



Quarterly InsurTech Briefing Q1 2017

April 2017

Quarterly InsurTech Briefing

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Quarterly InsurTech Briefing



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Foreword: Why InsurTech? A Pressured Insurance Value Chain

InsurTech is a burgeoning phenomenon that is modernizing the insurance industry. It is disrupting the traditional value chain whereby insurers offer loss protection, and shifting the emphasis to risk mitigation. Incumbents face disintermediation as investors in search of higher yields pour money into insurance-linked instruments in the capital markets. And entrepreneurial businesses are targeting friction costs and inefficiencies within every aspect of the traditional value chain.

Arguably, insurers who stick too long with the old model will fade as premiums and their balance sheets shrink. Those who thrive will learn to ride the wave of disruption to capture new opportunities – although whether they will still be known as insurance companies remains to be seen; they might have to reinvent themselves entirely.

This is the background for Quarterly InsurTech Briefing – a collaboration between Willis Towers Watson Securities, Willis Re and CB Insights – that aims to help organizations navigate the changing industry and to disrupt rather than be disrupted. This first edition highlights:

Ways to Engage

Many market participants want to embrace the InsurTech revolution but continue to struggle with determining how to successfully monetize industry changes, at least in the short term. Should they invest in their own research resources and fund development of new technologies in-house or with partners outside of the insurance industry? Should they set up Venture Capital (VC) arms and build portfolios of promising start-ups with potential to change their core business or at least become successful financial investments? Or should they monitor the market looking for winning technologies that are already mature and pay up to incentivize owners to sell to a large incumbent corporation?

A venture capitalist rule of thumb states that six out of 10 VC backed investments go out of business, three will be sold at a moderate profit or break even, and one will return handsomely in an IPO or acquisition. If we overlay these expectations with the remote probability that an underlying technology will be relevant to the sponsor of the corporate VC fund, we can see how challenging it is to win as a corporate backed VC. But there are several examples of successful incumbents that have recently formed corporate venture arms and are actively evaluating InsurTech investment and other opportunities. In this report, we analyze incumbent InsurTech strategy by examining the corporate venture and partnership model of Munich Re – one of the most active strategic investors in the space.

Small Business Promise

The \$100 billion small business insurance sector is one of the most promising for disruption, as insurers attempt to navigate the complexity of automating underwriting processes to accommodate a broad range of business classes in a user friendly format and combat the inefficiency of processing small ticket premiums and claims.

While digital distribution platforms have achieved limited market penetration to date, industry research suggests that up to 25% of total small business insurance premium could be digitally underwritten by 2020 – a hypothesis supported by demographic trends and changing small business owner behaviors. Indeed, a number of independent platforms have successfully raised capital with the goal of accelerating small business insurance market disruption.

We examine the characteristics of the small business insurance market that make it susceptible to digital disruption, review recent carrier activity in the space and speak with executives from recently formed independent platforms to gain insight into different business models of SME insurance disruption.

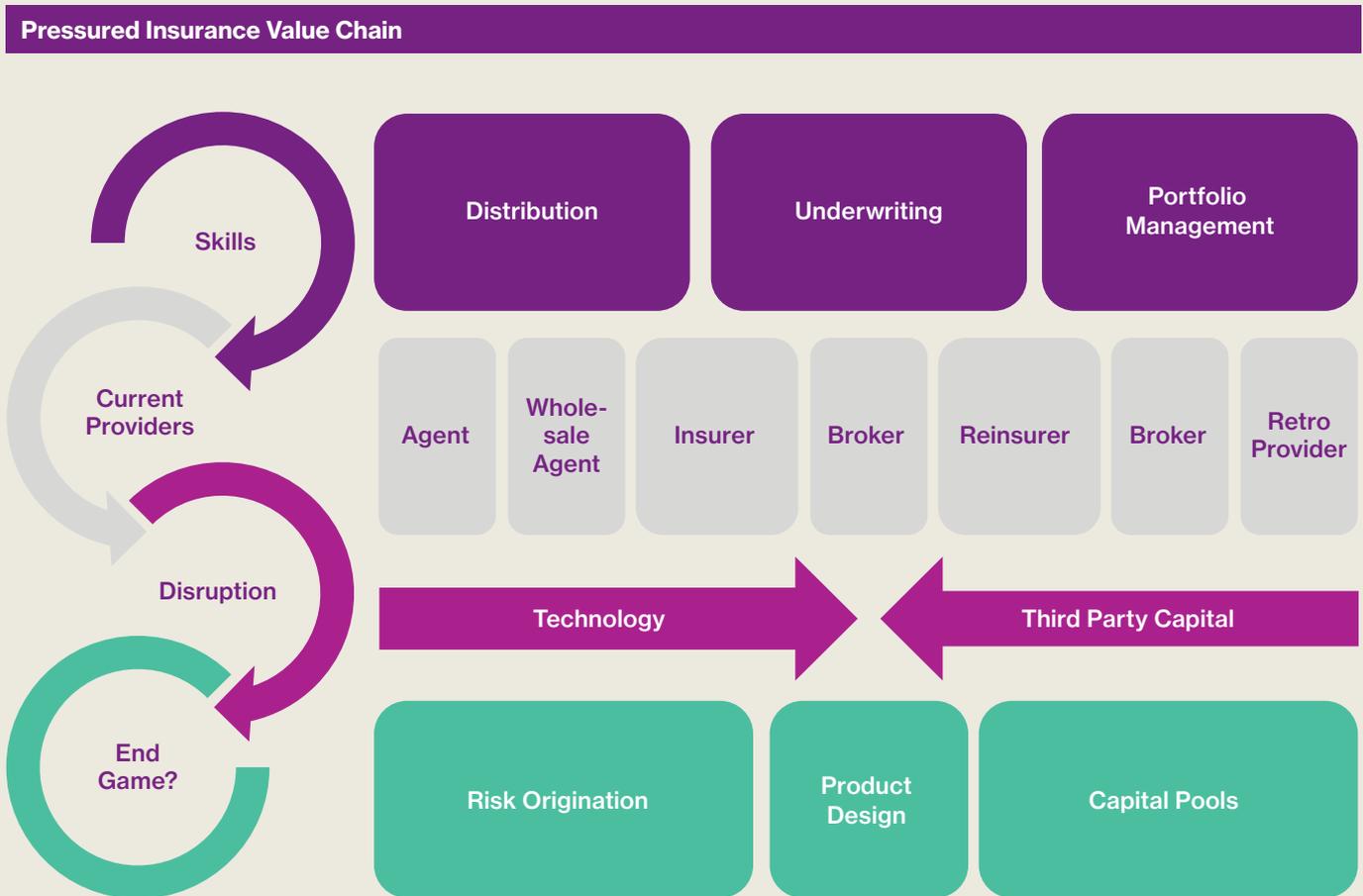
Amidst significantly elevated InsurTech investment activity from insurers, Travelers' £400 million acquisition of UK SME insurance broker Simply Business last month marked one of the largest investments to date, targeting the continued shift towards digital distribution in the small business insurance sector.

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New Tools of the Trade

InsurTech's rise means that there are an inordinate number of new tools and technologies with the potential to optimize existing business processes. Which products add sufficient value to warrant investment? We look into the 'hype cycle' of the InsurTech revolution, from early overinflated expectations to the productive applications and innovations that survive.

