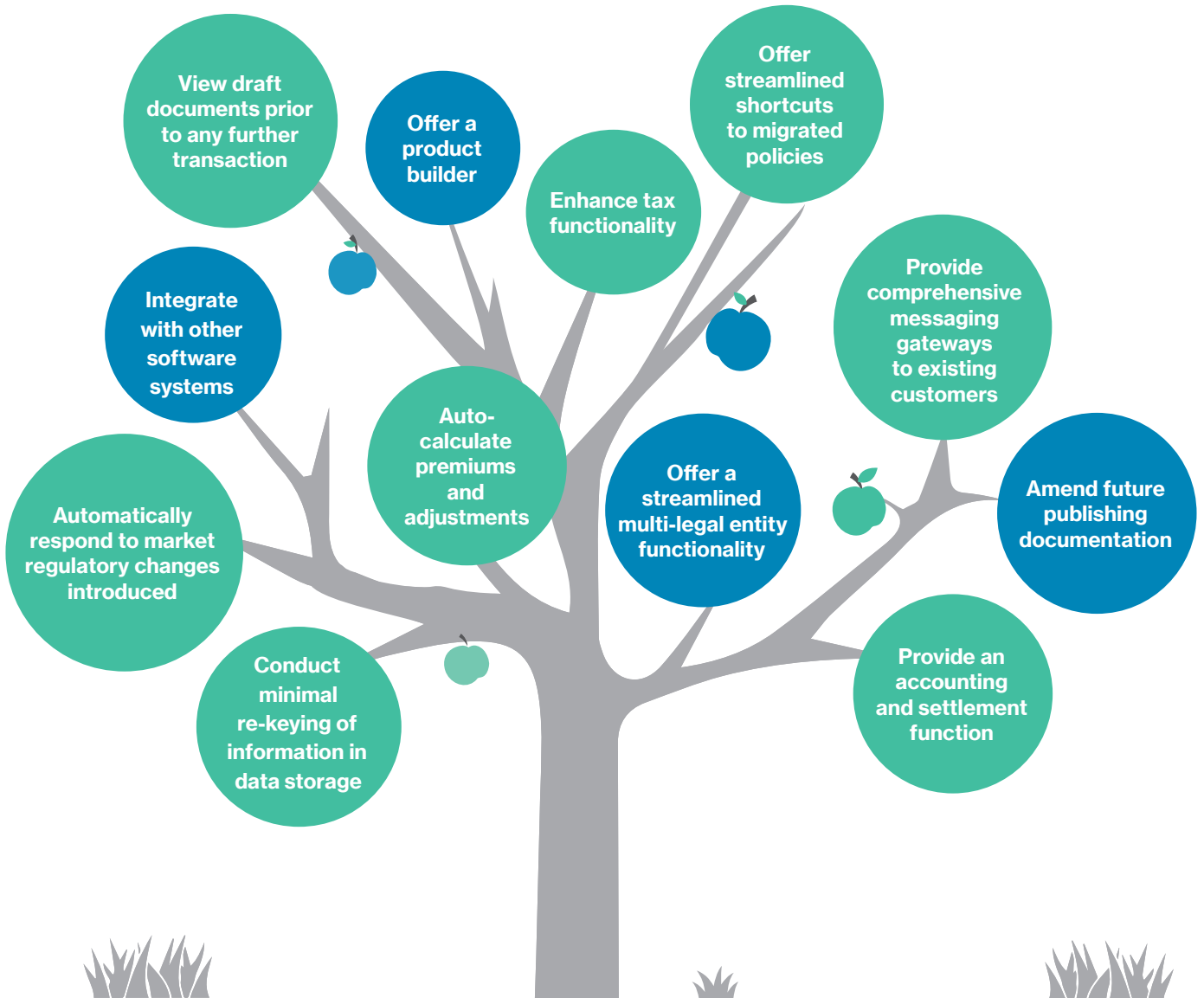

IT/Information services bottlenecks/Lack of coordination — 45%

Infrastructure/Data warehouse constraints — 37%

Lack of sufficient staff to analyze data — 37%

Data volume/quality/reliability — 33%

Data accessibility/not easily integrated — 29%

Conflicting priorities/Executive buy-in — 23%

Data capture/availability — 23%

Lack of expertise to analyze data — 17%

Lack of clarity on strategy — 11%

Lack of tools to analyze data — 9%

Regulatory concerns — 4%

Privacy concerns — 3%

Technology concerns (e.g., cyber risk, systems failure) — 2%

Other — 5%

None of these being data driven is not important to us — 2%

Base: Total respondents (n = 122 in 2019)
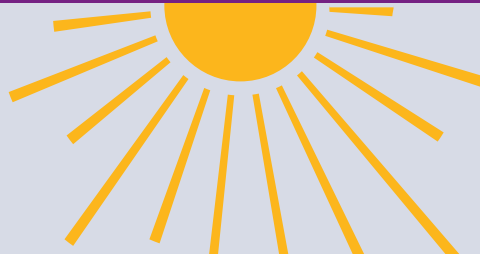
Source: Willis Towers Watson 2019 P&C Advanced Analytics Survey, NA

In today's market, a policy administration system must be able to do the following to be functioning at a basic level:

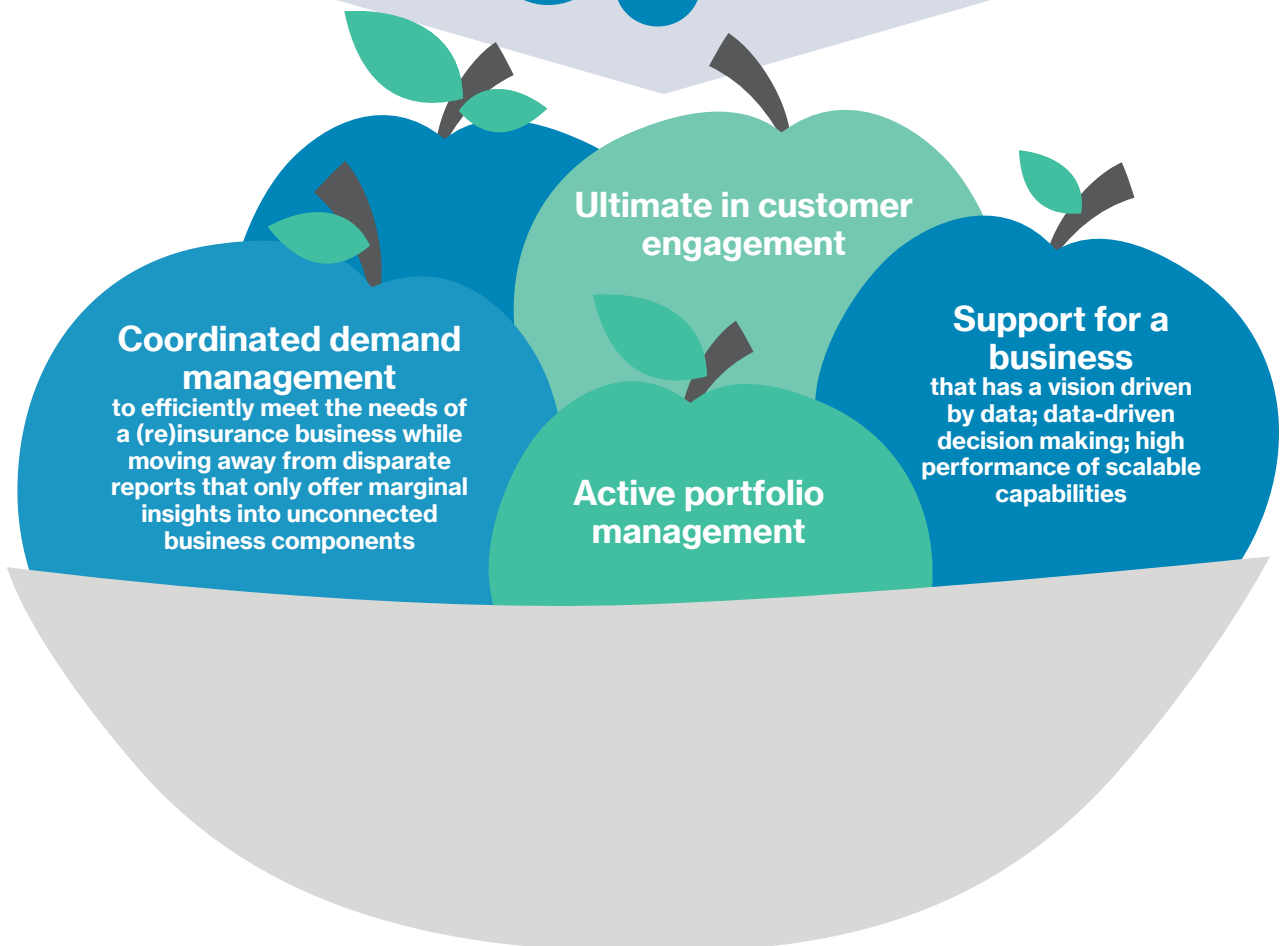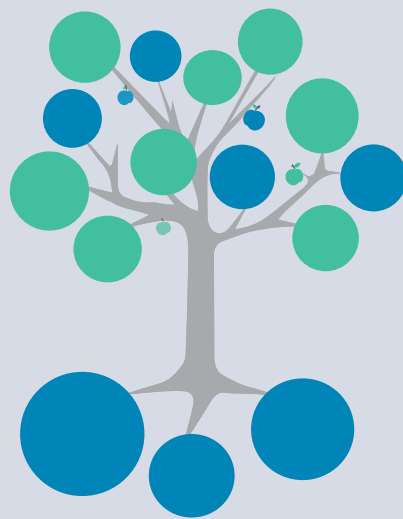View draft documents prior to any further transaction

Offer a product builder

Enhance tax functionality

Offer streamlined shortcuts to migrated policies

Provide comprehensive messaging gateways to existing customers

Integrate with other software systems

Auto-calculate premiums and adjustments

Offer a streamlined multi-legal entity functionality

Amend future publishing documentation

Automatically respond to market regulatory changes introduced

Conduct minimal re-keying of information in data storage

Provide an accounting and settlement function

4 ─── **Usage of management information (MI) and business intelligence (BI) derived in management systems**

Rich, high-quality, relevant and readily available data that reinforce and empower data-driven decision making (which in turn allows for the execution of tactical and strategic goals)

Requires a large volume of reports, policies and data

Data governance through common definitions, data lineage and accuracy

Using robust policy administration and central management systems effectively, data (both structured and unstructured) can not only be captured but also be put to work to generate untold benefits for (re)insurance entities and their respective client base alike. The fruits of this new approach will revolutionise the relationship that our industry has with the data that abounds.

Ultimate in customer engagement

Coordinated demand management
to efficiently meet the needs of a (re)insurance business while moving away from disparate reports that only offer marginal insights into unconnected business components

Active portfolio management

Support for a business
that has a vision driven by data; data-driven decision making; high performance of scalable capabilities

The seamless integration of policy administration and central management systems as part of the broader insurance functional chain

Pricing and Underwriting Risk

Quote

Bind

Issue

Policy Administration and Central Management Systems

Capture of Structured and Unstructured Data

Analysis and Business Processes - two options:

Option 1

End-to-end off the shelf
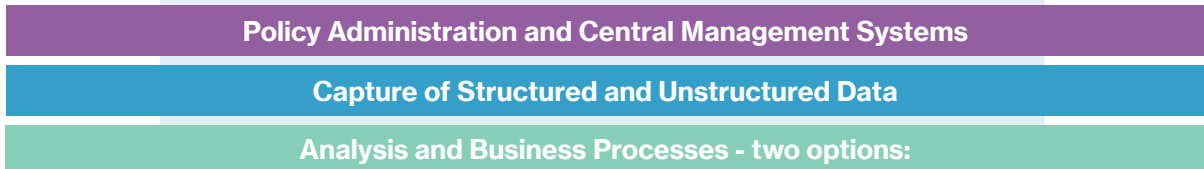
- Business process analysis
- Workflows/outsourcing
- Loss control
- Data management
- Redefining underwriting guidelines
- General management of live policies
- Strategic
- Insight into improving customer relationships/ engagement
- Compliance/licensing requirements
- Review of policy handling processes and architecture
- CRM optimisation
- Agency effectiveness management
- Rating
- New product development/pricing insights

- Product design insights
- Company strategy support insights
- Research
- Due diligence
- Rate filling proofing
- Form filling proofing
- Billing
- Document automation
- Digital asset management
- Document imagery
- Workflow systems
- Record management systems
- Sales support
- Placement insights
- Account servicing
- Internal/external messaging
- Modelling
- Analytics
- Accounting

Option 2

Connected Specialisms

Company management and customer engagement enhancements: driven by management information (MI) and business intelligence (BI) derived from the data held in policy administration and central management systems

Result: Better internal decision making, better servicing of clients, and better management of a risk portfolio

Pricing and Underwriting Risk

Quote

Bind

Issue

Policy Administration and Central Management Systems

With proper integration, policy administration and central management systems can have a direct beneficial influence on pricing and underwriting processes.

BRITECORE
Insurance Administration System

BriteCore is a cloud-native platform delivered through Amazon Web Services (AWS) and is one of the rare examples of an insurance core platform where every customer is deployed in the cloud. The property and casualty-focused administration system is centered on delivering ongoing technical innovation, long-range innovative thinking and improved customer experience to its customers: insurers that are in the market for a nimble, cloud-based platform.

Founded in 2009 by a group of six mutual insurance companies, the BriteCore community has grown to more than 50 customers served by nearly 300 employees. BriteCore's cloud deployment model, strong policy functionality, configurability and strong support for integration enable rapid deployment of the platform, with a 100% success rate for implementations and 100% customer retention. The company now supports a diverse group of carriers, start-ups and Managing General Agents.

Platform and policy administration

BriteCore provides full, end-to-end policy issuance and management functionality, including quoting, rating, underwriting, policy generation and statistical reporting, to its customers. The entire life cycle of the policy is managed through user-friendly interfaces, flexible workflows and efficient processes that support productivity and teamwork. Personal, commercial, workers' compensation and specialty lines of business are all supported, as well as multiline, multistate and multilocation policies.

Agents can quote and submit new applications through BriteCore's agent portal, and depending on configurable business rules, submitted policies can be addressed via straight-through processing or forwarded for review. Underwriters are supported with capabilities such as automatic rule enforcement, photo attachment, credit scoring and loss history integration. Customizable declarations, forms and letters are generated and imaged for nightly printing or electronic delivery to insureds, agents and mortgagees.

Over the past 10 years, the system has been enhanced to accommodate the more unique requirements or unusual scenarios that may occur in various lines of business. In-sequence or out-of-sequence endorsements can be processed easily by internal underwriters, for example. Coverages can be added or removed, and insureds, agents and mortgagees can all be modified.

Billing and accounts receivables are all managed through the platform with premium accounting, reporting and settings all included to manage the entire billing and payment life cycle of a policy. Payment processing from a variety of third-party vendors is available through a simple plug-and-play integration with BriteCore's robust web application processing interfaces (APIs). BriteCore also offers a core claims module, a mobile- and web-enabled policyholder portal, a data warehouse, and built-in contact and document management.

BriteCore also maintains an immutable transaction log that includes all actions that have been taken on a policy throughout its life cycle.

Feature overview
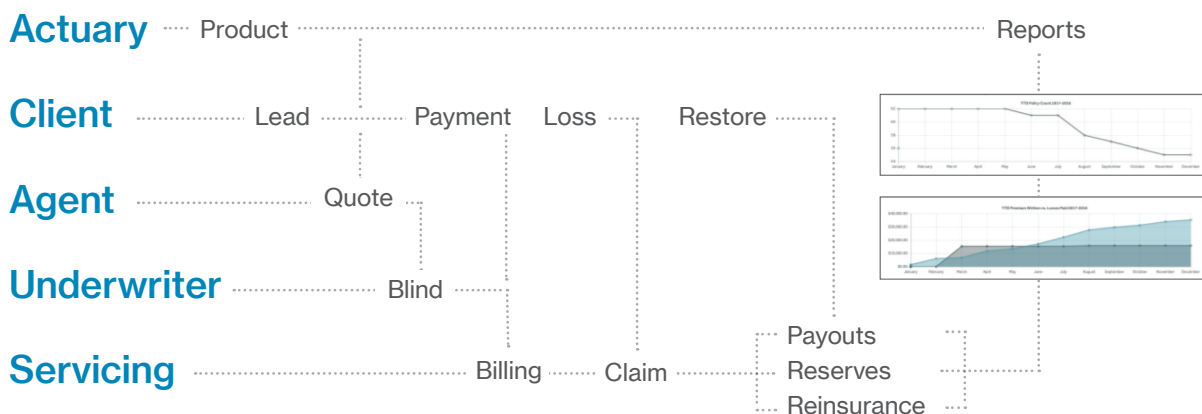
Continuous evolution

BriteCore operates on a continuous release model with new code changes merged nightly into client user acceptance testing (UAT) sites. Clients then choose which new features to incorporate into their software. These managed upgrades are all covered under BriteCore's subscription model, which means that clients do not need to purchase software upgrades, and all users stay on one version of the software.

The BriteCore community also drives the evolution of the platform. Through BriteCore's community source code contribution program, every customer has access to the source code, training and certification on the BriteCore platform for its software engineers. Customers and partners, individually or in collaboration with others, can contribute enhancements to the platform. Although the users are not allowed to touch core code, the changes made are merged through a test-first process. This program gives BriteCore customers a degree of control and independence that is unique in the industry.

Continuous development by BriteCore and its customers has ensured that as BriteCore has grown, the platform has evolved from a simple system geared for small mutual insurers to a configurable, scalable platform capable of supporting complex policies and increasing volumes of business.