As part of Willis Towers Watson's ongoing analysis of trends and business opportunities that are relevant to our clients, we hope you will find the Quarterly InsurTech Briefing useful. As ever, we welcome your feedback and suggestions.



“Arguably, insurers who stick too long with the old model will fade as premiums and their balance sheets shrink. Those who thrive will learn to ride the wave of disruption to capture new opportunities – although whether they will still be known as insurance companies remains to be seen; they might have to reinvent themselves entirely.”

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Incumbent InsurTech Strategy: Munich Re Case Study

Engaging Customers in the Digital Generation

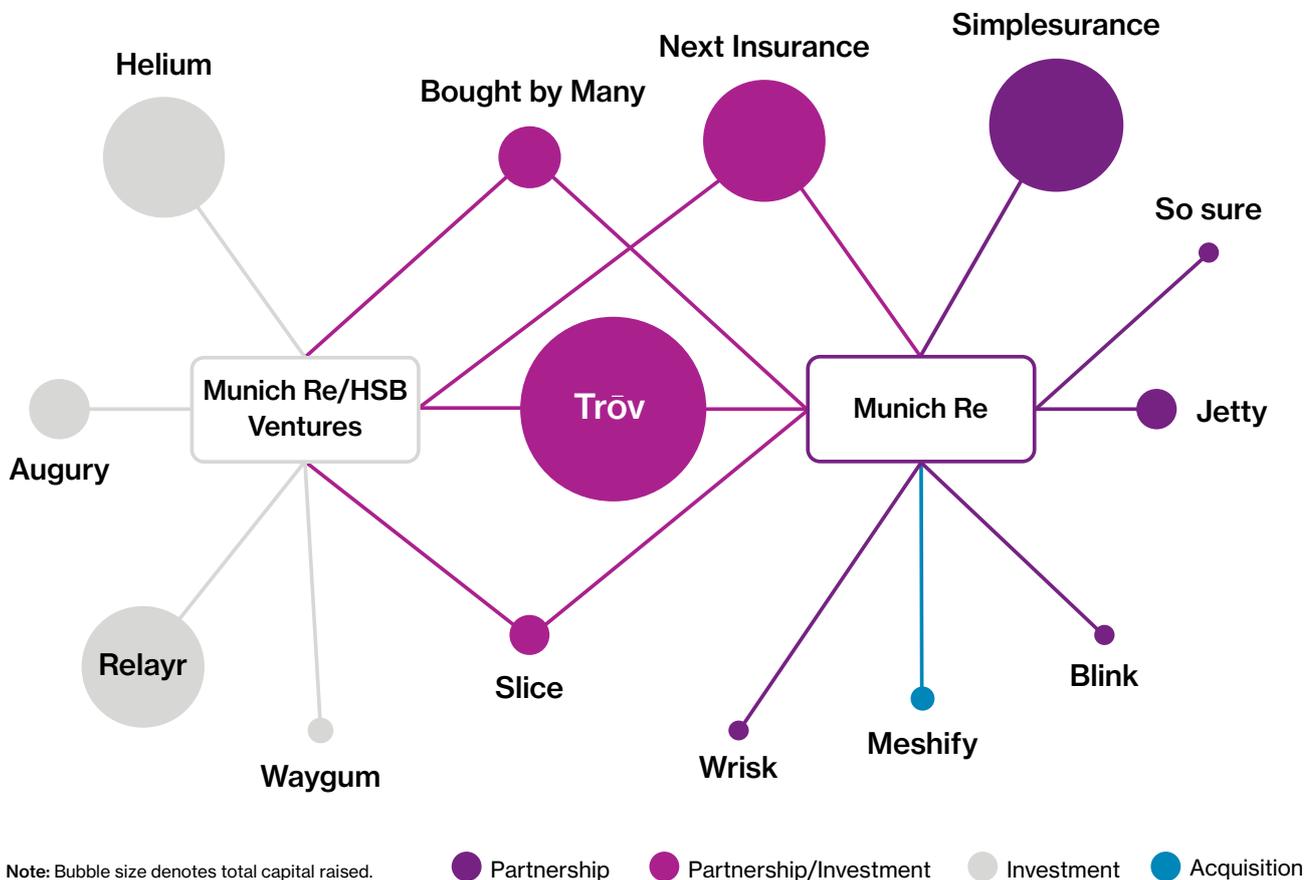
Digital Partners, Munich Re’s global venture established in May 2016, is focused on providing capacity, product development, data analytics, API-enabled back office technology and venture capital financing (through Munich Re’s corporate venture capital arm, Hartford Steam Boiler (HSB) Ventures) to emerging insurance and technology companies operating in the distribution sector. Digital Partners seeks to partner with disruptors who are changing the way insurance is experienced by customers and works closely with the broader Munich Re organization to provide expertise and support services to its partners.

The following section includes an overview of Munich Re’s recent investment and partnership activity in the technology sector, a summary of each of partner company and Andy’s responses to a series of questions about Munich Re’s InsurTech strategy.

To date, Digital Partners has established partnerships with nine companies, in addition to several separate technology investments made by Munich Re/HSB outside of Digital Partners. The following chart summarizes all of Munich Re’s technology investments, M&A and partnerships since 2015. Additional details about each company are included in the table on the following pages.

In order to get a better understanding of what Munich Re is looking to accomplish from its InsurTech partnerships and the Digital Partners venture, we spoke to Digital Partners’ Chief Executive Officer Andy Rear.

Munich Re Tech Investments, M&A and Partnerships (2015 – present)



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Incumbent InsurTech Strategy: Munich Re Case Study

(\$ in millions)

Company	Capital Raised	Disclosed Investors	Description
Partnerships and Partnerships/Investments			
Blink	–	<ul style="list-style-type: none"> CPP Group (100%) 	<ul style="list-style-type: none"> UK based provider of real time resolution flight interruption insurance solutions Tracks, proactively alerts customers and rebooks flights at no cost if cancelled or delayed Partners with travel distribution companies seeking to drive ancillary revenue Uses big data, data analytics and great customer experience to develop innovative products Digital Partners assists with providing fast delivery of a product with no pricing data
Bought By Many	9.5	<ul style="list-style-type: none"> Munich Re/HSB Octopus Ventures 	<ul style="list-style-type: none"> Provides improved offers for individuals with specific insurance needs via collective buying power Examples include pet insurance for rare breeds or travel insurance for people with medical conditions Attracted over 250,000 users with year-over-year revenue growth of over 100% Munich Re invested in and will provide capacity to Bought By Many Digital Partners provides bespoke technology and products to improve customer interaction
Jetty	4.0	<ul style="list-style-type: none"> Ribbit Capital SV Angel Other Investors^(a) 	<ul style="list-style-type: none"> First insurance provider built to specifically target needs of urban residents with modern lifestyles Offers traditional insurance products in GA, IL, PA; JettyPassport (renter services) also available in FL, NJ Digital Partners assists with product development and will provide capacity from Munich Re
Next Insurance	38.1	<ul style="list-style-type: none"> Munich Re/HSB Ribbit Capital TLV Partners Zeev Ventures 	<ul style="list-style-type: none"> Provides online insurance for commercial small businesses in the U.S. Products are simple to select and tailored based on deep understanding of the industry Launched product targeting commercial photographers in partnership with Munich Re Customers can buy, renew and maintain photographer policies online in all 50 states 24/7 Digital Partners assists in developing a product and underwriting approach to fit a pure online distribution model Munich Re invested in \$25.1 million Series A funding round in April 2017
Simpleurance	43.7	<ul style="list-style-type: none"> Allianz Ventures Rakuten Ventures Rheingau Ventures Route 66 Ventures Other Investors^(b) 	<ul style="list-style-type: none"> Provides cross-selling software solutions to interface between the insurance and retail industries Software enables retailers to offer insurance or extended warranties on their own products Allows retailers to improve customer service and increase profit margins Retail portals offer consumers the opportunity to directly insure purchased products instantly Digital Partners assists with the speed of product development and developing multi-country products
Slice	3.9	<ul style="list-style-type: none"> Munich Re/HSB Plug and Play Acc. Horizons Ventures XL Innovate 	<ul style="list-style-type: none"> New York based start-up preparing for upcoming on-demand insurance product launch Product will provide on-demand, pay-per-use insurance for the on-demand economy (e.g. ride sharing) Munich Re investment will enable Slice to expand into markets around the world Digital Partners assists with developing new product requiring personal and commercial lines covers
So Sure	–	–	<ul style="list-style-type: none"> London based start-up developing a peer-to-peer offering called Social Insurance Allows customers to introduce friends and benefit from collectively insuring personal items Premiums reduced for groups with fewer claims; initial product offering focused on mobile phones Digital Partners assists with developing pricing methodology for new social insurance concept
Tröv	84.0	<ul style="list-style-type: none"> Munich Re/HSB Guidewire Other Investors^(c) 	<ul style="list-style-type: none"> Provides single item coverage for loss, theft, accidental damage, etc. for any duration via mobile app Used primarily for electronics but can cover sports equipment, jewelry, valuables, etc. Digital Partners assists with developing products, underwriting and pricing to support customer experience
Wrisk	–	<ul style="list-style-type: none"> BMW Innovation 	<ul style="list-style-type: none"> Person-centric, highly flexible service that provides motor, travel and home coverages via mobile app Munich Re will become exclusive carrier for Wrisk's business in the UK, Europe and the U.S. Digital Partners will also provide access to some of its underwriting platform services Digital Partners is helping to develop transparent approach to underwriting based on individual's 'risk score'
Investments			
Augury	9.0	<ul style="list-style-type: none"> Munich Re/HSB Eclipse Ventures Other Investors^(d) 	<ul style="list-style-type: none"> Mobile based predictive maintenance solution that diagnoses machines, provides treatment recommendations and predicts future failures for use in factories, commercial buildings and homes Cost-effective, scalable solution to reduce environmental impact, energy usage and operational costs
Helium	36.0	<ul style="list-style-type: none"> Munich Re/HSB Google Ventures Other Investors^(e) 	<ul style="list-style-type: none"> Provides comprehensive solution for developers to prototype and produce IoT applications End-to-end solution including hardware and software products to connect any physical item to internet Enables developers to simplify data collection and device interaction on a massive scale
Waygum	36.5	<ul style="list-style-type: none"> Munich Re/HSB Kleiner Perkins CB Other Investors^(f) 	<ul style="list-style-type: none"> Provides an OpenSensor Cloud platform and WunderBar IoT Starter Kit that give developers the tools for building apps for the physical world for businesses to prototype new products OpenSensor is a cloud based system for gathering data collected from sensors and using it in apps
Relayr	1.6	<ul style="list-style-type: none"> Munich Re/HSB Tyco Other Investors^(g) 	<ul style="list-style-type: none"> Enterprise focused mobile platform suite that guarantees to increase speed-to-market to build and host enterprise grade mobile apps by 5x Best in class mobile backend as a service (MBAas) product
Acquisition			
Meshify	–	<ul style="list-style-type: none"> Munich Re (100%) 	<ul style="list-style-type: none"> Cloud-based IoT platform that develops electronic device management software, offers cross-platform measurement, monitoring and control and provides real time monitoring and alerts of potential risks

(a) Includes BoxGroup, Graph Ventures, MetaProp, Red Swan Ventures and Social Capital.

(b) Includes Assurant Growth Investors, Fines Holding, German Start-ups Group, Groger Management, Ilgner Leeheim, KfW, Mountain Partners and Rheingau Ventures.

(c) Includes Anthemis Group, Oak HC/FT Partners, Sompo Japan Insurance, SunCorp Group and undisclosed investors; funding include \$45 million Series D round led by Munich Re/HSB disclosed in April 2017.

(d) Includes First Round Capital, Lerer Hippeau Ventures, Pritzker Group Venture Capital and Orfin Ventures.

(e) Includes FirstMark Capital, Khosla Ventures, DG Incubation, Marc Benioff, Slow Ventures and SV Angel.

(f) Includes TechOperators, Cisco Investments, Josef Brunner, Tom Noonan, Startupbootcamp and undisclosed investors.

(g) Includes Navitas Capital, Cisco Systems and Alchemist Accelerator.

Quarterly InsurTech Briefing

Incumbent InsurTech Strategy: Munich Re Case Study

Andy Rear's complete responses to a series of questions about Munich Re's InsurTech strategy are included below and on the following page.

What are your primary strategic objectives for establishing partnerships with InsurTech companies? Are your current partnerships concentrated within particular InsurTech subsectors (distribution, loss control, claims, underwriting, etc.)? Are there any InsurTech subsectors that you are targeting to establish additional partnerships?

Digital Partners' current focus is to enable innovative propositions such as new insurance products and ways to sell insurance to consumers or small businesses. We have several such partnerships in the pipeline and continue to actively explore the market for new opportunities. Our underwriting is automated, and we are interested in partnerships which enable automated data-gathering and machine learning. In the future, as the business reaches scale we will seek to innovate customer servicing and, in particular, claims.

Describe the process by which you identify potential partner companies and establish partnerships. What is the nature of your interactions with your partners at each of the different stages of your relationship?

The four components of our value proposition are paper, product development capabilities, investment and technology – the extent to which we roll out some or all of those items varies by partner. Typically, we have a small team focused on meeting new partners and understanding the space; they provide the first filter. Once this team has identified an interesting potential partner, the commercial team will have a discussion about the parameters of a potential partnership. If a partnership is established, the delivery team will work with our partner to determine key deliverables and timing. This entire process takes 1-2 weeks. This is followed by a fairly intense 3-6 month period during which we develop the product and build the technology. Once the partnership goes live, integrated data feeds allow Digital Partners to continuously monitor the business, but we are primarily focused on where the partnership goes next.

For example, for one of our partners we launched the first set of products in one market. At this point there are two work streams occurring simultaneously. We are monitoring the existing partnership to determine whether it is working. Because all of our underwriting is automated, we can see how people interact with the webscreen; we can see if questions cause them problems; and we can see where we have high drop-out rates so we can think about amending our products or underwriting. As a result of what we saw, we implemented some technology improvements to speed up the quoting process. At the same time, on the second work stream, we started thinking about the next build. We have a new set of products that we may launch in that first market and we have 2-3 other markets that we may want to launch into. We are starting to think about what commercial partnerships might look like for those new products and new markets. What balance sheet are we writing on? What do we need to do in terms of product design, data, etc.? Does the expansion into new markets mean that we need to look at another round of funding and what role should we play in that? Do we replicate the technology model from the previous product or use a new structure? At any point that our partner makes any strategic change to its business, we would be involved in that conversation to support our partner. Our mission is to build long-term sustainable partnerships and to help these businesses grow.