BriteCore interface
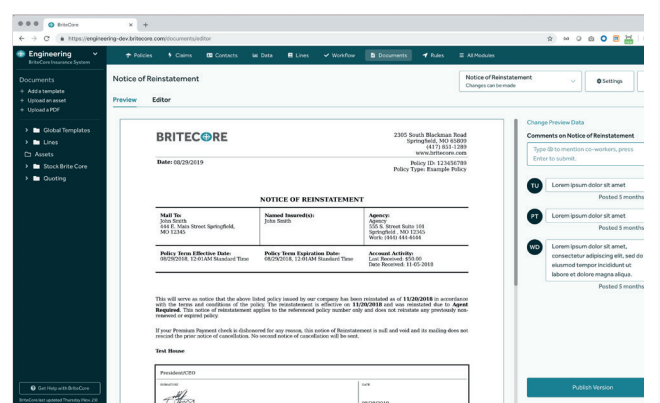
Community source code
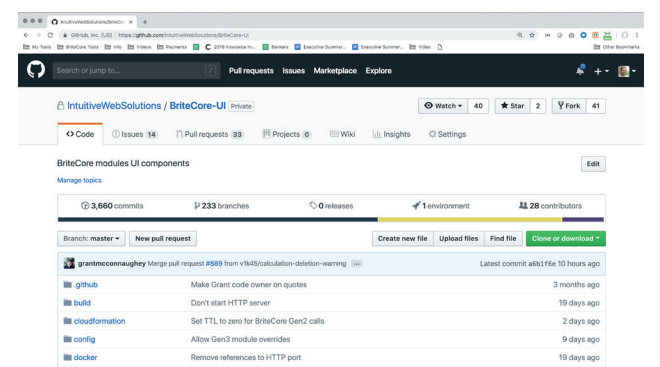
Latest transaction

In July 2019, BriteCore received US$47.5 million in a Series B capital raise by Warburg Pincus and existing investors Radian Capital and WCF Mutual Insurance Company. This brings the company's total funding to more than US$70 million. BriteCore will use this capital to accelerate its development of innovative products and expand its hiring of insurance industry experts to support the growth of its customer base.

RiskGenius leverages machine learning and other artificial intelligence (AI) techniques to automatically understand the contents of an insurance policy. This helps insurance professionals identify and deliver key coverage items quickly.

Founded in 2012 by two insurance claim attorneys, RiskGenius was initially launched as a claim document management solution but pivoted to policy analysis in 2014 as a result of the pull from the market. The RiskGenius team's background in the legal world with document management and AI led them to apply similar technology and techniques to insurance policies in order to understand the content, find key clauses, compare policy language and review underwriting submissions.

Commercial insurance underwriters and brokers: Policy review

Commercial insurance brokers can leverage RiskGenius to complete policy analysis — including the verification of premiums, limits and deductibles as well as key terms and conditions. Policy review can be completed on the RiskGenius platform across two or more documents (e.g., binders, policies, quotes) provided by the same

carrier, or even across carriers. Underwriters can employ RiskGenius' policy review module to conduct comprehensive compliance checking against benchmark language.

Traditionally, both underwriters and brokers have relied on manual keyword searches, pen and paper, and outsourcing to complete activities such as these. RiskGenius ensures consistent coverage analysis while allowing users to complete reviews much faster, thus enabling policies to go to market faster with fewer errors.

Emerging risks

Insurance professionals are also using RiskGenius to evaluate emerging risks across a portfolio of insurance policies, both rapidly and en masse. As recent headlines have focused on the concept of "silent cyber," insurance professionals have turned to RiskGenius to evaluate cyber exclusions and other terms and conditions that may lead to coverage. Instead of relying upon inferior and incomplete sampling methods, an insurance professional can evaluate thousands of policies for newly identified risks within minutes.

Coverage analysis

riskgenius

Coverage analysis

Policy checking	Benchmark Comparison	Competitor assessment	Emerging risk discovery
Ensure changes make it from one policy document to the next	See how policy language stacks up against a library of comparables	Compare coverage from different carriers against each other	Assess all of your in-market policy language for any systemic exposure

> "Policy optimization is coming. Once you know what is in a portfolio of commercial insurance policies, you can then select the best provisions for each specific insured. Think of it as manuscripting at scale."
>
> Chris Cheatham, CEO

The future

By aggregating policy data and marrying it to user behavior (e.g., by drawing on user decisions as to whether coverage is sufficient), RiskGenius seeks to deepen the automatic analysis of insurance policies going forward. A commercial insurance broker that utilizes RiskGenius across its enterprise can optimize policy information for future bindings, and carriers will be able to understand how a portfolio of policies aligns with its internal policy benchmarks.

Ultimately, RiskGenius aims to help customers ensure that there is consistent coverage across one or more insurance policies.

Latest transaction

In July 2019, RiskGenius completed a Series B financing round of an undisclosed amount. Led by Hudson Structured Capital Management and with participation from Hearst Ventures and FM Global, the raise will be used to help to continue refining RiskGenius' existing software platform and to further market its product to new clients. RiskGenius already works with many of the largest insurance carriers and brokers, including Liberty Mutual, QBE Insurance, FM Global and Everest Insurance. QBE Insurance was also an early investor, participating in RiskGenius' venture capital round in 2017 alongside Flyover Capital.
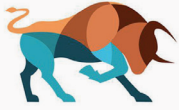
ProNavigator

Headquartered in the Canadian technology hub of Kitchener-Waterloo, ProNavigator is a cloud-based artificial intelligence (AI) platform that can be used to answer underwriting, product or billing questions instantly and automatically. It is purpose-built for insurance to automate workflows and improve access to information.

ProNavigator technology

Using natural language processing (NLP), ProNavigator's proprietary platform lets computers learn how to understand language the way in which it is spoken and written in the real world. This has been developed based on learnings from hundreds of thousands of real-life insurance-related conversations. These insights are delivered through two products: 1) a chat assistant for interacting with customers conversationally via messaging, and 2) a voice assistant integrated through Google Assistant and Amazon Alexa. These two products sit across four solutions: sales, service, underwriting and claims.

Sales	**Enables user to increase leads by automatically engaging prospects through the AI platform**
Service	**Offers customers real-time personalized service, 24 hours a day**
Underwriting	**Provides users the ability to give instant underwriting answers to distribution partners**
Claims	**Removes the friction in the claim and reporting processes**

Natural language understanding

User Intent:
Get Quote
Category:
Auto
Vehicle:
2015 Honda Pilot

User Intent:
Underwriting Inquiry
Category:
Home Daycare
FAQ:
Maximum number of children allowed

User Intent:
Report a Claim
Category:
Home
Type:
Flood
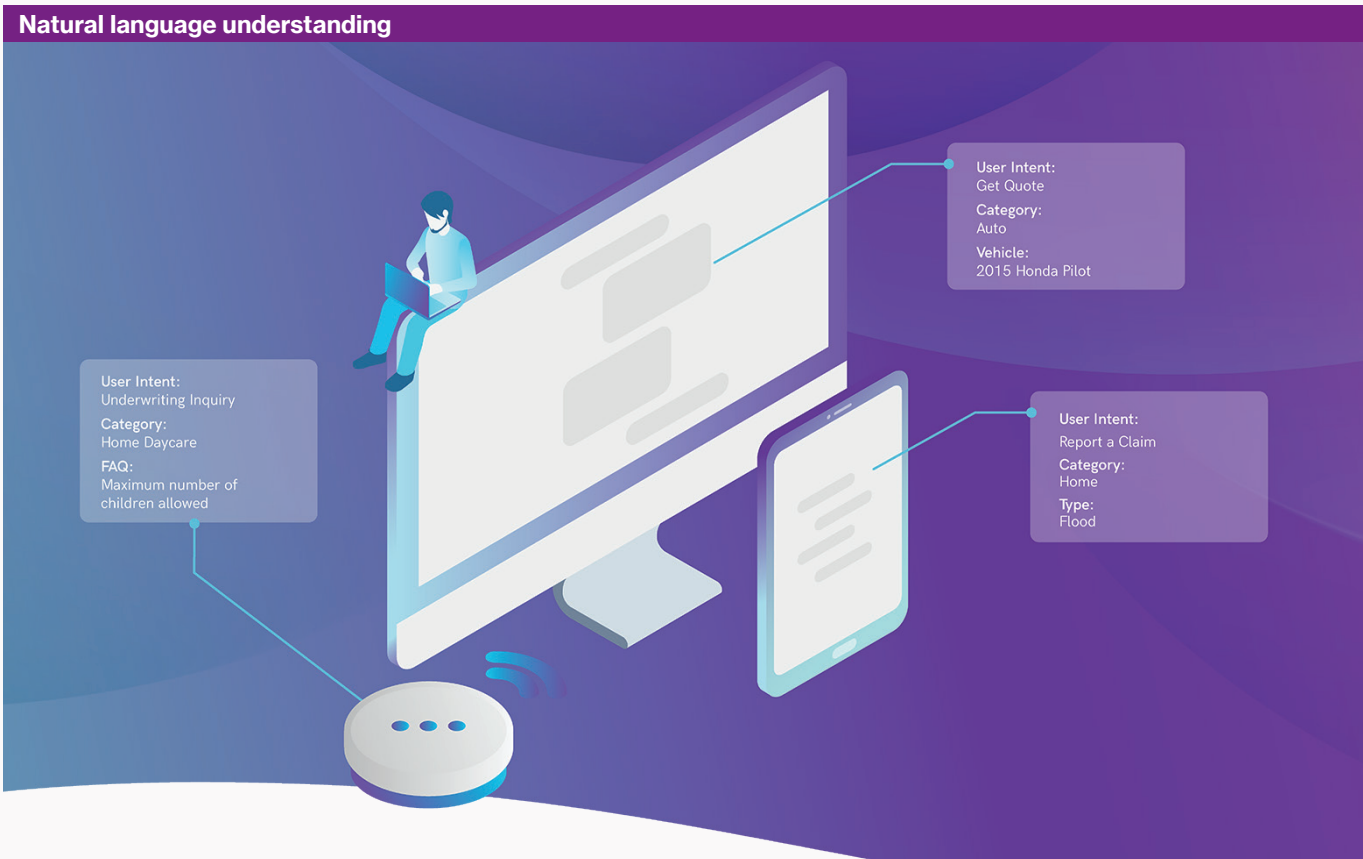
Sage Assistant

ProNavigator's Sage Assistant enables its users to retrieve relevant information quickly and deliver timely updates on products, billing and underwriting.
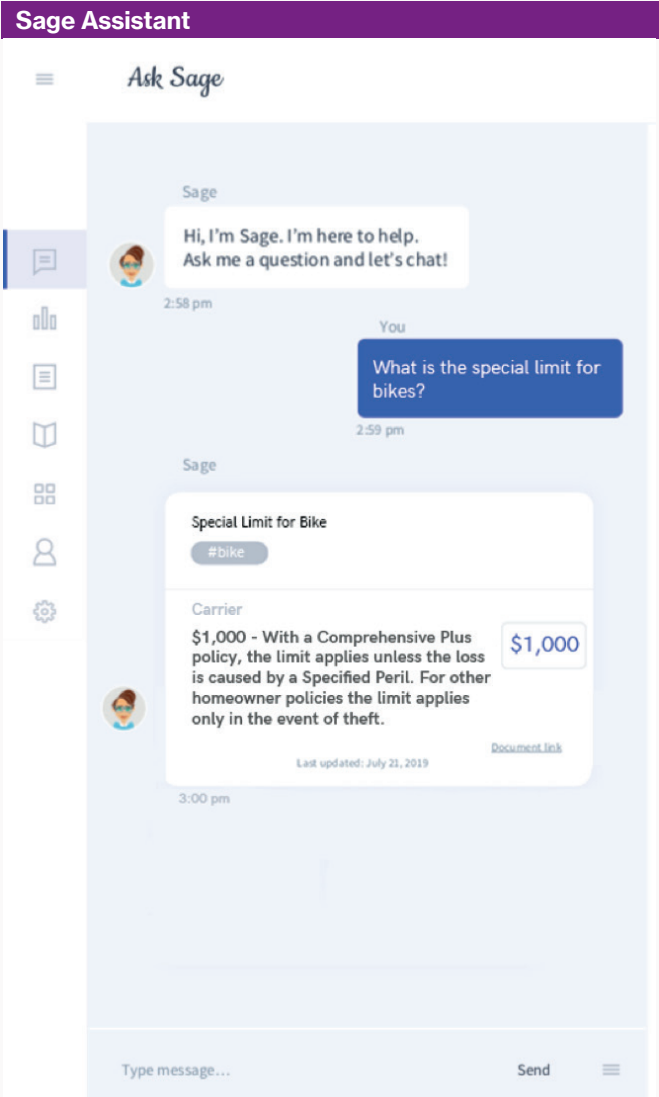
The solution:

- **Searches an insurance brokerage's entire knowledge base** across all product documents and policy resources from a single interface
- **Is easy to update,** as resources are uploaded and then automatically indexed, making them easily searchable
- **Enables users to ask insurance questions using natural language,** with no training required
- **Is a secure, cloud-based solution** that doesn't require any IT effort or software installation, so users can be ready to go in only a few weeks

By retrieving accurate answers on demand and ensuring employees and distribution partners are equipped automatically with up-to-date information, ProNavigator's solution overcomes delays — making brokers, underwriters and service agents 10% to 20% more productive.

> "Customers and distribution partners want speed, access and accurate answers to their problems. This is easier said than done. Technology is rarely as simple or straightforward as anyone wants it to be. But one thing was clear: The old way was broken, and so we set out to build the tools to make the flow of insurance information simpler, faster and more accessible."

Joseph D'Souza, Founder and CEO

Sage Assistant

Ask Sage

Sage
Hi, I'm Sage. I'm here to help. Ask me a question and let's chat!
2:58 pm

You
What is the special limit for bikes?
2:59 pm

Sage

Special Limit for Bike
#bike

Carrier
$1,000 - With a Comprehensive Plus policy, the limit applies unless the loss is caused by a Specified Peril. For other homeowner policies the limit applies only in the event of theft. $1,000

Last updated: July 21, 2019
Document link
3:00 pm

Type message…   Send

Latest transaction

ProNavigator closed its latest round of equity financing in 2018 and has invested the US$2 million in funding to help expand its customer base in the U.S. Since launching in 2016, the AI platform has helped over 90 brokers and carriers implement a streamlined customer value chain.

3. Incumbent Corner

Digital end-to-end platform **iptiQ** — A provider of bespoke life, health, property and casualty solutions on an insurance platform designed for a modern market

Interview with Philip Walker, CEO of iptiQ Americas

By James Kent, Global CEO, Willis Re, and Franck Pinette, Managing Director of the International Life and Health practice, Willis Re

Philip Walker

iptiQ

James Kent

Franck Pinette

With a focus on supporting the digital distribution and sale of a variety of life and health products and services, The iptiQ platform is one of the market-leading solutions for insurers and insureds alike. Willis Re's Global CEO James Kent and Franck Pinette, managing director of the International Life and Health practice, spoke to Philip Walker, CEO of iptiQ Americas, about the development and potential impact of iptiQ, and the broader impact of InsurTech for reinsurers.

James: Philip, it is fantastic to have you in with us today for this edition of "Incumbent Corner." Would you first please tell us about the inception of iptiQ and the thinking behind its creation? Why did you choose to build the technology yourselves from scratch?

Philip: Thank you for having us in to talk. iptiQ was founded by Swiss Re in 2014 to improve how people buy insurance and we as carriers deliver it. We all want coverage to be more affordable and accessible, but innovation — particularly enabling innovation — has been really hard for the industry. We believe efforts like these are absolutely key to closing the global protection gap.

There's a lot of focus on our technology (which is really terrific, by the way), but the real innovation isn't in tech — it's in the team. Across three continents, we've built teams with the knowledge, experience and culture to drive innovation and execution for ourselves and for our partners. Yes, we build great tech — but building these teams is our big differentiator strategically.

Franck: iptiQ is obviously a proprietary tool of Swiss Re but has clearly been made with end consumers, affinity groups, enterprise pools and carriers in mind. Do you believe that in today's market this is the only

way to make technology truly relevant at scale, i.e., a model that brings a number of incumbent moving parts together rather than looking to directly disrupt some part of the existing value chain?

Philip: Yes, partnerships are key. Swiss Re has a long track record of being successful by making our partners successful. iptiQ's solution is disruptive because of the leverage it creates for partners: massive implementation cost savings, sophisticated underwriting, complete digitization. This really helps partners establish their place in the market or open new revenue streams at record speeds.

In terms of approach, there is a lot of activity focused on digitizing distribution; we think some of these efforts have real merit, but it is not clear that these narrow solutions actually expand access. Across markets and product lines, we see common themes that demand a broader approach that considers every step in the chain. That's where we excel.

James: Without giving away too many secrets, can you please explain the essence of how iptiQ works? How pivotal is Swiss Re's underwriting tool Magnum to the success of iptiQ?

Philip: iptiQ combines the best of an InsurTech platform with an underlying carrier. The tech platform provides end-to-end capabilities, which can include everything from sales management to claims processing. The carrier provides the underlying risk capacity. The flexibility of this model means that we can support many product types (life and medical in the U.S.; life, medical, and property and casualty in Europe) and many solutions. This includes Magnum, which is used extensively in Europe.

Franck: iptiQ is highly configurable with over 140 life and health products available to be deployed. Other than stating preferred brand associations, what is an insurance/distribution/affinity partner required to do to get iptiQ live for its desired audience?

Philip: We work very hard to make it easy to work with us. For established distribution, it is important to have significant scale and a core product or process problem we can solve. When working with carriers, we focus on helping them serve their distribution at scale — ideally by lowering the cost of product introduction or digitization. With large brands, clear marketing tie-ins and channels are absolutely key.

How we work is customized to the type of partner. Integration with our application flow is quick and easy. Established distributors can be implemented in as little as 60 days. More complex integrations take on a true partnership feel. Companies that are looking to enter the value chain for the first time — especially big brands and ecosystems — turn to us as a one-stop shop. We can help them with every step of the process, domestically or around the world.

Distribution model

James: The messaging around iptiQ is geared towards wanting to reduce the complexity of insurance/insurance selling for customers and providing cost efficiencies through digital distribution. Why did Swiss Re feel the need to tackle this? As a business, were you observing these issues at scale?