What are the key criteria that you look for in a strategic partner?

We are seeking to build strategic partnerships rather than purely Venture Capital (VC) ones. However, there is a lot of overlap between what we look for in a strategic partner and what a VC looks for in an investment including: a quality team, ambition to build a sizeable business, good technology, and a scalable business model. We also need our entrepreneur partners to understand and respect that insurance is a highly regulated business, and that this will shape what is and is not possible: we have zero tolerance for regulatory risk.

How do you expect the landscape of digital distribution competitors to change over the next 5-10 years? How does this influence your distribution partnership strategy?

I believe it is unlikely that insurance will be the only consumer market not transformed by the internet—but it would be difficult to predict the exact extent of that transformation in the near term. What I hope is that the ability to purchase insurance digitally will offer consumers the opportunity to share in the benefits of reduced operating cost, but also to be able to make their choice based on product quality and on the claims experience, rather than purely on price.

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Incumbent InsurTech Strategy: Munich Re Case Study

Which InsurTech subsectors outside of distribution do you believe will have significant impact on the (re)insurance industry in the near and long term? How have you prioritized these subsectors within your partnership strategy?

In the long-run, we believe that technology will impact all parts of insurance: all lines and the entire value chain. Munich Re's strategy is to focus on defined areas of innovation with dedicated teams to support them such as Digital Partners.

How does Digital Partners determine which companies to invest in and which companies to partner with without an investment from Munich Re/HSB?

Digital Partners has announced two venture capital investments--Slice and Bought By Many. We may have further investments in the next several months, but we do not intend to invest in every company with whom we partner.

How does Digital Partners determine companies in which to invest and with which to partner with without an investment from Munich Re/HSB?

We do not make purely financial investments; the strategic partnership comes first, but investments must also make financial sense. From the first contact with potential partners, Digital Partners and the Corporate Venture Capital (CVC) team work hand-in-hand. CVC's role is to assess when and if it would be beneficial for Munich Re to invest in a partner and to manage that participation.

What differentiates Munich Re from other strategic (re)insurers with corporate venture capital arms and independent venture capital firms? Are there any sources of differentiation within your corporate venture investment strategy which make Munich Re a more desirable partner for InsurTech start-up companies?

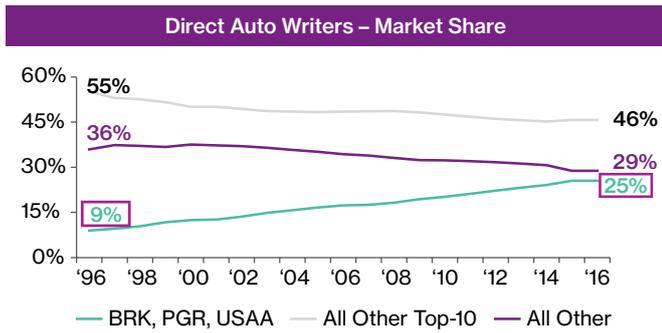
Digital Partners offers a holistic proposition. We provide our partners access to global insurance capacity, product design, underwriting, and data analytics with an explicit willingness to experiment and the technology to make the build and integration with the insurance carrier easier. In addition, we can offer venture capital to support the development of the partnership.

Quarterly InsurTech Briefing

Q1 2017 Industry Theme: Small Business Insurance Disruption

Small Business Insurance Market Entering the Early Stages of Digital Disruption

The first wave of digital disruption in the insurance industry occurred in the personal lines sector beginning in 1996, following the introduction of technologies which enabled development of improved pricing models and distribution. Berkshire Hathaway's 1996 acquisition of GEICO, one of the first direct-to-consumer auto writers, is now viewed as a catalyst for ensuing developments during the following two decades, during which GEICO, Progressive and USAA increased their collective market share by 17%. To add some perspective, each individual percentage point of personal auto market share equates to a premium opportunity of approximately \$2 billion, based on 2016 U.S. personal auto industry premium of \$214 billion. Today, these three major direct players collectively account for 25% of U.S. personal auto market share.



Rank	1996 Market Share		2016 Market Share	
1	State Farm	21%	State Farm	18%
2	Allstate	13%	Berkshire	12%
3	Farmers	8%	Allstate	10%
4	Liberty Mutual	5%	Progressive	9%
5	Nationwide	5%	USAA	5%
6	USAA	3%	Liberty Mutual	5%
7	Progressive	3%	Farmers	5%
8	Berkshire	3%	Nationwide	4%
9	Travelers	2%	AmFam	2%
10	AmFam	2%	Travelers	2%
	Top 10	64%	Top 10	72%
	<i>All Other</i>	<i>36%</i>	<i>All Other</i>	<i>28%</i>

Similarities between personal lines and small business insurance customers suggest that the small business insurance market, an approximately \$100 billion premium opportunity, is poised to experience similar digital disruption. The landscape remains highly fragmented, with the largest carriers each only controlling approximately 6% of the market, which further supports the belief widely held throughout the industry that the small business insurance market is among the most significant premium opportunities in the P&C sector.

Industry research suggests that up to 25% of total small business insurance premium could be digitally underwritten by 2020. This hypothesis is supported by demographic trends and changing small business owner behaviors which favor increased adoption of digital insurance solutions. Small businesses are expected to grow an average of 6% annually through 2020, at which point over 60% of businesses are expected to be owned by Millennials/ GenXers who are much more likely to favor digital management of insurance coverages. Recent surveys indicate that approximately 40% of small business owners are willing to buy insurance online today, if there were a solution capable of meeting the needs of their organization.

InsurTech start-ups focused on distribution will drive disruption in the small business insurance market while traditional carriers position themselves for change. Key players include:

- **E-brokers:** Providing consumer friendly digital experience (shopping, quoting, education, service, etc.)
- **Aggregators:** Providing small businesses with a view of potential available insurance options
- **Adjacent Players:** Non-insurance digital small business services companies beginning to partner to cross-sell insurance
- **Technology Enablers:** Assisting incumbent carriers and brokers to develop and offer digital services
- **Traditional Insurers/Distributors:** Partnering with start-ups, developing direct capabilities and becoming innovative around technology

Source: Statutory financial information per SNL Financial and The Boston Consulting Group and Morgan Stanley Research.

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Q1 2017 Industry Theme: Small Business Insurance Disruption

Selected notable examples of incumbent traditional insurers creating proprietary platforms and partnering with small business insurance distribution focused start-ups include:

Incumbent	Partner/Platform	Description
ALG, Hamilton, Two Sigma	Attune	<ul style="list-style-type: none"> Technology driven platform targeting small businesses
American Family	AssureStart	<ul style="list-style-type: none"> Provides small business insurance through direct writers
	Bunker	<ul style="list-style-type: none"> Online quoting platform targeting the 1099/"gig economy"
Berkshire Hathaway	Biberk	<ul style="list-style-type: none"> Offers general liability, workers' comp, BOP and commercial auto policies directly online
	Coverhound	<ul style="list-style-type: none"> Personal lines comparison platform; recently expanded into small commercial space
Chubb	Coverhound	<ul style="list-style-type: none"> Personal lines comparison platform; recently expanded into small commercial space
Hiscox	Hiscox Small Business	<ul style="list-style-type: none"> Provides small business insurance directly through Hiscox website
	Next Insurance	<ul style="list-style-type: none"> Online quoting platform targeting specialized small business coverages
	Bunker	<ul style="list-style-type: none"> Online quoting platform targeting the 1099/"gig economy"
	Coverhound	<ul style="list-style-type: none"> Personal lines comparison platform; recently expanded into small commercial space
Liberty Mutual	Next Insurance	<ul style="list-style-type: none"> Online quoting platform targeting specialized small business coverages
	Coverhound	<ul style="list-style-type: none"> Personal lines comparison platform; recently expanded into small commercial space
Markel	Next Insurance	<ul style="list-style-type: none"> Online quoting platform targeting specialized small business coverages; Markel is underwriting policies tailored to the unique risks of personal trainers
Munich Re	Slice	<ul style="list-style-type: none"> Provides first on demand, per use insurance product (targeting Uber and Lyft)
	Next Insurance	<ul style="list-style-type: none"> Online quoting platform targeting specialized small business coverages; Munich Re is underwriting policies tailored to the unique risks of professional photographers
Travelers	Simply Business	<ul style="list-style-type: none"> Technology driven UK small commercial insurance broker; acquired by Travelers in Q1 2017

Increasing Penetration of Digital Distribution – View from the Start-ups

In order to gain a better understanding of how InsurTech distribution platform start-ups are approaching the small business insurance market opportunity, we interviewed executives from four recently formed independent platforms: CoverWallet, Decisely, Embroker and Next Insurance. Based on the responses, it is clear that start-ups are independently evaluating the criteria for success in the small business market and while there is no clear consensus at this stage, a number of consistencies across responses from each company indicate that **the ability to efficiently capture business specific information and incorporate it into an automated underwriting process which enables the platform to effectively tailor products to meet the specific needs of individual small businesses on a large scale is among the most crucial developments required to enable digital distribution to significantly increase penetration of the overall small business market.**

A brief overview of each platform is included on the next page, followed by the responses from each firm's chief executive to a series of questions about their company's approach to the small business insurance market opportunity.

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Q1 2017 Industry Theme: Small Business Insurance Disruption

coverwallet

decisely

EMBROKER

nextinsurance

Chief Executive Officer (Interviewee)/Headquarters/Year Founded

Inaki Berenguer
New York, NY
2016

Kevin Dunn
Alpharetta, GA
2015

Matt Miller
San Francisco, CA
2015

Guy Goldstein
Palo Alto, CA
2016

Funds Raised/Investors

\$9.8 million

- Founder Collective
- Highland Capital Partners
- Index Ventures
- Union Square Ventures
- Two Sigma Ventures

\$60.0 million

- EPIC Insurance Brokers & Consultants
- Two Sigma Private Investments

\$14.3 million

- Bee Partners
- Canaan Partners
- FinTech Collective
- Nyca Partners
- Silicon Valley Bank
- Vertical Venture Partners
- XL Innovate
- 500 Start-ups

\$38.1 million

- Munich Re/HSB Ventures
- Ribbit Capital
- TLV Partners
- Zeev Ventures

Business Highlights

- Concierge-like service that reinvents how small businesses deal with the complexities of commercial insurance
- Helps clients manage variety of commercial insurance policies digitally through an online portal
- Three-pronged approach to market disruption:
 - Provide advice
 - Policy quoting
 - Policy management
- Established strategic partnerships with several leading national insurance carriers

- Provides health benefits, insurance and a technology platform for HR administration to small business in the U.S.
 - Strives to make benefits insurance and HR management simple, compliant and cost-effective for small businesses
- Primarily focused on employee benefits; also distributes P&C coverages through website
- Certified B Corporation
 - Held to rigorous standards of social and environmental performance, transparency and governance; committed to responsible, sustainable business practices

- Technology driven insurance broker and management platform that aims to improve how businesses of all sizes buy and manage insurance
 - Cloud-based platform uses proprietary software, data and predictive analytics to reduce cost of risk management for small businesses
 - System allows businesses to digitize existing policies and data, analyze, compare and buy new coverages
- Operates as a retailer and wholesaler with access to admitted and E&S carriers
- Products include commercial P&C, management liability and health and employee benefits coverages

- Digital insurance distribution platform seeking to transform the insurance experience for small businesses
 - Provides online, transparent, fast and complete insurance purchasing process with instant quoting
- Focuses on specialized coverages tailored to specific industries, including:
 - Personal trainers
 - Photographers
 - Contractors
- Strategic partnerships with leading third party carriers including:
 - Hiscox
 - Liberty Mutual
 - Markel
 - Munich Re

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Q1 2017 Industry Theme: Small Business Insurance Disruption

How do you define your target market?

coverwallet

The 25 million small business in the U.S. that need help dealing with the complex, and often confusing, intricacies of commercial insurance. Especially the ones that don't have time for this, and also have a tight budget.

decisely

Decisely proudly serves small businesses and brokers across the United States in an effort to help them grow and manage their workforce. We combine great service and great tech with our dedicated team of licensed brokers and comprehensive HR platform. Decisely offers multiple ways to offset costs of small business books through a friendly, free, and non-competitive model to brokers.

EMBROKER

Small commercial and middle market commercial insurance buyers.

nextinsurance

Our target market is the \$100 billion small to medium-sized business sector. What makes this market so exciting is that it has barely been touched by technology. The combination of its size and the massive gap that exists in the quality of the products being offered today gives us a unique opportunity to fundamentally shift the way businesses interact with insurance.

What do you consider to be the most important drivers of success for small commercial distribution today? Do you expect these drivers to change over the next 5-10 years?

coverwallet

Without a doubt, convenience and simplicity. These can be achieved in the next few years with online products that combine data, best user experience design practices, and technology. Although online and high tech shouldn't be in conflict with high touch. Customers need to know that if they have additional questions and need to discuss their insurance, they can talk to a human. At CoverWallet, we are high tech but we are also high touch. You can talk to us as much or as little as you want.

decisely

Our approach is account based everything (ABE). Decisely focuses on accounts of high value, and we seek to maximize the opportunity within each.

ABE is the coordination of personalized marketing, sales, and customer success efforts to drive engagement and conversion with a targeted set of accounts. The goal is to connect the revenue chain from marketing through sales to client success and account management. As a by-product, account-based alignment extends across our entire organization, including finance, product development, engineering, and the executive team. This approach suits our target market best and delivers personalized services.

EMBROKER

The main driver of innovation in commercial distribution is the buyer's demand that insurance operate at much higher level of speed and sophistication. Both small commercial and middle market companies look different than they used to and face different risks than they used to, with technology making it possible for companies to operate at scale, achieve global reach and make complex business decisions based on large amounts of data. These trends will only increase over the next five to ten years and the drivers of success for all players in insurance, not just distribution, will be how well they can keep up and provide a product and service that meets increasingly high buyer expectations.

nextinsurance

The first element is having a really strong product. This demands being hyper focused on the issues that currently exist and the ways that digital channels can help to overcome these obstacles. The second component is building a strong reputation and trust in your brand so that, over the long haul, small business owners are going to rely on you to bring an ideal solution to this critical need. These answers seem fairly obvious, but the biggest challenge in a 'newer' market – at least from a technology perspective – is recognizing that a great product that lives up to its promise is going to drive growth. Distribution through online channels is about bringing the concept to your target market, but the ability to deliver when that interaction takes places is absolutely critical.