Philip: Swiss Re came to this market based on requests from our clients. Many insurers feel stuck with complex, back-end processes based on legacy platforms and believe it's difficult to change this overnight. Many start-ups have tried to address some of these challenges, but only a few have the holistic, team-based approach that is required in order to solve the problem. The unique value of our platform at iptiQ is its versatility and ability to not only adapt to specific partners but also adapt technologically over time. We've built a versatile fully digital platform that allows our partners to grow and innovate rapidly that is backed by a partner that they know will be with them for decades to come.

Franck: iptiQ has been built to be modular, customizable and configurable, and it allows the end users to use the services that they truly like and that bring them the most benefit. Do you think that partnering with platforms that connect highly valuable specialized tools is now entirely preferable to implementing one system that has each component built in?

Philip: It's a balancing act. On one end of the spectrum, we can imagine an entirely proprietary platform with 100% custom components. Ironically, we see that many times from carriers and InsurTech start-ups: Both have a bias to build their own solution. On the other end, one can imagine a very loosely integrated set of services that adds little value but essentially works — basically a digital version of the traditional model. As a global player, we recognize that neither of these are strategically viable. The sweet spot lies in deeply but flexibly integrating best in class solutions in a way that creates seamless value for customers. It's harder in some respects than the other models but tremendously powerful and adaptable.

James: It is rare to see examples of reinsurers being able to put so much focus and attention on individual buyers of products like life and health insurance — and it is clear that the end consumer is of huge importance to you. Is this a trend that you think we can expect to see moving into other classes of business? Is this possible only because of the advent of highly customizable technology?
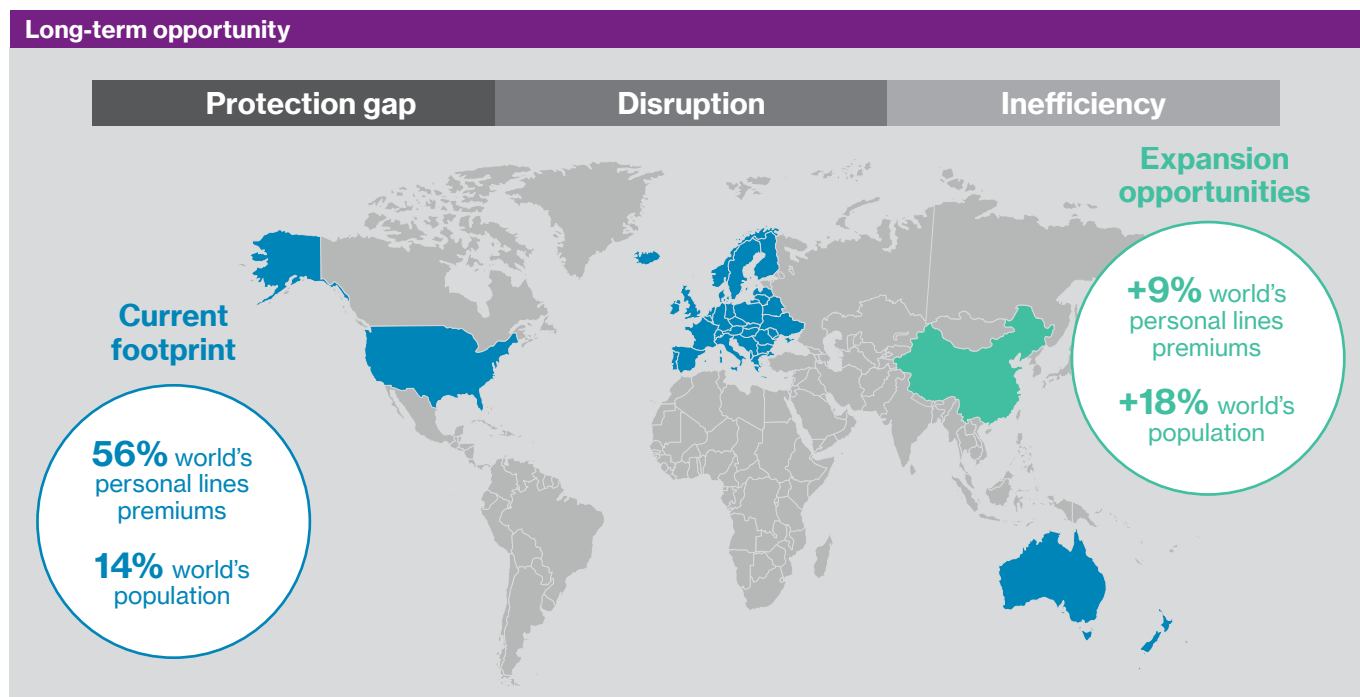
Philip: Our reinsurance clients want us to provide digital, bespoke and highly adaptable solutions. Our core business is B2B. Even so, we must have a keen attention on the needs of the families we serve. We must understand their needs and their challenges if we are to help the industry progress in its efforts to close the many protection gaps.

Franck: How do you think traditional life and health clients of Willis Re can benefit from digital platforms such as iptiQ? Which geographies is iptiQ currently available in? Is the long-term goal for it to be truly global?

Philip: Reactions from carriers have been very positive. Verti is one public example where we helped a reinsurance client to enter a new line of business quickly. Other carriers are seeking our help to add products that are missing from their portfolio, digitize existing products or redesign the interactions with their distribution. We intend to be the leading global B2B2C insurance platform. Partnerships with carriers and brokers are essential to that vision. Today we operate in the U.K., France, Germany, the Netherlands, Ireland, Spain, Italy, Australia, New Zealand and the U.S.

Long-term opportunity

| Protection gap | Disruption | Inefficiency |

Expansion opportunities

+9% world's personal lines premiums

+18% world's population

Current footprint

56% world's personal lines premiums

14% world's population

James: This quarterly is mainly focused on technology that supports policy administration and central management systems. Can you please tell us how valuable you think this part of the functional insurance chain is in terms of managing financial optimization, gathering intelligence on individual consumers and providing the overall backbone to any (re)insurance entity?

Philip: One of the big pitfalls of InsurTech is the very limited innovation in how we administer policies — how we deliver on the promises we make to customers. I am always on the lookout for new ideas on how we deliver this critical part of the model. On the other hand, traditional core systems do an excellent job of keeping things straight and on an even keel — albeit slowly. The challenge is to decide which parts of administration need to be digitized and which parts do not.

Some of this innovation problem stems from the economic realities: The payback on innovation is better at the front of the value chain. In life and health businesses, helping customers select and purchase coverage is a much bigger cost as a percentage of premium than the cost of supporting them over the life of the policy (until claims). This is why we make our platform available to clients — so they can benefit from our very large investment in innovation without the cost of rebuilding their systems at low return on equity.

Franck: As a wrap-up, can you please describe how big of a problem you see the global "under insured" issue to be, specifically for life and health insurance? Is this something that iptiQ could go some way to significantly solving?

Philip: This protection gap is the single greatest motivator for our team; it really fuels us. The life and health protection gap is a huge and growing problem in the world. In the U.S., for example, medical costs are now the single biggest cause of bankruptcies. Because this is a big problem for seniors, iptiQ now offers Medicare supplement insurance to fill this gap. The population mortality protection gap stands at US$21 trillion in the U.S., which works out to approximately US$400,000 per household. In Europe, the figure is almost as large (US$17 trillion).

Through our partnerships around the globe, we are confident that we can make the world more resilient. To do that, we need to hire a lot of really smart, really capable, technically brilliant teammates. A passion for protecting people is the thing that draws them to us and us to them. In the end, we solve fascinating problems that change people's lives one family at a time.

Technology Spotlight
Willis Towers Watson's Unify
Automation, integration and governance that improves insurer profitability

Willis Towers Watson's Unify is an end-to-end business process automation tool that allows users to integrate and automate disparate systems, all with the level of governance and control demanded by today's insurance regulations. It includes robotic process automation (RPA) capability, built specifically for the insurance industry.

Among the many benefits Unify offers, it enables insurers to extract the value of data assets. Often, accessing data can be challenging for insurers when they are stored in multiple systems as a result of organizational change (e.g., mergers and acquisitions) or they are trapped in outdated technologies, such as mainframes.

With Unify, insurers can automate the process of scrubbing and transforming data into useful formats for further analysis. Unify also automatically creates an audit trail that documents the workflow and ensures processes are auditable and traceable for governance and regulatory purposes, and not reliant on information contained solely in the heads of key personnel.

The off-the-shelf audit reports that are automatically produced with every built-in workflow provide users with not only answers but also confidence in those answers, because the major steps in the analysis process can be tracked.

All this matters because, currently, a significant proportion of premium in many insurance companies goes toward expenses. Companies that have efficient, automated and well-governed processes that avoid costly errors — and are able to leverage technology to perform predictable, high-manual-effort tasks — stand to gain a significant competitive advantage.

While much historical focus has been on distribution channels to address expense levels, significant opportunities exist for back-office efficiency gains as well. For example, one large U.K. insurer has licensed Unify to help it meet increasingly tight regulatory and financial reporting deadlines and pass efficiencies into its day-to-day operations. As a direct result, the elapsed time for its end-to-end actuarial process dropped by more than 50%. The duration of, and human input into, modeling runs was also halved.

With actuarial, risk and finance personnel constantly being asked to shorten reporting cycles and get closer to real-time reporting, the ability to effectively deliver valuable management information — on time, in the right format, for the right audience — will only be achievable by leveraging automation via robotics.

Unify can act as a bridge between the various systems used to conduct analysis and the tools that are appropriate to present information to management and stakeholders, whether they be data visualization tools, such as Power BI, Tableau or ClickView, or more traditional reporting tools, such as Word and PowerPoint.

Further, opportunities to efficiently conduct processes in claims and underwriting can improve customer experience and help to increase retention all while reducing expenses. While significant focus is placed on robust analytics and artificial intelligence (AI), RPA is the key that truly unlocks the value behind the analytics by enabling the decisions made to be carried out and executed. For example, if a claims AI model indicates that a claim should be expedited for payment, why wait on a manual trigger before embarking on the process to get a check cut when your RPA can automate that process and do it quicker and more efficiently?

We have entered the digital era, and RPA is the catalyst that makes our vision of efficient processes a reality. Unify is the RPA that is fit for purpose for the insurance industry. Reap the benefits of efficient and effective business processes with Unify.
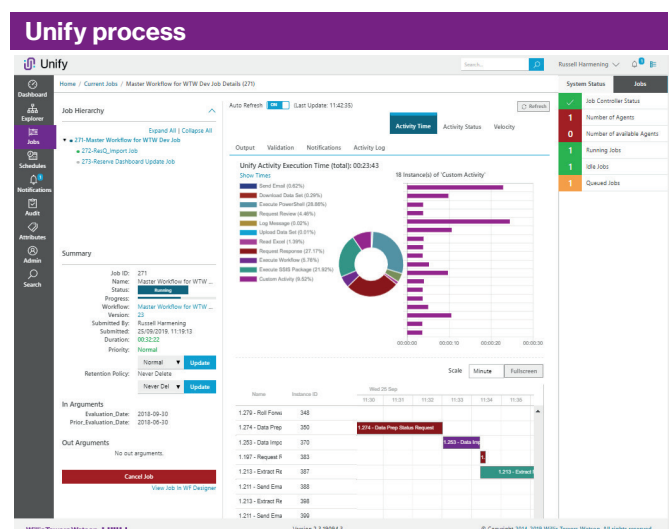
5. Thought Leadership

Policy administration systems: the backbone of the policy issuance process
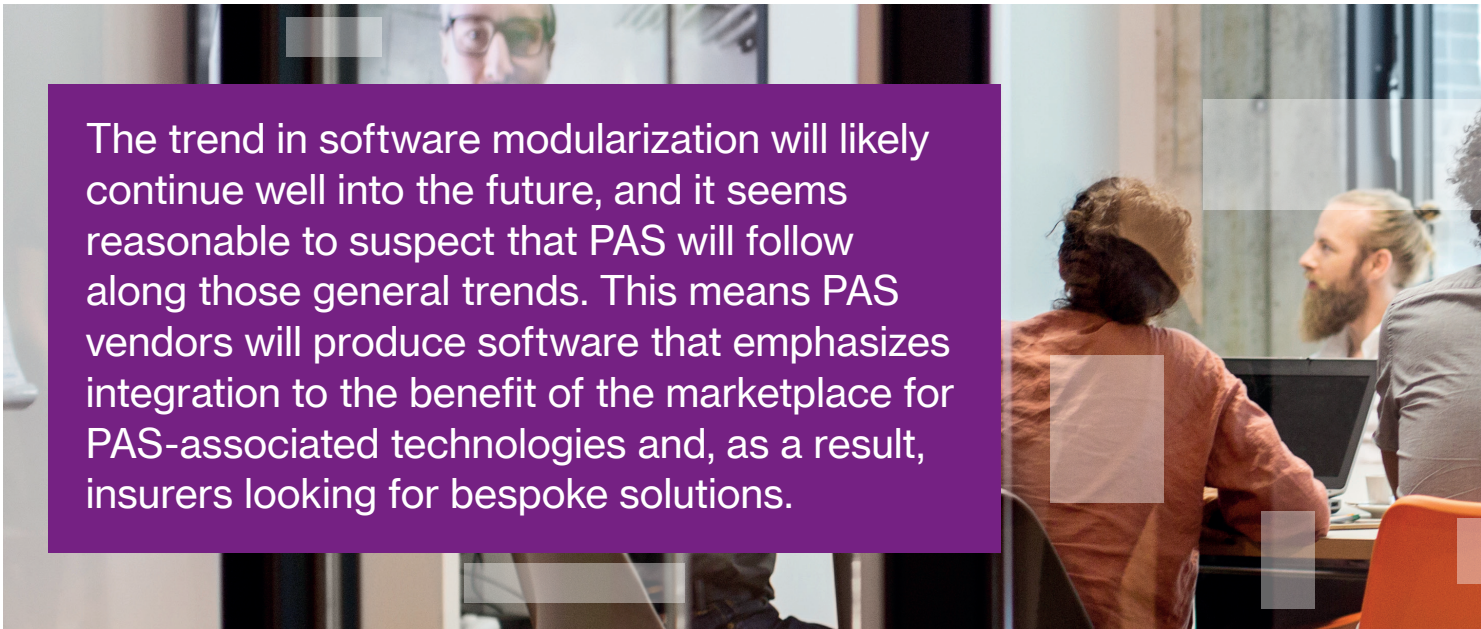
Jason Rodriguez, Data Science Lead, ICT Americas

The policy administration system (PAS) is the central system for policy registration and management, and it forms the backbone of the policy issuance process. Over time, the policy administration process, like many other routine manual tasks, has become increasingly automated. While the responsibilities of administrative professionals have decreased, the software requirements to support policy administration has grown well beyond the initial intended PAS use case. It is now common to expect the PAS to handle rate analysis and deployment, automated underwriting and renewals, form management and even workflow orchestration.

Providing this broad range of functionality has pushed PAS vendors to fill gaps in their platforms through partnerships with specialist software vendors. These specialist partners supply such services as document management, fraud identification and advanced rating engines that plug into the PAS solution with minimal integration challenges. Not only are these partnerships required given the high degree of specialism in the specific areas mentioned above, but third-party software integration is a consistent current standard in software development focused on cloud-based solutions and modularization.

Underwriting and rating sophistication without compromise

Modularization and the emerging ecosystem of open APIs

Major increases in the availability of high-quality software vendors and open-source tools have led insurers to look for the best individual tools rather than a do-it-all platform. Simultaneously, software design has trended toward the liberal use of web applications that are highly modularized; in fact, it is now common for a single product to be a

> The trend in software modularization will likely continue well into the future, and it seems reasonable to suspect that PAS will follow along those general trends. This means PAS vendors will produce software that emphasizes integration to the benefit of the marketplace for PAS-associated technologies and, as a result, insurers looking for bespoke solutions.

collection of web-enabled services. The main benefit to this approach is that these web services can be scaled and supported independently, which allows the software to flex to the demands of the actual use. The flexibility provided by modularization considerably improves software integration with similarly designed software, allowing a new set of insurance infrastructure solutions. Insurers can now rely less on one-size-fits-all solutions and achieve a more complex, bespoke information technology solution that fits their businesses. Insurers can mix and match solutions, allowing them to shop for value in one functional area while investing in a best in class solution in another functional area.

The next big question is, which PAS components are worth additional investment? Insurers should focus on specialized technology that surpasses the PAS standard. Two key areas include document management systems and enhanced rating engines. Both technologies are effectively delivery mechanisms for some complex underlying technologies, including natural language processing (NLP) and machine learning, which most PAS vendors do not have the expertise to fully support.

Document management and natural language processing

Document management has undergone rapid change recently as search engine technology, NoSQL databases and NLP continue to improve rapidly. The competitive landscape for these products requires expert data scientists exploring recent advancements in NLP technologies and converting these new advancements into improvements in fundamental document management services. Following are some specific areas where newer, more sophisticated document management solutions stand out from the rest.

Content management system

Search engine technology has revolutionized the way we navigate the Internet, and increased investment by technology companies has yielded some powerful and mature tools. These tools provide a powerful basis for NLP solutions beyond web page search applications; in fact, vendors are focused on bringing NLP to document management. For example, the legal services industry critically depends on extensive document libraries that are maintained and even searched by dedicated legal staff. Some start-ups have sought to reduce the valuable time spent organizing and searching these legal document repositories. InsurTech start-ups see parallel opportunities for large insurance companies in managing and reviewing insurance contracts. These InsurTech software offerings index an insurer's cache of insurance policies to allow for efficient document management with such features as keyword labeling, complex grouping, metadata filters and natural language searching. Over the long term, insurers will be able to perform more complex tasks such as compare the legal terms across documents, identify similar contracts, search for references to common entities, detect wording inconsistencies and eventually conduct basic translations.

Policy wordings

One troubling issue that large insurers face related to insurance contracts is the management of policy wordings. Subtle changes in policy wordings may impact fundamental exposure definitions, which could drastically alter insurer liability. These wording variations could lead to surprising and high-severity losses, which has compelled insurers and start-up companies to look for ways to identify these leakage risks. The technical challenge involved here is complex. Current NLP techniques cannot navigate the nuances of insurance contracts as well as an attorney or even a skilled intern. The state-of-the-science artificial

Insurers can now rely less on one-size-fits-all solutions and achieve a more complex, bespoke information technology solution that fits their businesses. Insurers can mix and match solutions, allowing them to shop for value in one functional area while investing in a best-in-class solution in another functional area.

intelligence (AI) observer has no issue identifying modifications to text, but the implication of subtle changes is not easy to assess without more contextual information. The current process of building AI systems relies on well-defined outcomes and a large store of historical experience, which are not likely to be available for each potential policy wording change. The solution requires a combination of AI to efficiently propose candidate wording deviations and an expert reviewer to evaluate the proposed issues. This is likely to be the sort of compromise that content management software will employ.

Report evaluation

During the underwriting of commercial lines policies, underwriters often reach out to third parties to perform external reviews. Those reviews include detailed descriptions of the risk, notes on red flags and relevant pictures documenting issues, as well as final recommendations. Reports such as these may contain useful information, but reviewing the full reports can often present a real challenge to underwriter productivity and, consequently, be overlooked.

We will explore a few different existing NLP technologies that can be useful here, focusing on their end goals rather than the details of the technologies themselves.

User assistance through report summarization

Reports can often contain redundant text that slows down a reader but adds little in the way of pertinent information. NLP algorithms can quickly parse documents and remove redundant text, similar to the way a compression algorithm compresses a photo. The underwriter can review the compressed version of the report much more quickly, and while this is not the same as reading the full report, it can be a major improvement over missing the report entirely.

Feature extraction from unstructured text

For any given report type, certain themes or concepts are routinely mentioned. For example, an assessor report for a property likely has references to building construction type, structure condition, or other risk factors either not reported or not reported accurately in the initial disclosure. NLP techniques such as topic modeling can identify the consistent thematic structure in unstructured text. Once defined, these themes can be used to highlight key insights found in the report or directly combined with additional policy information for predictive modeling. Features derived from unstructured report text are typically potent inputs to machine learning algorithms and could considerably improve risk segmentation.

Machine learning to evaluate key report findings

Supervised machine learning approaches involve using historical data, including outcomes (e.g., loss experience) to quantify the risk associated with a given policy. It is standard practice to use structured policy information such as answers to specific questions in the underwriting portal that are logged with the bound policy information. AI approaches can also include text from reports to learn which specific report contents are indicative of high or low risk. These high and low risk factors could be extracted from the report directly, displayed to the underwriter or directly used for underwriting rules (such as those that trigger referrals).

Enhanced rating and rules engines

Another general area of specialism that goes beyond current PAS capabilities is enhanced rating engines — software used to apply complex underwriting rules and rates. Specialized, enhanced rating engines stand out from the standard rating or rules engine technology in a couple of key areas. First, more sophisticated rating engines allow for a more complete rate selection experience, including scenario testing. Second, complex rates and rules such as those derived from machine learning can sometimes push the capabilities of PAS systems, especially older technologies. Third, specialized rating and rules engines offer a more direct connection between the business and rate deployment with support for the associated governance requirements.

Scenario testing

Rate selection is the complement of quantitative rigor and business judgement. Even when loss costs are perfectly quantified, insurance product rating changes need to be implemented with consideration of the competitive landscape and the perceived policyholder demand, which quickly makes this an extremely complicated problem. The best practice for rate selection to address this complexity involves generating and reviewing scenarios with the business leaders. While this scenario testing can be performed in an *ad hoc* way outside of the rating engine, the decoupling of scenario testing, rate selection and rate deployment introduces unnecessary inefficiency and risk to such a critical business process.

Getting away from tables

While the insurance industry has been well served by tabular rating structures over the past 30-plus years, the latest and greatest rating algorithms contain elements developed using machine learning techniques that produce much more complex rating structures. These complex rating structures typically exceed the deployment capabilities of legacy rating and rules engines. For example, ensemble models comprise underlying decision tree or linear models that, if converted to simple tables, would require thousands of rows.

### Dynamic and accurate pricing and underwriting

Rating change implementations in a PAS can take months due to processes that require IT resources to configure and test rates manually. These deployment strategies are costly, and the business function has limited control over the priority of deployments. Alternative solutions include plugging in-house solutions built by data science teams into the process, which typically involves cloud-based scoring engines. While the scoring engine may satisfy the data science or analytics team, business leaders are often much less enthusiastic over the lack of governance and overall quality of software developed by an insurance data science team.

In the middle ground between flexibility and efficiency are enhanced rating engines (including Willis Towers Watson's Radar software suite) that are designed specifically to address these conflicting business needs. These specialized engines also allow the business team to perform analyses such as scenario testing (as mentioned above) on the rating or underwriting model that is deployed into production. Each model modification is also tracked and available for audit. With enhanced rating engines, deployment can be configured to explicitly require review and sign-off prior to going live.

Closing remarks

The trend in software modularization will likely continue well into the future, and it seems reasonable to suspect that PAS will follow along those general trends. This means PAS vendors will produce software that emphasizes integration to the benefit of the marketplace for PAS-related technologies and, as a result, insurers looking for bespoke solutions. Some start-ups are positioned to help support this marketplace of PAS-related systems and help these companies overcome their integration challenge. Intellagents has created a platform to both curate the various vendors and provide the necessary technological connections between software systems to allow for an efficient integration of these distinct components. They even work with start-ups to set-up on-demand pricing schemes that procurement offices and IT departments are starting to expect with infrastructure-as-a-service solutions. Intellagents is effectively lowering the barrier to entry for PAS-associated technologies and sets the stage for an exciting new future for the PAS marketplace in the coming years.

The next big question is, which PAS components are worth additional investment? While the answer may vary a bit depending on an insurer's place in the market and ambitions, two specialized areas where the difference between PAS standard and best in class is considerable are document management systems and enhanced rating engines. Both technologies are effectively delivery mechanisms for some complex underlying technologies, including natural language processing (NLP) and machine learning (ML), which most PAS vendors do not have the expertise to fully support.
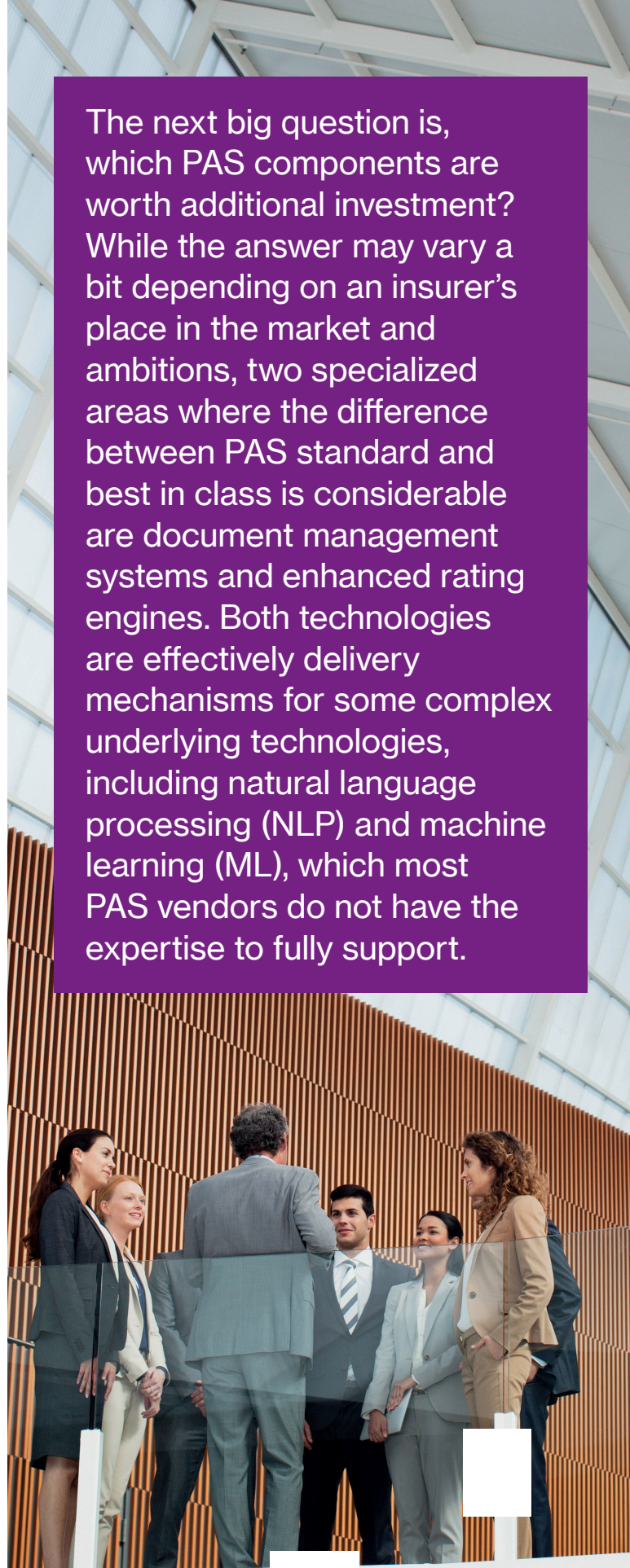
Hippo, a California-based home insurance provider, has raised US$100 million in a Series D funding round, and with a valuation of over US$1 billion, it joins the InsurTech unicorn club. Since launching in 2017, the company has raised US$209 million and has expanded to provide home insurance in 17 states, covering over 50% of the U.S. homeowner population and growing its customers by more than 25% month on month.

The latest round, led by Bond, will be used to propel Hippo's expansion, with a target of covering more than 80% of the U.S. homeowners' population by the end of 2019. It will also help to grow its direct-to-consumer product portfolio and its network of industry distribution partners. This follows a Series C funding round of US$70 million in November 2018 and marks a period of sustained growth for the company, which has seen its premiums increase tenfold.

Hippocorn

"We're excited about the growth we've achieved, bringing protective home insurance to hundreds of thousands of homeowners across the U.S., and the funding partners we've brought on who help us continue to deliver the best possible experience to our customers."
Assaf Wand, CEO and Co-Founder

Product and distribution

Hippo's product offering is based on data-driven pricing and real-time underwriting that delivers accurate profiles to its customers of the property they wish to insure. This sees the company leveraging public data such as satellite imagery, municipal building records, and Internet of Things (IoT) devices and sensors. Through this process and the auto-filling of online questionnaires with publicly accessible data, a prospective customer's onboarding process is simplified: Quotes are delivered in under 60 seconds, at savings up to 25% less than the industry average.

In addition to its direct-to-consumer model, Hippo has established an extensive network of distribution partners, which includes homebuilders, lenders, reinsurers and connected home firms.
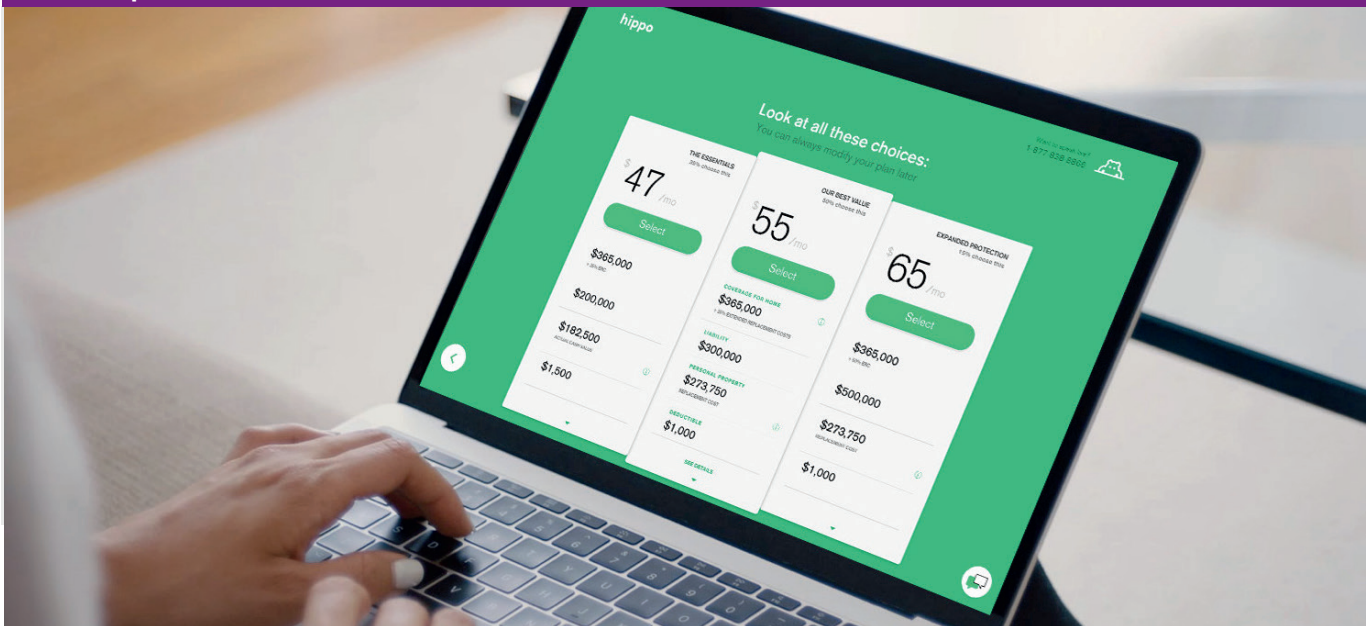
hippo

Proactivity in the insurance life cycle

Hippo is looking to take a more proactive role in its customers' property and insurance life cycles.

Current customers' homes are monitored through aerial photography to map extensions, including pools or decking; for customers in qualifying U.S. states, Hippo offers a Notion (a U.S.-based IoT sensor company) SmartHome Monitoring System when a policy is purchased. This gives customers a discount on premiums and can help prevent total damage to a property.

Further examples of Hippo's proactive approach can be derived from the company's actions before last year's California wildfires. Hippo's artificial intelligence technology, which uses aerial imagery through multiple partnerships, leveraged unique data sources to monitor all the houses they cover. This information was then used to identify and contact all policyholders who lived in active wildfire areas with up-to-the-minute information. Rather than waiting for claims to materialize, Hippo wants to prevent claims from happening.

SmartHome Monitoring System
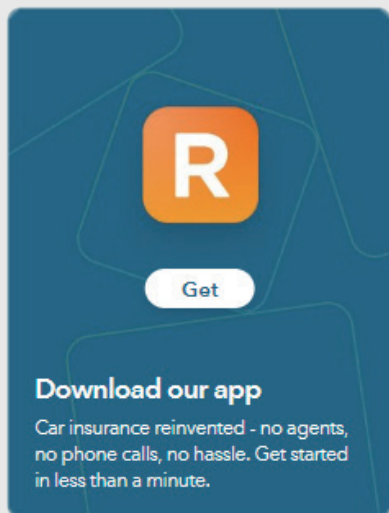
ROOT

Root, a U.S.-based mobile/app-based motor insurer, uses mobile phone technology, machine learning and telematics to price drivers based on the user's actual driving behavior.

Root raised US$350 million in a Series E funding round in August of this year. Led by DST Global and Coatue

Management and with participation from existing investors Drive Capital, Redpoint Ventures, Ribbit Capital, Scale Venture Partners, and Tiger Global Capital Management the round was the largest raise yet in the motor InsurTech market and takes Root's valuation to around US$3.65 billion and cements Root's unicorn status.
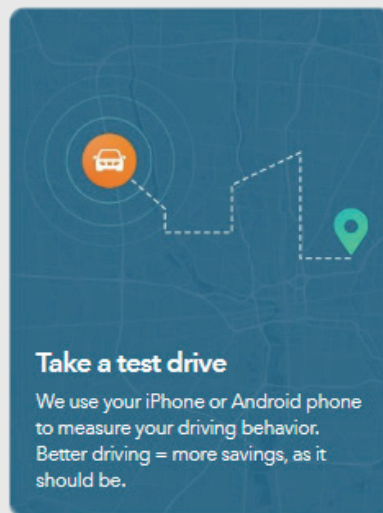
App-based policy application process
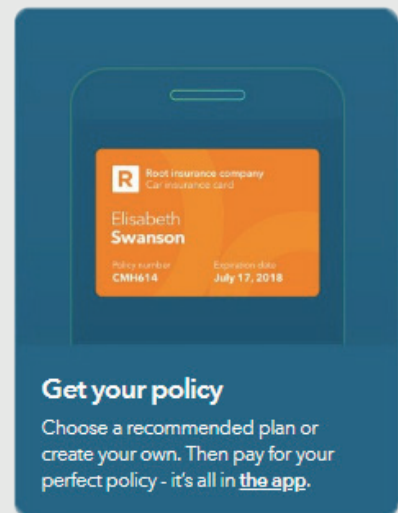
Download our app
Car insurance reinvented - no agents, no phone calls, no hassle. Get started in less than a minute.

Take a test drive
We use your iPhone or Android phone to measure your driving behavior. Better driving = more savings, as it should be.

Get your policy
Choose a recommended plan or create your own. Then pay for your perfect policy - it's all in the app.

"Root is demonstrating the value of telematics in a new way, which has created widespread customer demand for pricing that accurately reflects risk based on behavior, not demographics. Root's latest funding round has proven that the company has unlocked an opportunity to remake the insurance industry."

ROOT

How you drive and not who you are

To obtain a quote, users complete a short test drive, measured through each driver's smartphone, to determine driving behavior, with over 200 variables such as braking, turning, miles driven and phone use while driving measured. This process, combined with the insights derived from its proprietary algorithm, enables Root to slowly reduce its reliance on demographic variables in the pricing process and move toward one that is increasingly based on real-time observed behavior. The received quote, if the driver is accepted, is a direct reflection of the user's recorded driving.