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Q1 2017 Industry Theme: Small Business Insurance Disruption

How do you expect the landscape of digital small commercial distribution competitors to change over the next 5-10 years?

coverwallet

We will see a concentration in which 4-5 players will dominate the online market. And those are companies that didn't exist two years ago. The online reinvention of any industry generally comes from people from outside the industry, usually with tech DNA. Think about Paypal, Uber, Amazon, Netflix, Zillow, Kayak, or AirBnB. They were not started by existing banks, travel companies, retailers, media, real-estate, travel or hotel groups.

decisely

Think of the airline industry: ten years ago, companies such as Priceline and Expedia did not exist. The majority booked trips with travel agents. Fast forward to present day, and most people can't imagine not using the Internet for travel bookings. The same goes for the insurance industry.

Within five to ten years (and now), you will see technology as table stakes. HR departments will have to run with the Internet, and employees will expect personalized health offerings tailored to their individual needs and circumstances. In the next decade, we will see at least two online e-commerce only benefit brokers rise into the top 10 largest brokers in the U.S (we are one and unsure who will be the second).

Technology is leading the way for fundamental change that puts the power of e-commerce in employers' and employees' hands. From multi-channel distribution strategies to the relationships between insurers and brokers, employees will have access to their healthcare right at their fingertips.

EMBROKER

I think that winners will emerge as scalable platforms that create significant value for their customers and gain meaningful market share.

nextinsurance

Success breeds competition so it's only fair to expect that the biggest challenge is going to be about differentiation, delivering a strong and constantly evolving product and developing brand recognition. The great thing about having a head start is that there is a real opportunity to cement a company like Next as the innovator in small business insurance. Yet, being first is only an advantage if you remain true to the principles that defined that initial innovation – looking at the status quo and understanding how to channel digital innovation to make it better for all parties involved.

What are the primary sources of differentiation for your platform compared to your competitors?

coverwallet

The simplicity of our online product; and our customer centricity. We are a product focused organization, with design and technology in our DNA. We are not insurers "building a website."

We know executives at a competitor that has been around for about six years. We literally heard from them that customers don't care about an easy and elegant experience because they need the insurance and will go through whatever experience you put them through. They neglect any prioritization or resource allocation to good product design. I would invite you to try us and them and you will immediately get what I mean.

Other executives may tell you that they are committed to building simple and beautiful experiences for their customers, but when you ask how many product designers (graphic designers, interaction designers, usability managers, information architects, analytics managers) they have on payroll, the answer is 0. As a note, so far we have three UI designers at CoverWallet.

Research shows that new billion dollar companies generally reinvent existing behavior with a superior consumer experience based on data, design and technology, rather than bringing something radical and novel to the market. This is what we are doing at CoverWallet.

Quarterly InsurTech Briefing

Q1 2017 Industry Theme: Small Business Insurance Disruption

What are the primary sources of differentiation for your platform compared to your competitors?

decisely

Decisely employs trusted advisors that are 100% licensed. We were built by brokers that understand both front and back-end solutions, unlike our competitors that only created a front-end solution. Decisely utilizes a channel agnostic distribution system, capable of selling direct through brokers, carriers and other point-of sale distribution outlets.

Because plans vary and healthcare laws reform over time, Decisely brokers must serve as trusted advisors, ensuring that our clients are paired with the right insurer. Many small businesses demand self-service technology, but also require validation that their choices are the best ones for their company. That's what Decisely does. We pair self-service with specific guidance tailored to each client so they receive the best combination of insurance services and protection.

EMBROKER

Embroker's platform is already being used by relatively large, complex companies to manage their risk and insurance, it's a powerful set of tools that is also made available to smaller companies so they make better, more informed insurance decisions. It's also getting more powerful. As we continue to collect more data, we're able to better tailor coverage to our customers, which in turn helps us grow, and that in turn helps us power better recommendations.

nextinsurance

The most important differentiation for us at this stage is that there isn't anyone else who has managed to crack it. We were incredibly focused on unpacking every detail of the insurance process for small businesses and identifying every weakness and pain point. The result is a product that is incredibly easy to use, delivers a superior product, and fundamentally changes the way we view insurance.

At its core, we believe the most important differentiator was recognizing that insurance is supposed to be something inherently good. When you take that perspective as your starting point, you can ask basic questions like; why does it take so long to sign up? Why are policies so lacking the very basics you'd expect for a given industry? Why aren't they tailored to specific industries in any real way?

Once you begin with those questions, you can channel real technological innovation to create a significantly faster, cheaper and ultimately better process. This isn't about incremental improvement, but a massive leap forward in what business owners can expect from insurance.

Are there any carriers that you view as competitors? Do you think that carriers can ultimately be successful originating business directly through proprietary digital distribution platforms? What are the advantages to being independent?

coverwallet

We see them as partners. We are very humble when it comes to insurance. We know that we have a lot to learn from carriers when it comes to insurance. Our core competence in the UX, design, data, online technologies, or digital marketing. We will never say that we know more about insurance than any of the carriers we work with. We need a symbiosis in which technology DNA, meets insurance DNA. And if you mix it well (via the right partnerships), magic can happen.

decisely

Because Decisely works directly with carriers, we do not view them as our competitors. The relationship with our carriers is a symbiotic "co-opetition". We know carriers will go direct to employers, we acknowledge that there is always going to be competition for clients. This competition is great for consumers as it adds additional transparency and innovation. Decisely values both. Through our relationship with carriers, we can offer customized, cost-effective benefit offerings for small businesses.

EMBROKER

No, we don't view any carriers as competitors. I do think the strict boundaries between broker and carrier will start to break down a bit, but I see this as just precipitating new types of partnerships and benefiting organizations that can move quickly enough to take advantage of the opportunities this will present.

nextinsurance

At this stage the freedom of independence gives us the ability to put the business owner first. We don't have any red tape that blocks us from making the ideal tailored policy for a given case of business. Instead, our starting point is creating the best policy and then we identify the partner that will make that happen with us. We believe that we have a unique advantage in that regard and its going be very difficult for traditional insurance companies to make up ground in this specific sector.

Quarterly InsurTech Briefing

Q1 2017 Industry Theme: Small Business Insurance Disruption

How many carrier partners do you have? What criteria do you look for in a carrier partner?

We don't disclose the number.

coverwallet

In terms of criteria, we are proud to have partnered with carriers who understand that the world is changing and that they need to move forward in order to remain relevant. They understand that they need to push themselves to make their platform more ready for online distribution (e.g., quote generation, cancellations, payments, claim submission). In particular the simplification of the process (e.g., simplified applications) and removal of excessive legalese. Insurance is not that difficult if everyone makes the effort to explain it in plain English, and in an digestible format (e.g., using visuals and illustrations).

decisely

Decisely offers thousands of insurance plans and has access to over 250 carriers. We put the needs of our small business clients ahead of all else, and we are focused on getting them the best rates and plans to meet their workforce needs.

EMBROKER

We have over 25 carrier partners including almost all the leading commercial carriers. We look, first and foremost, for carriers that have great products and a great reputation in the market. We also try to partner with organizations that are capable of executing on new, innovative ideas.

nextinsurance

We are currently working with 3 major carrier partners, and we're simply looking for companies that want to establish a real win/win with their customers. The concept of a zero-sum game in insurance is completely flawed and by understanding the gaps in this logic, you can create products that make the situation better for everyone involved. All of our partners recognize this central fact and that is a powerful foundation for innovation.

Are your interactions exclusively with carriers? Is your platform also used by brokers?

coverwallet

Not Applicable

decisely

Our interactions are not exclusively with carriers nor direct to employers. The Decisely platform was built with brokerages in mind. Our platform allows brokers and carriers to work with Decisely directly to profitably manage their small book of business. We nurture our small business clients and hand them back when over 100 lives.

EMBROKER

Our interactions are exclusively with carriers, not with other brokers.

nextinsurance

Next's platform replaces the agent, connecting carriers directly to the small businesses. This means that Next acts as an MGA, with no connection to brokers whatsoever. The system today is so fragmented, with sales-driven brokers not able to provide the right insurance packages for the small businesses. By skipping the brokers altogether and making that direct link between the carriers and the businesses – we can enable a more trusting relationship between them and better overall service.

Quarterly InsurTech Briefing

Q1 2017 Industry Theme: Small Business Insurance Disruption

How important are independent agent and broker digital strategies to your business model? How do you expect these efforts to impact overall distribution trends in the small commercial market?

coverwallet

Not Applicable

decisely

A digital strategy is our model. Decisely is 100% digital. Unlike others in the space, our goal is to share the market with brokers and make things easier and more efficient for them. As a B Corp, we are committed to sustainable business practices that positively impact our employees, clients, and community.

We have stayed ahead of the demand to meet the unique needs of the small business marketplace. We have offices in three locations (Georgia, California, and Utah), but we service clients nationwide digitally.

EMBROKER

Needless to say, commercial insurance is complex. The technology required to add enough value that customers pay attention is hard to build, it goes way beyond being able to quote online, and requires real structural changes to almost all existing processes. Building this technology requires significant investment and implementing it requires massive organization change for existing legacy players. Ultimately, I think this will lead to more market consolidation over a long period of time as fewer organizations have the resources and tech expertise required to compete effectively.

nextinsurance

Because of our unique approach, we are completely independent of the needs or limitations of traditional agents and brokers. In fact, the challenges that so many businesses are having with their insurance because of the middle-man nature of the broker is exactly what gives Next such a unique advantage. Our platform is essentially serving as the ideal broker, enabling our customers to get better policies, faster than ever before and at a lower cost. However the strategies of these agencies adapt, we're going to aim to stay a step ahead and maintain our commitment to make the insurance process as effective as possible.

Do you expect that successful digital distributors in the personal lines markets will be able to succeed in the small commercial market? What skills are transferable and what are the key distinctions between the personal lines and small commercial markets?

coverwallet

In online businesses you need to pick one. Everyone can do everything, but not at the same time. You need to pick. Very few companies have been able to succeed in B2C and B2B. For example Apple tried many times to get into B2B services and always failed. Google only tried to get into the B2B world after 15 years. Whatsapp is very successful in B2C but in companies people use Slack, despite that they are very similar. Lending club is very successful in B2C, but companies go to Kabbage, FundingCircle or OnDeck instead. The decisions are made differently.

decisely

There is no line between digital and broker. In fact, they are one in the same and clients expect and need trusted advisors. That's exactly what Decisely is – a digital broker. Others in the space have built technology to solve the problems of small businesses, yet they have only created a self-service front end. This front-end focus is solely a digital distributor. What makes Decisely different, as I said, is that we are a digital broker. We provide self-service on the front-end, but our back-end also understands the uniqueness in the brokerage industry when it comes to pricing, carriers, and compliance – all things necessary to run and keep a small business afloat.

Employers and employees demand that their benefits are personally tailored to them and that their trusted advisor is available 24/7. The ability to provide information whenever and wherever clients want them is critical to success. Decisely can be with their clients wherever they are, whether that's at work, traveling, a day at the beach, or at their child's soccer game.

EMBROKER

It's possible for the micro-segment, policies of a few thousand dollars that really look and behave like personal lines anyway. Once you're dealing with a business of any actual size and complexity though it's a whole different set of capabilities required to succeed.

nextinsurance

There is a level of specificity that is necessary in the small business market that makes it uniquely difficult to penetrate. Each case of business has its own specific challenges and issues and these are constantly changing and evolving. The ability to remain ahead of the curve in a sustainable and scalable way is incredibly difficult and the capacity to overcome this challenge will be the defining factor in succeeding in this sector. We believe that the approach necessary here is unique and that companies coming from a more 'one-size-fits-all' mentality will struggle to account for this level of nuance. In fact, we think that the move to other processes might actually be easier for us than it would be for companies moving into this sector.

Quarterly InsurTech Briefing

Q1 2017 Industry Theme: Small Business Insurance Disruption

What percentage of small commercial premium do you think is originated through digital distribution platforms today?
How do you expect this to change over the next 5-10 years?

Pure digital today is less than 1%. There are some brick and mortar brokers that get leads digitally, but the rest of their process is analog. I even heard from some brokers that they are “digital” because you can email them a PDF, and a PDF is... digital (laughing).

People in the insurance industry know that most small businesses will eventually buy insurance directly online. What insurers don't appreciate is how fast this shift is going to happen. Chris Dixon used to say predicting the future of the Internet is easy: anything that hasn't moved online, it will. People, companies, investors and even countries can't stop this transformation. The only choice you have is whether you join the side of innovation and progress or you don't and die.

coverwallet

I am convinced that in 5-10 years, over 90% of new small commercial premium will be originated through digital distribution platforms. The demand to do business online is there from the small business buyer and we and partners are building the simplified means to fulfill it. However, it's important to keep in mind that renewal premiums (i.e., people who already have insurance placed and serviced offline) will take longer to move since there is inertia and insurance is sticky. It's similar to what is happening in the auto industry today. There's no question that 10 years from now, over 90% of new cars sold will be electric or self-driving. But that doesn't mean that every car on the road in 10 years will be part of the new wave; the existing stock always takes time to churn out or switch.

decisely

Brokers that are 100% digital are few and far between. They do not represent a major part of industry at this point. In the next five to ten years, at least two online only digital distribution channels will be in the top 10 of brokerage firms. It's happened in the airline industry, it will happen in this one. Similar to the travel and airline industry, there will be the Priceline or the Expedia of the insurance industry. And it's going to be Decisely.

EMBROKER

I don't think it's a matter of origination through platforms per se (and I know buyers don't think about it this way either) but rather the percentage of small commercial and middle market insurance buyers that benefit from technology solutions in a meaningful way. Currently this is less than 1% but looking out ten years I think most of the market will be in this category.

nextinsurance

It's going to increase dramatically.