Root's benefits

Savings of up to 52%

Rate based primarily on your driving

Earn cash for referring friends

File a claim in about 3 minutes

Free Roadside Assistance included in every policy

Easily manage your policy in the Root app

Free Lyft credits on select holidays
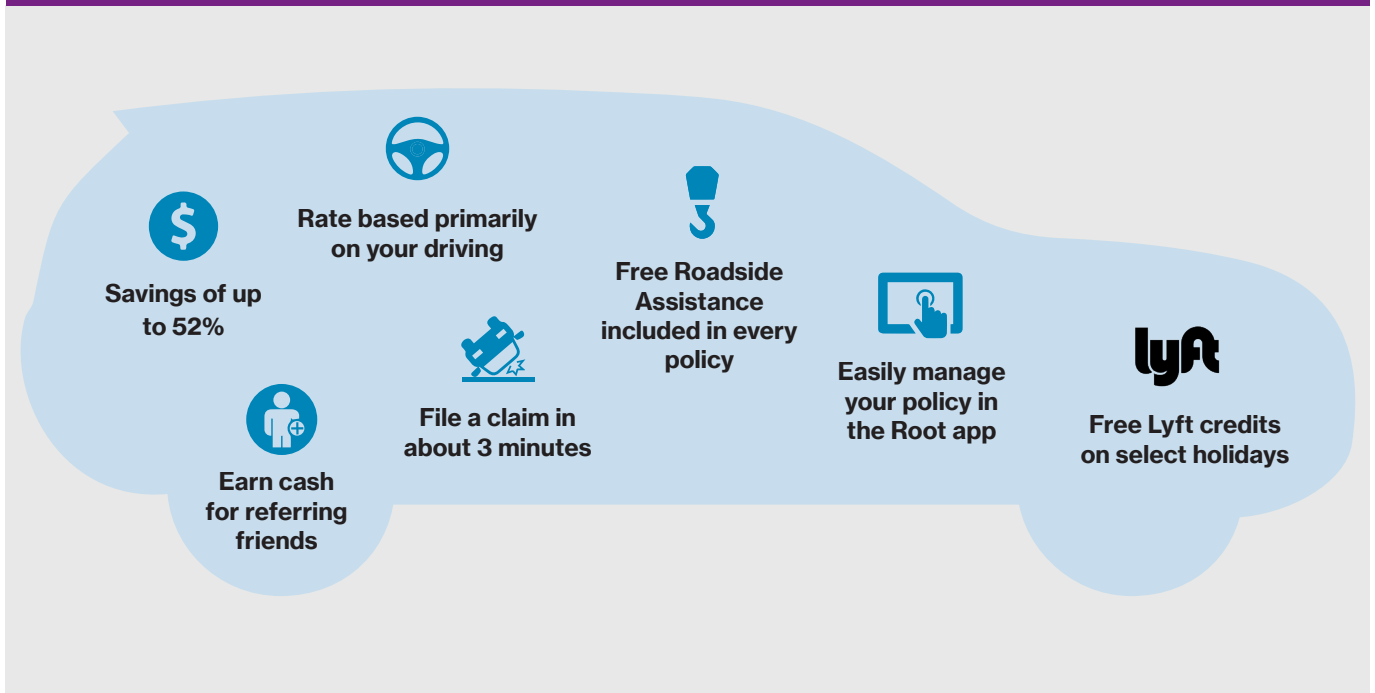
All in the app

Root's digital-driven proposition expands to its policy management and claims, which are all handled directly through the company's mobile app. From managing your deductible level to claims support, Root has worked to make this as accessible and user friendly as possible to ensure that the company's customers get the coverage and service that is right for them.

As of Q2 2019, Root had written more than US$280 million in direct premiums, this is up from US$100 million from Q4 2018.

Plan personalization

Find the plan that's right for you.

Monthly | 6 months (save 30%)

Root Base
Fulfills state minimum requirements.
$34.84/month

Root Premier
Higher levels of coverage.
$63.00/month

Create your own
We'll walk you through each coverage so you can select the one that best fits your needs and budget.
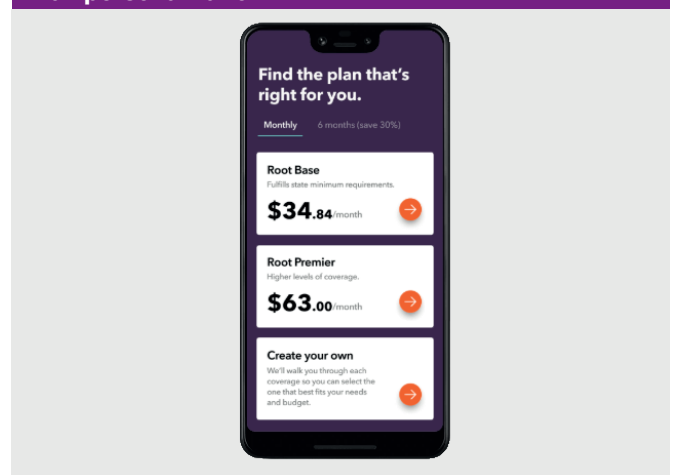
7. The Data Center

InsurTech by the numbers

Q3 2019 continues the billion dollar funding trend

2019 surpasses annual funding high: In the first three quarters of 2019, US$4.36 billion has been deployed to InsurTech companies across 239 deals. That already marks a 5% increase from the total amount of investment in all of 2018. Deal activity is also on pace to surpass 2018's high based on the average number of deals per quarter in 2019.

Eighty-three deals with a total value of US$1.5 billion were announced in Q3 2019. This is a 20% increase in the number of deals and a 6% increase in the funding total from Q2 2019. Q3 is now the fifth consecutive quarter over US$1.2 billion.

Compared with Q3 2018, deal count in Q3 2019 increased by 46%, while funding volume increased by 20%.

- In Q3 2019, 44% of all InsurTech deals took place in the U.S, a two-percentage point increase from Q2 2019.
- The U.K. accounted for 6% of all deals. China accounted for 13%, which is up 4-percentage points from last quarter. Much of the increase in China can be attributed to a rise in the interest toward China's growing health insurance industry.
- This quarter also saw New Zealand and Tunisia record their first ever deal since this publication started recording. Since 2012, Asia Pacific (APAC) has been responsible for 16% of all deals. Measuring the last four quarters, APAC's share has grown to 23% of all deals. In Q3 2019, APAC was responsible for 30% of all deals. Europe as a whole in comparison was responsible for 16%.

Seed and Series A funding rose to US$161 million in Q3 2019, up from US$147 million in Q2 2019.

- Q3 2019 saw an 8-percentage point rise in the number of early stage investments from Q2 2019, and year-on-year saw a 7-percentage point increase in deal count.

Q3 2019 had a four percentage point drop in the number of C, D and E+ rounds from Q2 2019. This drop was most starkly seen at the Series E+ level, with a 60% drop in deals quarter-on-quarter. Series B deal count, however, has been consistent for the last three quarters, with Q3 2019 also recording 12 deals at this level.

P&C transactions in Q3 2019 increased by 6% from Q2 2019 to 52 deals.

- This quarter observed a 6% rise in funding levels from Q2 and a 64% increase in funding year-on-year.
- This quarter was supported up by three mammoth deals: Root Insurance, Hippo and PolicyBazaar.

L&H start-ups for Q3 2019 recorded 31 deals and US$566 million in funding, a respective 55% and 7% increase from Q2 2019.

- Compared with Q3 2018, this quarter saw an 18% decrease in funding but recorded a 82% increase in deal counts.

Distribution and MGAs gain funding

- Full-stack insurers and MGAs are breaking out with larger funding rounds such as Hippo's US$100M Series D and Ethos' US$60M Series C. Of the top 10 largest deals of the quarter, two went to insurers and three to B2B; the remaining five went to distribution-focused start-ups.
- In Q3 2019, 17 of the 31 L&H investment deals went into distribution-focused start-ups (a 15-percentage point reduction from Q2 2019), one to full-stack insurers (a seven-percentage point reduction from Q2 2019), and 13 to B2B start-ups (a 22-percentage point increase from Q2 2019).
- With P&C, the margin between B2B and distribution-focused start-ups continues to be distinctly narrower. Of the 52 deals, 26 went to B2B and 25 to distribution. The remaining investment went to full-stack insurers.

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InsurTech by the numbers

Q3 2019 recorded eight deals of US$40+ million, which is one less than Q2 2019 and two less than the high of 10 recorded in Q1 2019. This level equals that of Q3 2018.

- Q3 2019 recorded 16 investments of US$20+ million and 11 US$30+ million (both matching Q2 2019).
- Q3 2018 recorded 10 deals of US$20+ million and 13 of US$30+ million

The largest deal of the quarter was a US$350 million Series E+ round in Root Insurance, a usage-based car insurer. Coatue Management, Drive Capital, DST Global, Redpoint Ventures, Ribbit Capital, Scale Venture Partners and Tiger Global Management all participated and Root Insurance has now raised a total of US$614 million. The next three biggest were:

- A US$200 million Series D investment in Gusto, an HR and benefits automation platform, with participation from Dragoneer Investment Group, Fidelity Investments, General Catalyst, Generation Investment Management, and T. Rowe Price; Gusto has now raised a total of US$516 million.
- Tecent Holdings took a US$130 million corporate minority stake in Policy Bazaar, an Indian comparison website.
- A US$100 million Series D investment in Hippo, an home insurance company; the company has now raised US$209 million.

The remaining US$40+ million transactions were:

- Sumitomo Life has taken a US$90 million corporate minority stake in Singapore Life, a life insurance company.
- Ethos Technologies, a predictive analytics and data technology for life insurance policies, raised US$60 million in a Series C round, with Accel, Google Ventures, and Sequoia Capital participating. This takes its total funding to US$107 million.
- SmartHR, a personnel management platform, raised US$50.98 million in a Series C round. This brings its total funding to US$75 million.
- BriteCore has received US$47.5 million in growth equity from Radian Capital, Warburg Pincus and WCF Mutual Insurance.

The aforementioned US$40 million+ deals were split evenly across P&C and L&H-focused start-ups.

Strategic tech investments by (re)insurers grew to a new quarterly record, after reaching a record high last quarter.

Q3 2019 recorded 43 investments into private tech companies by (re)insurers, the highest quarterly total.

- U.S.-based technology firms remain the number one target with 37% of (re)insurer investments, but this is down up 27 percentage points from Q2 2019.
- U.K.-based firms received 12% of re(insurer) investments this quarter. Other dominant countries were Germany, with 9% of deals, and France, Singapore and Switzerland who all received 7% of deals.
- 35% of deals were in the Seed and Series A funding stages, which is up two-percentage points from Q2 2019.

(Re)insurer partnerships matched Q2 2019, with 19 partnerships.
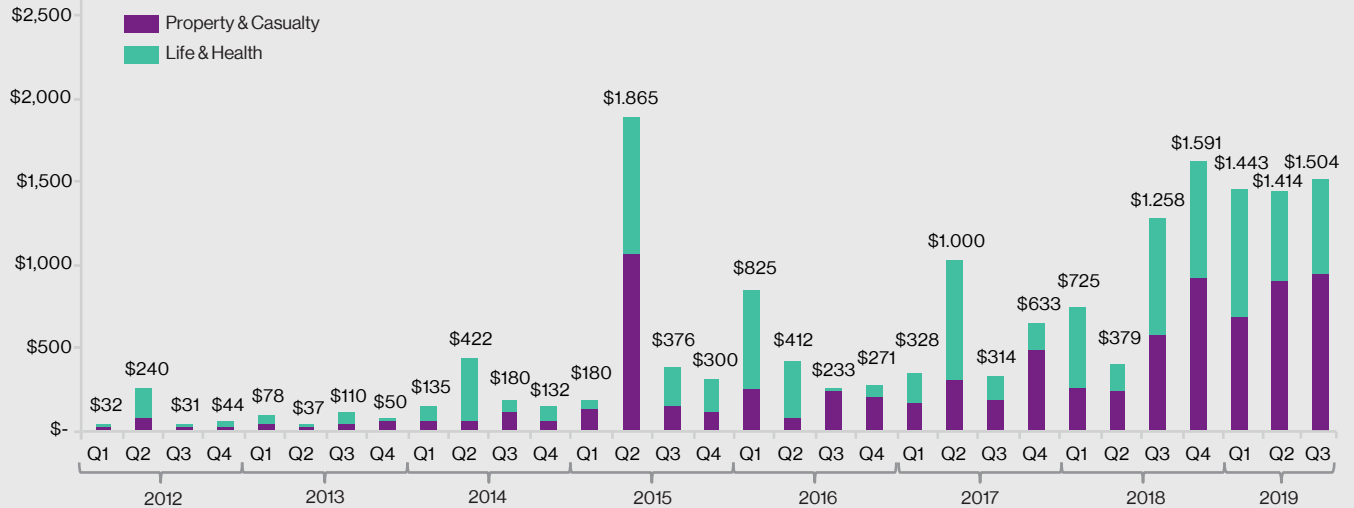
Select partnerships included:

- Nationwide has partnered with Bold Penguin, to help speed up the company's product underwriting for commercial lines property/casualty agents.
- Grab, a Southeast Asian-based rideshare firm, and NTUC Income have launched a microinsurance product to provide Grab driver-partners with critical illness protection services.
- Vouch launched its proprietary insurance products and risk assessment tools designed specifically for high-growth companies backed by Munich Re.
- Ageas UK and SightCall, an AR-powered visual support technology, have partnered to optimize Ageas' claims journey with real-time video communication.
- USAA, in collaboration with Google Cloud, is leveraging machine learning (ML) to speed up the auto claims process, by obtaining near-real-time damage estimates from digital images.

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InsurTech by the numbers

Quarterly InsurTech funding volume – all stages
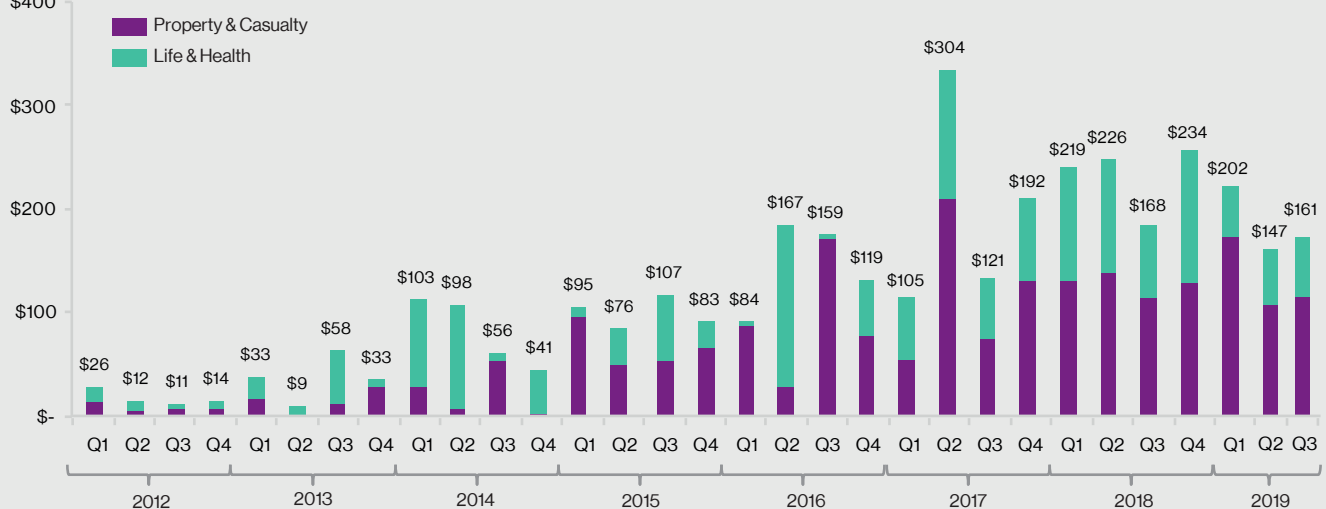
($ in millions)

Legend:
- Property & Casualty
- Life & Health

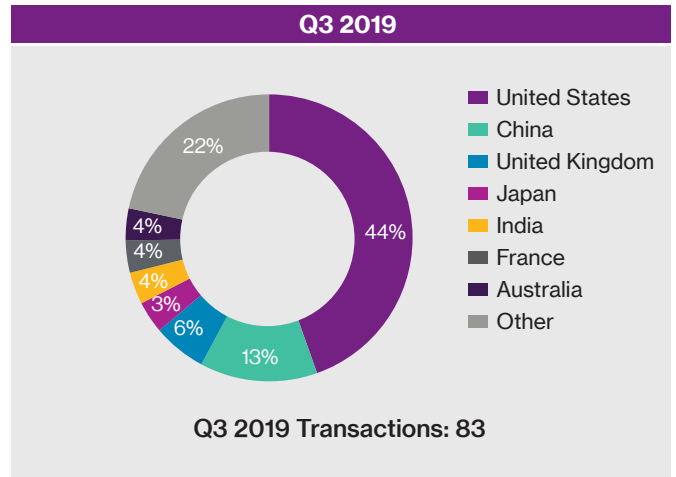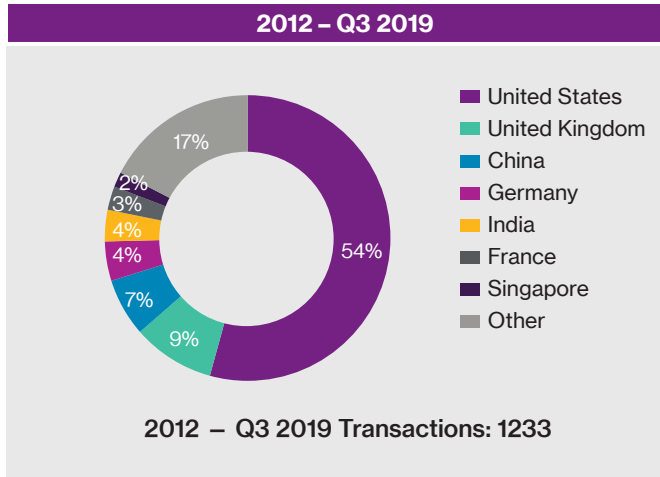| Deal Count																														
	2012				2013				2014				2015				2016				2017				2018				2019		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
P&C:	5	3	4	4	5	4	12	9	10	7	16	8	17	13	16	21	44	18	33	29	26	37	29	45	45	46	40	41	57	49	52
L&H:	8	6	7	9	15	8	9	4	9	15	14	15	11	19	15	20	16	17	6	13	17	32	21	11	23	27	17	23	30	20	31

Quarterly InsurTech funding volume – early stage

($ in millions)

Legend:
- Property & Casualty
- Life & Health

Deal Count																														
	2012				2013				2014				2015				2016				2017				2018				2019		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
P&C:	4	1	4	4	4	2	6	6	5	3	10	6	13	7	9	16	35	9	25	21	17	25	21	24	33	30	22	25	36	27	35
L&H:	6	3	6	6	8	4	5	4	6	8	11	8	5	9	11	16	6	10	3	10	12	20	13	7	14	21	11	15	20	12	19

The Data Center

InsurTech by the numbers

Quarterly InsurTech transactions by target country

2012 – Q3 2019

United States 54%
United Kingdom 9%
China 7%
Germany 4%
India 4%
France 3%
Singapore 2%
Other 17%

2012 — Q3 2019 Transactions: 1233

Q3 2019

United States 44%
China 13%
United Kingdom 6%
Japan 3%
India 4%
France 4%
Australia 4%
Other 22%

Q3 2019 Transactions: 83

Quarterly InsurTech transactions by investment stage

2012 – Q3 2019

Seed/Angel 41%
Series A 23%
Series B 13%
Series C 5%
Series D 2%
Series E+ 3%
Other 13%

2012 — Q3 2019 Transactions: 1233

Q3 2019

Seed/Angel 46%
Series A 19%
Series B 15%
Series C 5%
Series D 2%
Series E+ 2%
Other 11%

Q3 2019 Transactions: 83

P&C InsurTech transactions by subsector

2012 – Q3 2019	Q3 2019

B2B 41%
Carrier 5%
Distribution 54%

B2B 50%
Carrier 2%
Distribution 48%

Carrier B2B Distribution

2012 – Q3 2019 P&C Transactions: 745

Q3 2019 P&C Transactions: 52

L&H InsurTech transactions by subsector

2012 – Q3 2019	Q3 2019

B2B 42%
Carrier 9%
Distribution 49%

B2B 42%
Carrier 3%
Distribution 55%

Carrier B2B Distribution

2012 – Q3 2019 L&H Transactions: 488

Q3 2019 L&H Transactions: 31

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Q3 2019 InsurTech transactions – P&C

Date	Company	Funding ($M)		Investor(s)	Description
		Round	Total		
01/07/2019	QBTech	--	--	• BlueRun Ventures • TechCrunch Shenzhen	• QBTech develops an insurance robot that provides smart customer service, smart sale, smart voice chat, smart underwriting, and more.
02/07/2019	RenewBuy	19	29.2	• Amicus Capital Partners • IIFL AMC • Lok Capital • Mount Nathan Advisors	• RenewBuy is an online platform for auto insurance that is powered by proprietary technology whose algorithm seeks to find the lowest premiums across insurers and shows customized results.
03/07/2019	Lovys	3.7	3.82	• MAIF Avenir • Plug and Play Accelerator • Portugal Ventures • Techstars	• Lovys is an aggregated monthly subscription service for all of a user's insurance needs.
05/07/2019	Saphron	--	1	• CARD MRI • Sage Venture Partners • Talino Venture Labs	• Saphron offers a financial service platform to make insurance accessible in Southeast Asia.
15/07/2019	BlockClaim	0.12	0.75	• Alan Armitage • Amadeus Capital Partners • MetLife Digital Accelerator • Ninety Consulting • Pragmatica • Toby Clarke	• BlockClaim has developed an advanced claims and fraud management plug-in for the insurance industry. Leveraging the power of artificial intelligence and blockchain, it operates a light-touch, nonintrusive solution that enhances insurer data, offers insights on fraud suspicions and automates claim processes from the initial receipt of claim right through to the final settlement, without disturbing existing workflows.
15/07/2019	BriteCore	47.5	70.5	• Radian Capital • Warburg Pincus • WCF Mutual Insurance	• BriteCore is a cloud-based insurance core software platform offering end-to-end capabilities, including policy administration, claims management, underwriting rules and rating, agent quoting and inquiry, contact management, billing, imaging, printing, data warehousing, and reporting.
15/07/2019	Kover.ai	0.12	0.12	• MetLife Digital Accelerator	• Kover.ai creates autonomous insurance that runs at near-zero cost.
15/07/2019	RiskGenius	--	8.04	• Flyover Capital • FM Global • Hearst Ventures • Hudson Structured Capital Management • Mid-America Angels • Plug and Play Accelerator • QBE Ventures • Undisclosed Angel Investors • Undisclosed Investors	• The RiskGenius Platform applies artificial intelligence to insurance policies. Its customers leverage custom algorithms and workflow modules to better understand policy language and create more efficient underwriting workflows.
23/07/2019	Cove	1.33	1.33	• Greenlight Re Innovations	• Cove, a personal lines digital managing general agent, allows consumers to easily purchase insurance products via mobile or desktop. It has a restructured and user-friendly interface that makes the process of buying insurance simpler and affordable.
23/07/2019	Covela	0.15	0.15	• Nilo Ventures • Y Combinator	• Covela is a digital insurance agent for companies. Covela offers free advice through the platform so that companies can quote, compare, hire and manage their insurance quickly and easily.
24/07/2019	Coverfox	5.89	49.49	• Accel • Aegon • Catamaran Ventures • InnoVen Capital • International Finance Corporation • SAIF Partners India • Transamerica	• Coverfox provides a smarter way for people to buy and manage their insurance. It offers products online for Indian customers across categories like Health, Car, Life, Travel and Home Insurance, featuring top insurance brands in India.

Note: Blue font denotes current round investors.

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Q3 2019 InsurTech transactions – P&C

Date	Company	Funding ($M)		Investor(s)	Description
		Round	**Total**		
24/07/2019	Hippo Analytics	100	209	• Bond • Christopher Hill • Comcast Ventures • Felicis Ventures • Fifth Wall Ventures • GGV Capital • Hillhouse Capital Management • Horizons Ventures • ICONIQ Capital • Jacob Gibson • Josh Stench • Lennar • Louis Beryl • Mark Lefanowicz • Matt Humphrey • Michael Ovitz • Moderne Ventures • Pete Flint • Pipeline Capital Partners • Plug and Play Ventures • Propel Venture Partners • Ramtin Naimi • RPM Ventures • Sinai Ventures • Soo Boon Koh • Standard Industries • Warren Hogarth • Zeev Ventures	• Hippo offers intuitive and proactive home insurance by using data, like municipal building records, and technology, such as satellite imagery and smart home devices, to streamline the quoting and on-boarding experience, for such products as protection for possessions like appliances, consumer electronics and home offices.
26/07/2019	Mobile Garantie	--	--	• Helvetia Venture Fund	• Mobile Garantie is a specialist for warranty and repair costs insurance in the vehicle sector.
26/07/2019	Pact Insurance	7.38	7.38	• Maniv Mobility	• Pact is an instant and affordable car insurance provider.
06/08/2019	CompareAsiaGroup	20	110	• ACE & Company • Alibaba Entrepreneurs Fund • Alibaba Group • Experian • Experian Ventures • Gobi Partners • Goldman Sachs Investment Partners • H&Q Asia Pacific • International Finance Corporation • Jardine Matheson • Mark Pincus • Nova Founders Capital • Owen Van Natta • Route 66 Ventures • SBI Group	• CompareAsiaGroup is a comparison platform in Asia, committed to finding consumers the right financial products, helping save time and money. The company helps consumers save time and money by offering a free and easy online market comparison of banking and insurance products, as well as broadband and mobile plans, etc. Providers benefit from lower cost of acquisitions, higher conversion rates and unlimited reach to consumers through the Internet. • Under the CompareAsiaGroup umbrella are several brands, each localized for their respective markets: MoneyHero in Hong Kong and Vietnam, CompareHero in Malaysia, Money101 in Taiwan, MoneyGuru in Thailand, SingSaver in Singapore, MoneyMax in the Philippines, and HaloMoney in Indonesia.
07/08/2019	Vouch Insurance Services	0.15	24.65	• 500 Startups • Index Ventures • Ribbit Capital • Silicon Valley Bank • Y Combinator	• Vouch Insurance Services offers start-ups with the technology, advice and risk-mitigating tools they need to thrive. The company offers an insurance product that integrates with business tools.
07/08/2019	WeGroup	1.68	3.67	• Business Angels Network Flanders • imec.istart • KBC Bank • PMV • Poland Prize • Spreds • Undisclosed Investors • VLAIO	• WeGroup is a Belgian InsurTech start-up that helps insurance providers all over the world to better connect with their digital customers.

Note: Blue font denotes current round investors.

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Q3 2019 InsurTech transactions – P&C

Date	Company	Funding ($M)		Investor(s)	Description
		Round	Total		
09/08/2019	handdii	1.02	1.04	• Charles Robinson • Greenlight Re Innovations • Hartford InsurTech Hub • John McBain • Scale Investors • Undisclosed Investors	• handdii, based in Australia, is a digital platform that automates the property insurance claim process from FNOL through to claim finalization.
09/08/2019	Vouch Insurance Services	24.5	24.65	• 500 Startups • Index Ventures • Ribbit Capital • Silicon Valley Bank • Y Combinator	• Vouch Insurance Services offers start-ups with the technology, advice, and risk-mitigating tools they need to thrive. The company offers an insurance product that integrates with business tools.
15/08/2019	AgencyKPI	3	3	• 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.
15/08/2019	DealerPolicy	16	16	• MTech Capital	• 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.
16/08/2019	Jones	4.98	7.93	• 500 Accelerator • 500 Startups • Ground Up Ventures • Hetz Ventures • JLL Spark • MetaProp	• Jones automates the insurance compliance process and provides contractors with Pay-As-You-Go insurance so they can comply on the spot. The company is helping independent contractors across the U.S. to overcome the liability insurance hurdle, bid for any project and cut their business expenses.
19/08/2019	Root Insurance	350	614	• Coatue Management • Drive Capital • DST Global • Redpoint Ventures • Ribbit Capital • Scale Venture Partners • Silicon Valley Bank • Tiger Global Management • Undisclosed Investors	• Root Insurance is an insurance company that creates personalized products to give good drivers the protection they deserve. It incorporates individual driving behavior into every quote, thus calculating insurance premiums based on driver behavior.
20/08/2019	Soteris	0.15	0.15	• Y Combinator	• Soteris offers machine learning software for insurance pricing.
20/08/2019	Zendrive	37	52	• ACME Capital • Amitt Mahajan • BMW i Ventures • Expansion VC • First Round Capital • Fontinalis Partners • Hearst Ventures • IT-Farm Corporation • Jerry Yang • Lee Linden • Max Levchin • Max Ventilla • Nyca Partners • Othman Laraki • Sam Lessin • Sherpa Capital • SignalFire • Tad Montross • Thomvest Ventures • Tim Ferris • Trucks VC • XL Innovate	• Zendrive is using data and insights to empower drivers to make better driving-related decisions and to make time spent on the road a fun and rewarding experience.

Note: Blue font denotes current round investors.

The Data Center

Q3 2019 InsurTech transactions – P&C

Date	Company	Funding ($M)		Investor(s)	Description
		Round	Total		
21/08/2019	Archipelago Analytics	13	28.19	• Canaan Partners • Undisclosed Investors • XL Innovate	• Archipelago develops interconnected technologies to efficiently capture and move critical data through the insurance value chain, from client to broker to capacity provider.
26/08/2019	Kelly Klee	8.03	15.02	• David Fitzgerald • David Wong • Gary Tolman • Langdell Investments • Matt Coffin • Undisclosed Investors	• Kelly Klee is an insurance company that provides home, auto, and other types of insurance through an online platform.
27/08/2019	Hedvig	10.4	14.44	• Cherry Ventures • D-Ax • Nicklas Storakers • Obvious Ventures • Philian Invest • Sophia Bendz • Sven Hagstromer • Tacito Partners	• Hedvig is a Swedish homeowners insurance provider that offers a mobile app aimed at simplifying the way users report damage and receive compensation.
28/08/2019	Inshur	1.5	10.9	• MTech Capital • Munich Re Ventures • Undisclosed Investors • Viola Group	• Inshur provides auto insurance for TLC (New York) and private hire drivers (U.K.). The mobile app allows drivers to quote, purchase and service an insurance policy via mobile in minutes.
30/08/2019	Nouga	0.94	0.94	• Undisclosed Investors	• Nouga offers a digital multi-product insurance platform.
03/09/2019	DigiConstat	0.1	0.1	• Undisclosed Investors	• DigiConstat is a mobile platform to digitize insurance car claims and automate process using artificial intelligence.
04/09/2019	Zhongbaojinfu	--	--	• BlueRun Ventures • Hofan	• Zhongbaojinfu is an insurance service provider, offering product development and pricing support for insurance companies, multi-level sales support programs, product claims operations; and more.
06/09/2019	Conservis	6.36	37.01	• Cultivian Sandbox • Heartland Advisors • Middleland Capital • Pontifax AgTech • Undisclosed Investors	• Conservis helps clients reduce costs, grow revenues, and manage risk and eliminate compliance headaches. Conservis' Ag Services Group enables agricultural producers to automate record keeping, compliance activities and core farm operating processes to reduce costs, grow profits and better manage risk.
06/09/2019	Tremor Technologies	10	12	• Anthemis Group • Markel Ventures • Nephila Capital • Undisclosed Investors • W.R. Berkley	• Tremor Technologies offers a reinsurance trading platform to enable programmatic reinsurance transactions using Smart Exchange technology and a secure, private blockchain.
09/09/2019	Covela	--	0.15	• Nilo Ventures • Y Combinator	• Covela is a digital insurance agent for companies. Covela offers free advice through the platform so that companies can quote, compare, hire and manage their insurance quickly and easily.
10/09/2019	Bound	0.04	0.04	• Global Insurance Accelerator	• Bound is an embedded insurance platform that offers a direct-to-consumer distribution outreach expansion. The company enables insurance brokerages and agencies to offer their products via multiple publishers in context and at a point of sale.
10/09/2019	InDoW Technology	0.04	0.04	• Global Insurance Accelerator	• InDoW Technology is software designed for insurance compliance professionals and U.S. regulators that increases the productivity of in-house compliance teams and insurance department analysts.
10/09/2019	Kasko	0.04	0.04	• FinTech Hive Accelerator • FinTech Innovation Lab • Global Insurance Accelerator • InsurLab Germany Accelerator • OTP Startup Program	• Kasko develops insurance products and cross-selling solutions for digital businesses.

Note: Blue font denotes current round investors.

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Q3 2019 InsurTech transactions – P&C

Date	Company	Funding ($M)		Investor(s)	Description
		Round	Total		
10/09/2019	LeO:	1.6	1.6	▪ Undisclosed Investors	▪ LeO is a personable 24/7 customer service solution for the insurance industry powered by AI. LeO helps agents, brokers, and insurance carriers simplify the way they interact with consumers. With LeO's AI algorithms, users can automate time-consuming and paper-heavy processes, and provide data-driven insights about their customers.
10/09/2019	Relativity6	0.04	1.19	▪ Global Insurance Accelerator ▪ MassChallenge ▪ OnRamp Insurance Accelerator ▪ Plug and Play Ventures ▪ Undisclosed Investors	▪ Relativity6 is an analytics company that uses artificial intelligence to help insurance organizations retain customers.
16/09/2019	Joonko	11	11	▪ Ping An Ventures ▪ Raisin	▪ Joonko is a digital financial portal that enables consumers to find the financial and insurance products that match their needs.
17/09/2019	Broker Buddha	4.5	4.5	▪ Plug and Play Ventures ▪ Vertex Ventures	▪ Broker Buddha's online submission platform converts static PDF insurance applications into interactive online smart forms. New prospects can quickly complete applications online through the agency website, while returning clients can update forms pre-filled with the prior year's info, and sign electronically online.
19/09/2019	Coterie Applications	--	2.26	▪ Greenlight Re Innovations ▪ Undisclosed Investors	▪ Coterie offers API-based commercial insurance that aims to make buying, changing, and renewing insurance easy.
19/09/2019	Insurmi	1	1.12	▪ Coplex ▪ Global Insurance Accelerator ▪ Plug and Play Accelerator ▪ Undisclosed Angel Investors ▪ Undisclosed Investors	▪ Insurmi is an AI-driven, life insurance application that helps consumers easily calculate coverage needs and compare quotes from the nation's top insurers.
20/09/2019	LISA Insurtech	--	--	▪ Startupbootcamp FinTech	▪ LISA Insurtech provides automated insurance claims and settlement systems.
21/09/2019	PolicyBazaar	130	428.78	▪ ABG Capital ▪ Chiratae Ventures ▪ Info Edge ▪ Intel Capital ▪ Inventus Capital Partners ▪ MakeSense Technologies ▪ PremjiInvest ▪ Ribbit Capital ▪ SoftBank Group ▪ Steadview Capital ▪ Tencent Holdings ▪ Tiger Global Management ▪ True North ▪ Undisclosed Investors ▪ Wellington Management	▪ PolicyBazaar helps users compare financial products like life and general insurance, loans, and credit cards. To enable easy and sensible comparison, the company has partnered with financial institutions disbursing loans and selling insurance in India. PolicyBazaar helps get free insurance quotes, and users can compare plans based on multiple features.
23/09/2019	Bold Penguin	32	32	▪ Guggenheim Partners ▪ Hudson Structured Capital Management ▪ Lightstone Ventures ▪ Lockton ▪ Pivot Investment Partners ▪ Plug and Play Accelerator	▪ Bold Penguin offers a marketplace for commercial insurance exchange that connects customers, agents, and carriers.
24/09/2019	Cowbell Cyber	3.3	3.34	▪ Global Insurance Accelerator ▪ Holmes Murphy ▪ ManchesterStory Group ▪ Tri-Valley Ventures	▪ Cowbell Cyber simplifies and expedites the process of obtaining accurate cyber insurance coverage for businesses by mapping insurable threats to the type of exposures.

Note: Blue font denotes current round investors.

The Data Center

Q3 2019 InsurTech transactions – P&C

Date	Company	Funding ($M)		Investor(s)	Description
		Round	Total		
24/09/2019	Everledger	20	30.53	▪ Accelerateur Allianz ▪ Barclays Accelerator ▪ BBVA Open Talent ▪ Bloomberg Beta ▪ Fenbushi Capital ▪ Fidelity Investments ▪ Future Perfect Ventures ▪ GMP Securities ▪ Graphene Ventures ▪ MasterCard Start Path ▪ Rakuten Ventures ▪ Tencent Holdings ▪ Vickers Venture Partners	▪ Everledger provides an immutable ledger for diamond identification and transaction verification for various stakeholders, from insurance companies to claimants and law enforcement agencies. The company provides new methods of financing and insuring diamonds, as well as combatting fraud, by providing an application for various stakeholders in the diamond pipeline.
24/09/2019	Insurely	0.38	0.38	▪ Elias Jacobso ▪ Robert Chirico Willstedt ▪ Undisclosed Angel Investors	▪ Insurely is a Swedish digital insurance platform on a mission to make insurance easier to understand and manage.
25/09/2019	CyberFortress	3	3	▪ Greycroft ▪ LiveOak Venture Partners ▪ Plug and Play Accelerator	▪ CyberFortress is a cyber-insurance company for small businesses.
25/09/2019	Arceo Labs	37	37	▪ CRV ▪ Founders Fund ▪ Lightspeed Venture Partners ▪ Plug and Play Ventures ▪ UL Ventures	▪ Arceo is using AI to leverage data for mitigating and transferring risk with better tools, speed, and force than the adversaries. Arceo's artificial intelligence-backed analytics unlock global data sources for insurers and others, to pinpoint vulnerabilities and drive down risk. Its ecosystem brings companies the information they need to illuminate cyber threats, implement rapid protection, and drive cyber resiliency.

Note: Blue font denotes current round investors.

The Data Center

Q3 2019 InsurTech transactions – L&H

Date	Company	Funding ($M)		Investor(s)	Description
		Round	**Total**		
01/07/2019	Singapore Life	90	232.3	▪ Aberdeen Standard Investments ▪ Aflac ▪ Chong Sing Holdings FinTech Group ▪ Ion Pacific ▪ IPGL ▪ Michael Spencer ▪ Standard Life Aberdeen ▪ Sumitomo Life	▪ Singapore Life is a life insurance company fully licensed by the Monetary Authority of Singapore. Singapore Life offers high net worth universal life solutions for those who prefer Singapore and the Singapore regulatory environment as a destination for their wealth and protection needs.
01/07/2019	Zipari	15	22.33	▪ Vertical Venture Partners	▪ Zipari develops solutions for carriers to engage with consumers. Powered by consumer analytics, Zipari's insurance-specific CRM and Consumer Experience Platform provide carriers with real-time insights into consumer behavior at every touchpoint.
02/07/2019	Battleface	--	--	▪ Greenlight Re Innovations	▪ 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.
07/07/2019	Aixuan Technology	2.9	2.9	▪ China Fellow Partners ▪ FreesFund ▪ Ligang Capital ▪ Wisdom Sports	▪ Aixuan Technology is a third-party technology platform that provides big data algorithm, actuarial model, prediction model, and more in the application of finance and insurance.
08/07/2019	Employment Hero	15	24.6	▪ AirTree Ventures ▪ AMP New Ventures ▪ OneVentures ▪ SEEK	▪ Employment Hero makes online human resources software for companies. The software combines functions like payroll, employee benefits and retirement, employment contracts, accounting, and more on a single web app. The company also offers employees a marketplace for services like health and insurance, mobile phone plans, gym membership discounts, etc.
08/07/2019	Memori	--	0.1	▪ 113 Venture ▪ Undisclosed Investors	▪ Memori is an all-in-one online platform to manage legacy, from the convenience of securing wills, insurance policies, and memorial services.
08/07/2019	Yuanxin Huibao	7.25	7.25	▪ Qiming Venture Partners ▪ Sequoia Capital China	▪ Yuanxin Huibao is a health insurance technology company that provides product pricing, risk management, user acquisition, and other solutions.
11/07/2019	Baofu Tongcheng	--	--	▪ Crystal Stream ▪ Hongdao Capital ▪ MindWorks Ventures	▪ Baofu Tongcheng, with the product, Quanchijian, is a dental health management and insurance company that provides insurance, finance, medical, and online and offline retail and operation systems and solutions.
22/07/2019	SmartHR	50.98	75.19	▪ ALL STAR SAAS FUND ▪ BEENEXT ▪ Coral Capital ▪ DG Incubation ▪ East Ventures ▪ Jun Nishikawa ▪ Kotaro Chiba ▪ Light Street Capital ▪ NISSEN ▪ Signifiant ▪ Tokio Marine Holdings ▪ Undisclosed Investors ▪ Undisclosed Venture Investors ▪ World Innovation Lab ▪ Yu Akasaka	▪ SmartHR is a crowdsourced personnel management platform. The company automates procedures related to social insurance and unemployment insurance. It was developed to free up managers or human resources representatives from tiresome and time-consuming personnel management.
22/07/2019	SmartHR	6.02	75.19	▪ ALL STAR SAAS FUND ▪ BEENEXT ▪ Coral Capital ▪ DG Incubation ▪ East Ventures ▪ Jun Nishikawa ▪ Kotaro Chiba ▪ Light Street Capital ▪ NISSEN ▪ Signifiant ▪ Tokio Marine Holdings ▪ Undisclosed Investors ▪ Undisclosed Venture Investors ▪ World Innovation Lab ▪ Yu Akasaka	▪ SmartHR is a crowdsourced personnel management platform. The company automates procedures related to social insurance and unemployment insurance. It was developed to free up managers or human resources representatives from tiresome and time-consuming personnel management.

Note: Blue font denotes current round investors.

The Data Center

Q3 2019 InsurTech transactions – L&H

| Date | Company | Funding ($M) | | Investor(s) | Description |
		Round	Total		
24/07/2019	Gusto	200	516.12	• 137 Ventures • A-Grade • Aaron Levie • Aaron Patzer • Adam Nash • Alexis Ohanian • Brainchild Holdings • capitalG • Charlie Cheever • Clara Shih • Cota Capital • Data Collective • Dave Goldberg • David Sacks • Dharmesh Shah • Dragoneer Investment Group • Drew Houston • Ed Baker • Elad Gil • Emergence Capital Partners • Fidelity Investments • Gail Goodman • General Catalyst • Generation Investment Management • Google Ventures • Jared Leto • Jawed Karim • Jeremy Stoppelman • Jerry Yang • John Suh • Josh Silverman • Justin Rosenstein • Karen Mills • Kevin Hartz • Kevin Systrom • Kleiner Perkins Caufield & Byers • Kris DugganLarry Augustin • Marco Zappacosta • Matt Mullenweg • Matt Rogers • Max Levchin • MSD Capital • Obvious Ventures • Patrick Collison • Pear • Phil Libin • Ribbit Capital • Rothenberg Ventures • Ryan Holmes • Salesforce Ventures • Sherpalo Ventures • Signatures Capital • Slow Ventures • Steve Loughlin • T. Rowe Price • Tien Tzuo • Tobias Lutke • Trip Adler • Troy Carter • WME Ventures • Y Combinator	• Gusto is an online platform that consolidates a company's payroll system, benefits information, and HR in one place.
06/08/2019	BeneFix	--	1.89	• Ben Franklin Technology Partners of Central & Northern PA • MidCap Advisors • Undisclosed Investors	• BeneFix is a managed marketplace that automates and optimizes marketing, sales, onboarding, enrollment, ben-admin and servicing.

Note: Blue font denotes current round investors.

The Data Center

Q3 2019 InsurTech transactions – L&H

Date	Company	Funding ($M)		Investor(s)	Description
		Round	Total		
06/08/2019	Sidecar Health	18	18	• GreatPoint Ventures • Morpheus Ventures	• Sidecar Health provides personalized and affordable health insurance for members. Members can see any provider, costs are transparent, and plans are cheaper than comparable ACA plans.
09/08/2019	Kakbima	0.03	0.03	• The Baobab Network	• Kakbima is a digital insurance manager that tracks all of a users insurance and micro-insurance policies, claims and premiums simplifying access to insurance information digitally, anywhere and anytime.
09/08/2019	Lumary	1.36	1.36	• Equity Venture Partners	• Lumary develops software to manage workflow between providers, clients and others in the National Disability Insurance Scheme.
15/08/2019	Ginger	1.3	1.3	• Undisclosed Investors	• Ginger's digital platform offers personalized travel insurance solutions for corporate and personal travel.
15/08/2019	Patch	6.28	8.83	• Healthy Ventures • KEC Ventures	• Patch provides real-time price transparency and streamlined insurance benefit processing for the purchase of health care services.
16/08/2019	Xiaobangtouzi	28.36	28.36	• BlueRun Ventures • Reinsurance Group of America • Sequoia Capital China • Tencent Holdings	• Xiaobangtouzi is a wealth management consulting service provider for families, whose offerings include insurance planning and investment management.
22/08/2019	The Carevoice	10	12.2	• Artesian Capital Management • Chinaccelerator • DNA Capital • Haitao Capital • LUN Partners Capital • SOSV • Undisclosed Investors	• The Carevoice is a health InsurTech platform bringing extensive health care experience to the communities in China, especially insurance members and employees. The company provides insurers with SaaS membership services solutions to improve customer engagement by granting insurees a VIP access to The CareVoice social independent health care platform.
27/08/2019	Ethos Technologies	60	106.5	• Accel • ARRIVE • Downey Ventures • Google Ventures • Kevin Durant • Sequoia Capital • Shawn Carter • Silicon Valley Bank • Smith Family Circle • Stanford University • Thirty Five Ventures	• Ethos predictive analytics and data technology to provide life insurance policies. The application process takes minutes; there are no medical exams for most applicants, and no commissioned agents.
29/08/2019	Nuanwa Technology	--	--	• Kuanping Capital • Sequoia Capital China	• Nuanwa Technology, incubated by ZhongAn Insurance, is a health insurance technology company that provides health insurance product customization, risk management, claim service, system service, and other solutions to insurance companies and IoT platforms.
04/09/2019	Axieme	0.55	1.24	• Banco BPM • Invitalia Ventures • Two Hundred	• Axieme is an Italian P2P insurance that provides the policyholder with a cash-back reimbursement if there is no claim.
04/09/2019	Leyue Health	16.07	17.68	• BlueFocus Communication Group • CAS Investment Management • CASH Capital Investment Management • Cowin Capital • Green Pine Capital Partners • Opsmart Technology	• Leyue Health provides a business health insurance payment platform.
10/09/2019	Avolanta	0.04	2.54	• Global Insurance Accelerator • Undisclosed Investors	• Avolanta specializes in the multiline insurance industry and is based out of South Carolina.

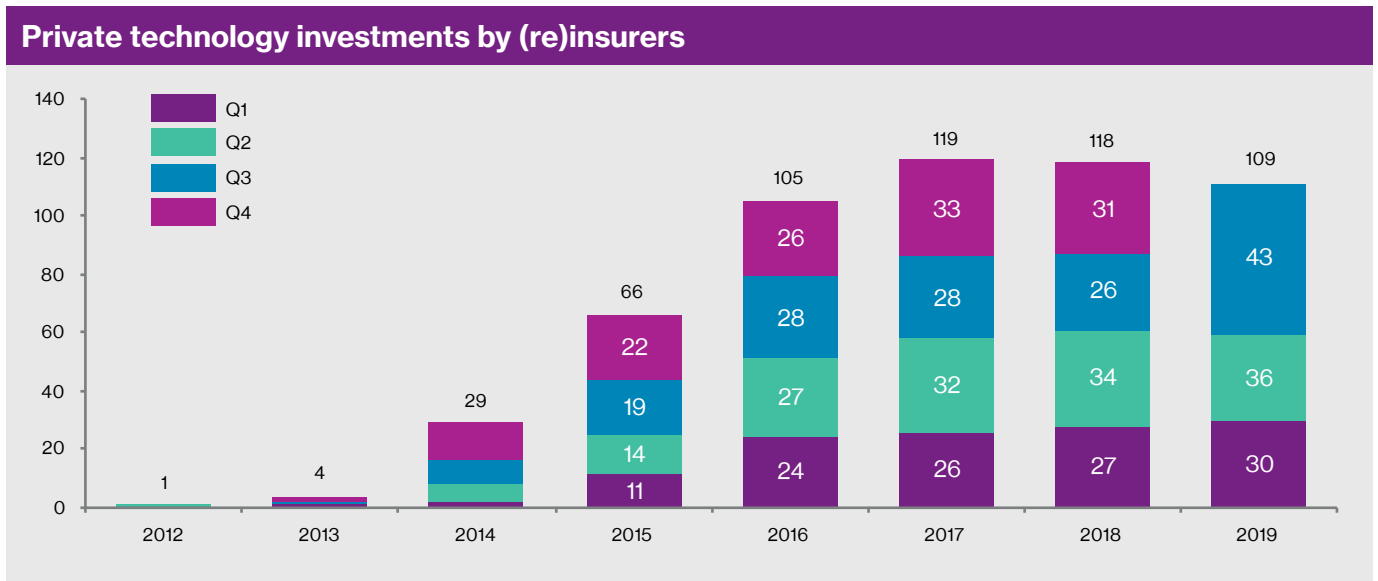Note: Blue font denotes current round investors.

The Data Center

Q3 2019 InsurTech transactions – L&H

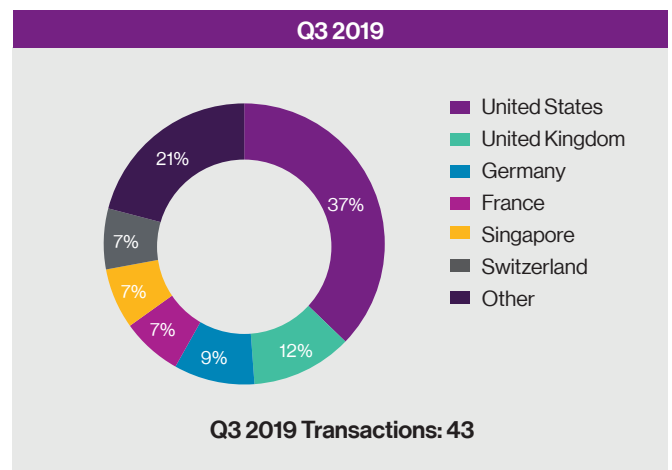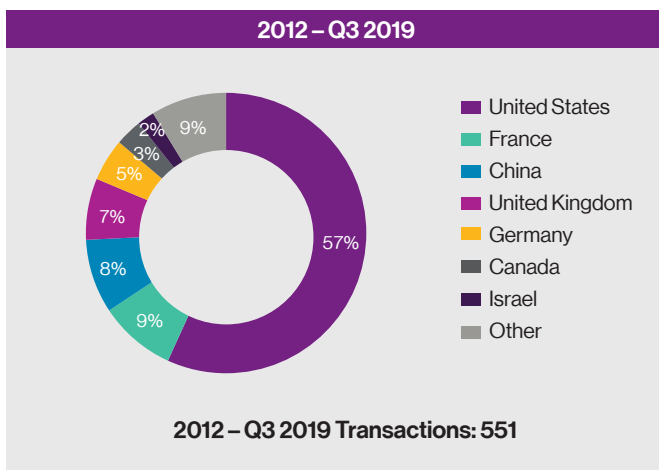| Date	Company	Funding ($M)		Investor(s)	Description
		Round	Total		
10/09/2019	Breathe Life	0.04	3.44	• Diagram Ventures • Global Insurance Accelerator • Real Ventures • Undisclosed Angel Investors	• Breathe Life is a digital transformation platform that delivers a customer-centric experience with tools and analytics that helps carriers and individual insurance distribution organizations reach more potential consumers and sell more policies.
16/09/2019	PerfectQuote	0.8	0.8	• Quake Capital • Sidekick Fund	• PerfectQuote makes software for insurance brokers to compare employee benefit plan options for clients.
17/09/2019	Duobaoyu Insurance	28.19	28.19	• Bertelsmann Asia Investments • Lightspeed China Partners • PPDai Group • Yunfeng Capital • ZhenFund	• Duobaoyu Insurance provides insurance knowledge and consulting services.
18/09/2019	Frich	--	--	• Plug and Play Japan • Plug and Play Ventures • VOYAGE Ventures	• Frich is a P2P insurance platform based in Japan.
19/09/2019	Hoggo	2.64	2.64	• Undisclosed Investors	• Hoggo is a digital insurance brokerage platform.
27/09/2019	DeadHappy	4.92	4.92	• e.ventures • Octopus Ventures	• DeadHappy is an InsurTech company that aims to remove the taboo surrounding death by offering more flexible life insurance policies.
27/09/2019	Mintbao	--	--	• Bertelsmann Asia Investments • Sequoia Capital China	• Mintbao is an AI-based personalized insurance recommendation platform, providing a robo-advisor solution to help families and individuals configure insurance packages.

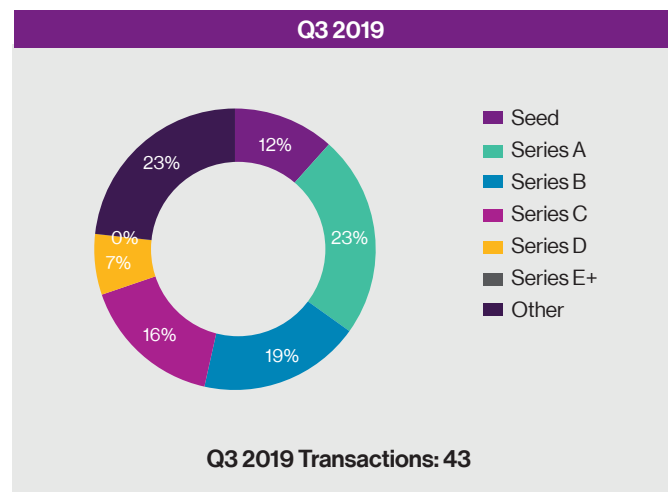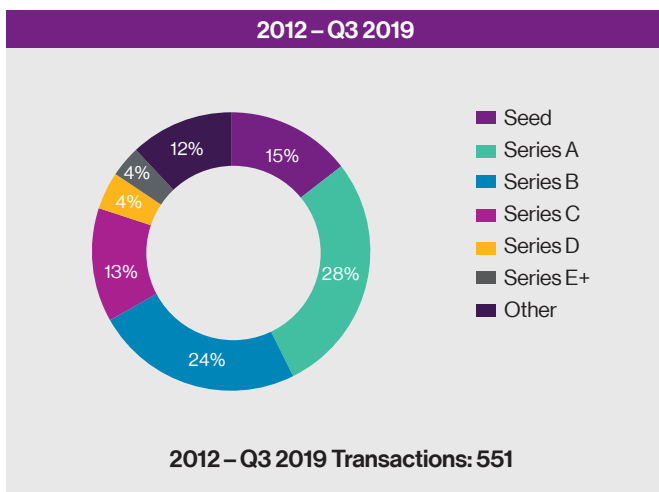Note: Blue font denotes current round investors.

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Private technology investments by (re)insurers

Private technology investments by (re)insurers

Stacked bar chart showing private technology investments by (re)insurers by quarter (Q1, Q2, Q3, Q4) from 2012 to 2019.

- 2012: 1
- 2013: 4
- 2014: 29
- 2015: 66 (Q1: 11, Q2: 14, Q3: 19, Q4: 22)
- 2016: 105 (Q1: 24, Q2: 27, Q3: 28, Q4: 26)
- 2017: 119 (Q1: 26, Q2: 32, Q3: 28, Q4: 33)
- 2018: 118 (Q1: 27, Q2: 34, Q3: 26, Q4: 31)
- 2019: 109 (Q1: 30, Q2: 36, Q3: 43)

Private technology investments by (re)insurers by target country

2012 – Q3 2019

- United States: 57%
- France: 9%
- China: 8%
- United Kingdom: 7%
- Germany: 5%
- Canada: 3%
- Israel: 2%
- Other: 9%

2012 – Q3 2019 Transactions: 551

Q3 2019

- United States: 37%
- United Kingdom: 12%
- Germany: 9%
- France: 7%
- Singapore: 7%
- Switzerland: 7%
- Other: 21%

Q3 2019 Transactions: 43

Private technology investments by (re)insurers by investment stage

2012 – Q3 2019

- Seed: 15%
- Series A: 28%
- Series B: 24%
- Series C: 13%
- Series D: 4%
- Series E+: 4%
- Other: 12%

2012 – Q3 2019 Transactions: 551

Q3 2019

- Seed: 12%
- Series A: 23%
- Series B: 19%
- Series C: 16%
- Series D: 7%
- Series E+: 0%
- Other: 23%

Q3 2019 Transactions: 43

The Data Center

Q3 2019 private technology investments by (re)insurers

Date	Company	Funding ($M)		(Re)insurer investor(s)	Description
		Round	Total		
01/07/2019	Singapore Life	90	232.3	▪ Sumitomo Life	▪ Singapore Life is a life insurance company fully licensed by the Monetary Authority of Singapore. Singapore Life offers high net worth universal life solutions for those who prefer Singapore and the Singapore regulatory environment as a destination for their wealth and protection needs.
02/07/2019	Pop Valet	2.9	4.33	▪ MAIF Avenir	▪ Pop Valet transports single-unit vehicles for the entire automotive industry, from the manufacturer to the after-sales professional, the renter or the dealer. With a network of valets in France, Pop Valet ensures, via in-house technology, responsiveness and quality of service that is not possible during transport by truck.
02/07/2019	Battleface	---	---	▪ Greenlight Re Innovations	▪ 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.
03/07/2019	Lovys	3.7	3.82	▪ MAIF Avenir	▪ Lovys is an aggregated monthly subscription service for all of a user's insurance needs.
03/07/2019	autoSense	---	---	▪ Zurich Insurance Group	▪ autoSense is a Zurich-based smart mobility company that has developed a connected vehicle application that allows users to turn their vehicle into a mobile WiFi hotspot, track vehicle location and check vehicle conditions and driving behavior.
08/07/2019	Homebell	---	23.24	▪ AXA Venture Partners	▪ Homebell offers an online marketplace for users to find home improvement services.
09/07/2019	Silenccio	---	---	▪ AXA Venture Partners	▪ Silenccio is an Internet protection service that monitors and alerts users proactively when it detects potential defamation and insults.
12/07/2019	iTutorGroup	---	315	▪ Ping An Insurance	▪ iTutorGroup is an online education platform and English language learning institution, serving students that range from global business professionals to young children. Founded in 2004, iTutorGroup has educated students in 40 countries, and has hosted more than 10 million classroom sessions through its products, including VIPABC, TutorABC, TutorABC Jr., and TutorMing.
16/07/2019	AppyParking	9.44	13.94	▪ Aviva Ventures ▪ Sumitomo Corporation	▪ AppyParking provides a kerbside management platform that ensures that standardized kerbside data can flow between local authorities and mobility operators.
18/07/2019	Arabesque	20	20	▪ Allianz X	▪ Arabesque offers an asset management service combining portfolio management technology with the value of the UN Global Compact, the Principles for Responsible Investments and balance sheet/business involvement screenings.
18/07/2019	N26	170	682.6	▪ Allianz X	▪ N26 is a mobile banking platform without a branch network that gives customers a solution to control their finances. Users are able to open an N26 account directly from their phone or computer in an easy, paperless, five-minute sign-up process.
22/07/2019	UVeye	31	35.5	▪ W.R. Berkley Corporation	▪ UVeye is building computer vision and machine learning technology to be used to help detect security threats by scanning the underside of passing vehicles.
23/07/2019	Cove	1.33	1.33	▪ Greenlight Re Innovations	▪ Cove, a personal lines digital managing general agent, allows consumers to easily purchase insurance products via mobile or desktop. It has a restructured and user-friendly interface that makes the process of buying insurance simpler and affordable.
24/07/2019	Coverfox	5.89	49.49	▪ Aegon ▪ Transamerica	▪ Coverfox provides a smarter way for people to buy and manage their insurance. It offers products online for Indian customers across categories like Health, Car, Life, Travel, and Home Insurance, featuring top insurance brands in India.
25/07/2019	HaloDoc	---	78	▪ Allianz X ▪ Prudential	▪ HaloDoc is a communication platform that instantly connects users to doctors, and offers the quick, safe and convenient delivery of medications, vitamins and supplements.
30/07/2019	Jobble	11	12.24	▪ AXA Venture Partners	▪ Jobble is an on-demand marketplace and management platform that connects gig economy workers in the United States seeking jobs with companies offering flexible work opportunities.
01/08/2019	Aspire Financial Technologies	32.5	41.62	▪ MassMutual Ventures	▪ Aspire Financial Technologies provides SMEs with business credit lines to solve their working capital needs. The company's goal is to provide business owners with fast and simple access to the funding they need to grow.

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Q3 2019 private technology investments by (re)insurers

| Date | Company | Funding ($M) | | (Re)insurer investor(s) | Description |
		Round	Total		
02/08/2019	Babylon Health	550	635	▪ Munich Re Ventures	▪ Babylon Health develops babylon, a digital health care application that enables users to talk to a doctor or GP within minutes and get medical advice via video consultations, phone calls or text messages.
09/08/2019	handdii	1.02	1.04	▪ Greenlight Re Innovations	▪ handdii, based in Australia, is a digital platform that automates the property insurance claim process from FNOL through to claim finalization.
14/08/2019	Aclarity	1	1	▪ MassMutual Ventures	▪ Aclarity is developing and commercializing miniaturized water treatment plants for homes and buildings to protect against growing water-quality issues and uncertainties. Automated by smart sensors, the patent-pending electrochemical water treatment system uses low levels of electricity to disinfect pathogens, precipitate metals and destroy toxic chemicals in water.
14/08/2019	Vermietet	14.5	19.44	▪ AXA ▪ Swiss Life	▪ Vermietet is a real estate management portal that supports owners in the administration and optimization of their properties. With a direct interface, the cloud solution provides full visibility overall revenue and expenses within the company's own real estate portfolio.
15/08/2019	Under Technologies	2.5	4.77	▪ Northwestern Mutual Future Ventures	▪ Under Technologies is a New York, NY-based stealth technology company.
16/08/2019	Xiaobangtouzi	28.36	28.36	▪ Reinsurance Group of America	▪ Xiaobangtouzi is a wealth management consulting service provider for families, whose offerings include insurance planning and investment management.
16/08/2019	99.co	15.2	25.26	▪ Allianz X	▪ 99.co is a map-based property search engine for housing renters, buyers and property agents that utilizes smart algorithms.
19/08/2019	Better.com	65	205	▪ Ping An Ventures	▪ Better.com is a direct lender dedicated to providing a fast, transparent digital mortgage experience backed by customer support. From offices in New York City, the company is using technology to change the way people finance their homes.
20/08/2019	H2O.ai	72.5	146.12	▪ Ping An Ventures	▪ H2O is an AI company that makes machine learning accessible to corporations and allows business users to extract insights from data, without needing expertise in deploying or tuning machine learning model, with key deployments in financial services, insurance and health care among other industries.
20/08/2019	Zendrive	37	52	▪ XL Innovate	▪ Zendrive is using data and insights to empower drivers to make better driving-related decisions and to make time spent on the road a fun and rewarding experience.
21/08/2019	Archipelago Analytics	13	28.19	▪ XL Innovate	▪ Archipelago develops interconnected technologies to efficiently capture and move critical data through the insurance value chain, from client to broker to capacity provider.
22/08/2019	B3i Services	---	16	▪ China Pacific Insurance	▪ B3i Services provides insurance solutions on a blockchain platform offering opportunities for efficiency, growth, and quality across the value chain to benefit all participants including end customers.
26/08/2019	Atonarp	33	57	▪ Northwestern Mutual Future Ventures	▪ Atonarp provides miniaturized Smart Spectrometer, a real-time molecular data analytic tool to be used in industrial gas process analytics applications in the energy, pharmaceutical, petrochemical and semiconductor industries.
27/08/2019	Homee	15	28.8	▪ Liberty Mutual Strategic Ventures ▪ State Farm Ventures ▪ The Hartford	▪ Homee is an on-demand property maintenance service that provides customers with instant access to electricians, plumbers, HVAC technicians and handymen from a mobile app.
30/08/2019	K4Connect	0.75	22.65	▪ AXA Venture Partners	▪ K4Connect is a technology integration company focusing on smart home and on-demand apps for senior-living facilities. Its software platform can integrate any number of disparate smart devices, systems and applications into a single responsive system.

The Data Center

Q3 2019 private technology investments by (re)insurers

| Date | Company | Funding ($M) | | (Re)insurer investor(s) | Description |
		Round	Total		
04/09/2019	EVEN Financial	25	49.94	▪ MassMutual Ventures	▪ EVEN Financial is a search, comparison and recommendation engine for financial services. EVEN provides essential infrastructure for financial services and channel partners, connecting consumers to personalized products, with a simple API.
04/09/2019	Neura	16	29.02	▪ AXA Venture Partners	▪ Neura enables brands to intelligently transform customer engagement by delivering behavioral attributes and real-time events to marketing campaigns based on each user's real-world behavior.
05/09/2019	Happy Money	70	391.13	▪ CMFG Ventures	▪ Happy Money creates financial products and services. HappyMoney aids members by helping users refinance high-interest credit card balances.
06/09/2019	Tremor Technologies	10	12	▪ Markel Ventures ▪ Nephila Capital ▪ W.R. Berkley	▪ Tremor Technologies offers a reinsurance trading platform to enable programmatic reinsurance transactions using Smart Exchange technology and a secure, private blockchain.
16/09/2019	Joonko	11	11	▪ Ping An Ventures	▪ Joonko is a digital financial portal that enables consumers to find the financial and insurance products that match their needs.
17/09/2019	Riverain Technologies	15	15	▪ Ping An Ventures	▪ Riverain Technologies provides health care artificial intelligence software tools used to efficiently detect diseases at its earliest stages.
19/09/2019	Coterie Applications	---	2.26	▪ Greenlight Re Innovations	▪ Coterie offers API-based commercial insurance that aims to make buying, changing and renewing insurance easy.
24/09/2019	Incepto Medical	6.17	6.57	▪ AXA Venture Partners	▪ Incepto Medical builds AI solutions to assist with radiology and diagnostic imaging.
24/09/2019	Fundbox	176	433.5	▪ Allianz X	▪ Fundbox provides revolving lines of credit for small businesses that are easy to use. The company leverages advanced insights to create previously unavailable financial options and straightforward, honest customer experience.
26/09/2019	MoneyFarm	44	122.28	▪ Allianz X	▪ MoneyFarm operates as an online personal banker offering a free portfolio of investments based on user's profile and goals. The company creates profiles based on a customer's investment target and risk propensity. A team continuously monitors the investment state and provides recommendations, if needed, to rebalance portfolio according to market trends.
30/09/2019	WHILL	---	77.25	▪ Tokio Marine Holdings	▪ WHILL is a personal mobility company specializing in manufacturing intelligent, customer-focused and aesthetically pleasing electric vehicles.

The Data Center

Q3 2019 strategic (re)insurer partnerships

Date	Company	(Re)insurer investor(s)	Description
03/07/2019	Trupo	▪ Colonial Life	▪ New York-based Trupo is offering three new insurance products – accident, dental, specified disease and cancer – through its online tool for freelance workers and all backed by Colonial Life.
09/07/2019	Bold Penguin	▪ Nationwide	▪ Nationwide has partnered with Bold Penguin, to help speed up the company's product underwriting for commercial lines property/casualty agents. ▪ Bold Penguin's platform offers real-time commercial risk analysis and rating.
17/07/2019	Hi Marley	▪ FedNat Home Insurance	▪ Florida-based FedNat has implemented Hi Marley's AI-enabled SMS texting platform to help evolve its claims process. ▪ Hi Marley enables its claims staff to communicate with insureds and the providers that are typically involved in a claims process, within a singular conversation.
23/07/2019	Cape Analytics	▪ CSAA	▪ CSAA Insurance Group has partnered with Cape Analytics, which provides advanced AI technology, to more quickly and inexpensively assess the condition of member homes. ▪ Cape Analytics holds a database of more than 70 million residential buildings in the U.S. and leverages geospatial imagery, computer vision and deep learning to provide timely and accurate property information.
24/07/2019	LifeYield	▪ Allianz Life	▪ LifeYield, a cloud-based solution that facilitates tax-smart, risk-smart management of an investor's entire household portfolio, has partnered with Allianz Life. ▪ This partnership will see Allianz Life's financial professional customers having access to LifeYield's Social Security Advantage solution.
01/08/2019	Grab	▪ NTUC Income	▪ Grab, a Southeast Asian-based rideshare firm and NTUC Income have launched a microinsurance product to provide Grab driver-partners with critical illness protection services.
27/08/2019	Duck Creek	▪ Liberty Mutual	▪ Liberty Mutual has partnered with Duck Creek Technologies, a technology firm, to develop a new workers compensation claims platform.
04/09/2019	Deposify	▪ Assurant	▪ Assurant, a global provider of housing and lifestyle solutions, has partnered with Deposify, a European-based company, to offer property managers a method for managing refundable cash security deposits.
10/09/2019	Pivot Health	▪ Cigna	▪ Pivot Health, HealthCare.com's InsurTech arm, launched a partnership with Cigna to market a new portfolio of short-term health insurance products. ▪ These will be delivered through the Cigna PPO network.
11/09/2019	Traveloka	▪ Astra Life	▪ Astra Life has launched an online life insurance product in Indonesia with Traveloka. ▪ Through the partnership, Astra Life has launched four life insurance packages, all of which can be purchased directly through the app: Life Basic package, Accident Basic package, Life and Accident Package, and Life and Accident Plus package. Users will be able to choose between six-month or one-year coverage period.
16/09/2019	Hover	▪ Travelers	▪ Travelers' is using Hover's technology to assist in assessing property damage. ▪ Hover can transform smartphone photos of any property into an accurate three-dimensional model, gathering precise measurements of a building's exterior, including its roof, siding and windows. This means policyholders can submit information to the claims professionals without organizing an onsite inspection.
17/09/2019	Vouch	▪ Munich Re	▪ Vouch launched its proprietary insurance products and risk assessment tools designed specifically for high-growth companies backed by Munich Re.
23/09/2019	Insuritas	▪ Hiscox	▪ Insuritas, in partnership with Hiscox Insurance, has launched iInsure. This product enables banks and credit unions to fully integrate insurance quote and buy capabilities into their high-usage digital banking platforms.
23/09/2019	Socotra	▪ Nationwide	▪ Nationwide has launched Spire, a digital insurance platform designed to be convenient and accessible from a mobile phone. ▪ This new offering is backed by Socotra, a cloud-based software company that Nationwide invested in early Q1, which provides the APIs that work as the operating system for Spire.
24/09/2019	Coronet	▪ AXA XL	▪ Coronet, a security-as-a-service powered by AI and cloud, has partnered with Slice, an on-demand insurance platform providing small to midsize businesses with on-demand, cyber insurance which is back by AXA XL.
25/09/2019	Amazon	▪ Nationwide	▪ Nationwide has announced that its services will be incorporated into Amazon Echo Auto devices. The Nationwide Alexa skill will allow drivers to connect to Nationwide's roadside assistance hotline and quickly check weather and roadside conditions. ▪ Amazon.com will include a link for users to sign up for Nationwide's insurance.
25/09/2019	SightCall	▪ Ageas	▪ Ageas UK and SightCall, an AR-powered visual support technology, have partnered to optimize Ageas' claims journey with real-time video communication. ▪ SightCall is a visual support technology that enables Ageas UK agents to use live video to perform claims assessments remotely.
25/09/2019	Google Cloud	▪ USAA	▪ USAA, in collaboration with Google Cloud, is leveraging machine learning to speed up the auto claims process, by obtaining near-real-time damage estimates from digital images.
26/09/2019	Branch	▪ SCOR	▪ SCOR, the French reinsurer, is providing paper to support bundled homeowners and auto policies underwritten by Branch.

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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