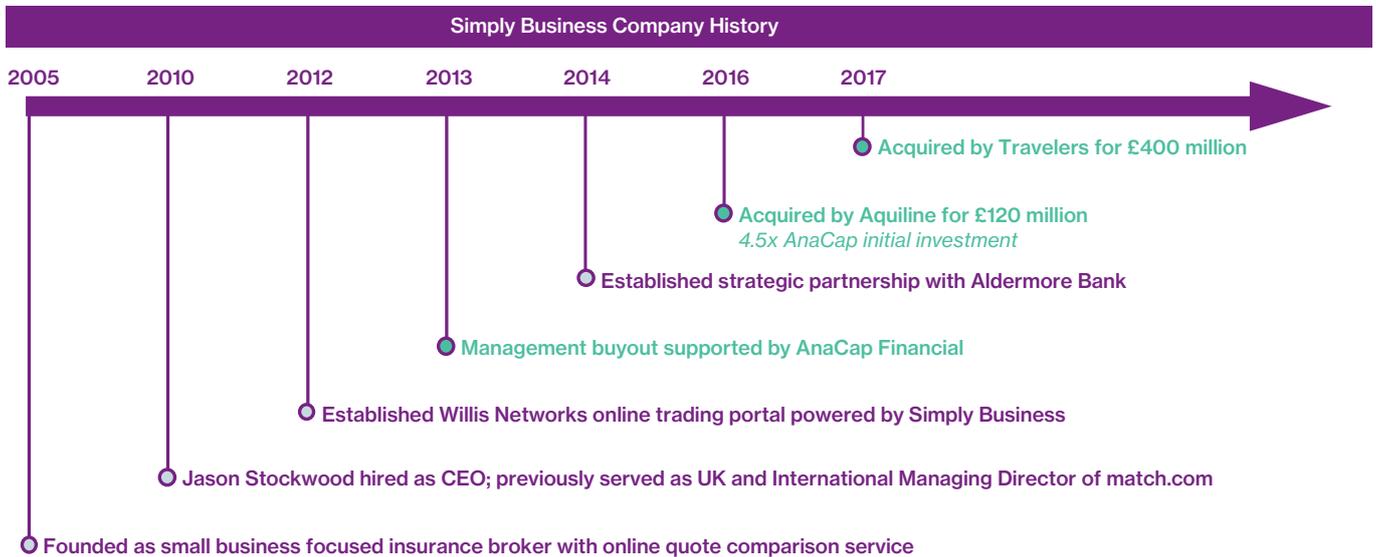
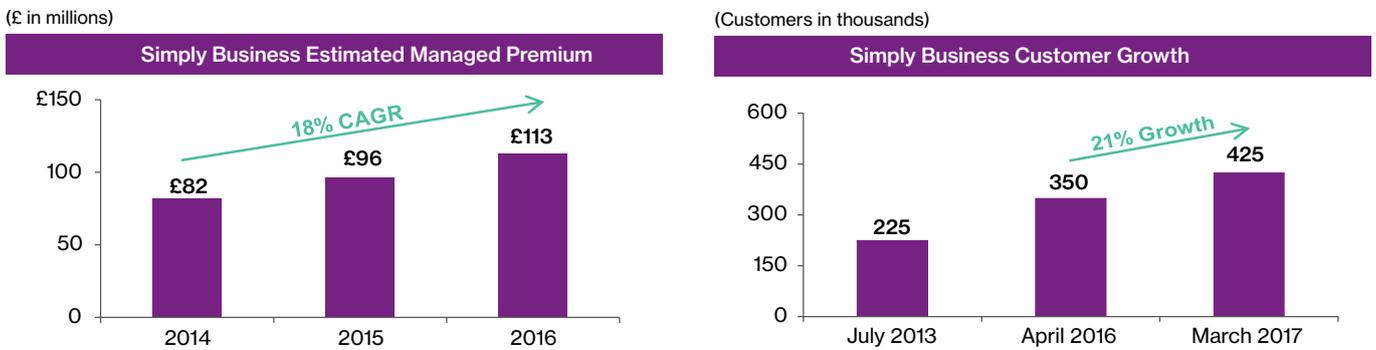
Quarterly InsurTech Briefing

Transaction Spotlight: Travelers' Acquisition of Simply Business

Advancing Travelers' Digital Agenda to Better Serve Customers

Amidst significantly elevated InsurTech investment activity from strategic (re)insurers since 2014, Travelers' £400 million acquisition of UK SME insurance broker Simply Business in mid March 2017 marked one of the largest investments to date targeting the continued shift towards digital distribution in the small business insurance sector. The transaction confirmed Travelers' commitment to advancing its digital agenda to better serve its customers while providing a clear signal to the market of the scarcity value of scalable technology-driven distribution platforms with a demonstrated ability to attract small businesses.

Publicly disclosed financial metrics for Simply Business illustrate the company's impressive track record of managed premium and customer growth.



At a premium valuation of approximately 50x Simply Business' 2016 EBITDA of £8 million and more than three times the £120 million price the business traded for less than a year ago, the transaction is indicative of Travelers' long-term strategic commitment to increasing penetration of smaller accounts in the small business insurance market. It also signifies its belief that the success Simply Business experienced in achieving £113 million of managed premium (18% CAGR since 2014) in the UK will be replicable in the U.S. and other markets.

Source: Company press releases and other public news sources.

Quarterly InsurTech Briefing

Transaction Spotlight: Travelers' Acquisition of Simply Business

Expanding UK Small Business Success to the U.S... with a Leading Partner

Simply Business launched its U.S. insurance operation in late 2016, about six months prior to the transaction. "The plan is to significantly enhance our opportunity in the U.S. and internationally," said Simply Business CEO Jason Stockwood at the time of the transaction, "We launched in the U.S. six months ago. We're very bullish about the U.S. It's about [Travelers] backing us." Stockwood noted that in particular, Travelers' U.S. market expertise will be helpful in navigating state-by-state insurance regulation.

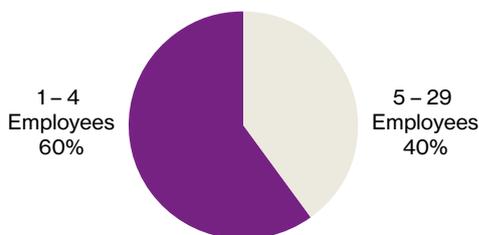
Travelers, the largest commercial lines insurance writer in the U.S., is also a top five player in the U.S. small business insurance market, with approximately \$2.7 billion of premium written through its Select Plus product, which is primarily marketed towards larger accounts. Conversely, Simply Business focuses on accounts at the smaller end of the small business insurance market, often referred to as the Micro Market.

Insurers and industry researchers employ various definitions of the exact parameters of the Micro Market, but according to Conning's 2016 Strategic Study entitled "The Small Business Market: Evolution in Distribution," the Micro Market includes businesses with under five employees and less than \$10,000 of annual premiums. Based on this definition, approximately 60% of small businesses (with less than 30 employees) fall within the Micro Market and collectively account for approximately \$14 billion of premiums, or 14% of the overall U.S. small business market.

The small business insurance market remains highly fragmented today as a result of large carriers, including Travelers, historically prioritizing larger accounts due to the incremental investment required to aggregate sufficient small commercial premium to achieve an attractive return. Recently, selected competitors and a number of independent distribution platforms have elected to attack the small business insurance market opportunity from the opposite perspective – by creating a front-end platform targeting Micro Market businesses.

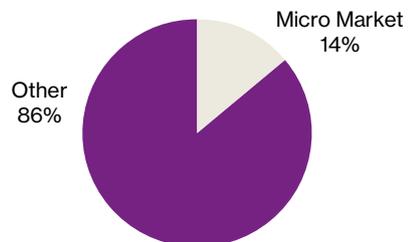
Following its acquisition of Simply Business, Travelers, already a leader in the larger account segment of the U.S. small business insurance market, appears to have set its sights on increasing penetration within the Micro Market. Travelers is likely to face familiar competition in this space, with other major U.S. commercial writers including Berkshire Hathaway and AIG (in partnership with Hamilton and Two Sigma) electing to build out small commercial focused platforms organically. Travelers alternatively elected to pay a significant premium for an established business that has already gained traction in the UK. Although Simply Business will need to prove that its success in the UK small business insurance market is transferrable to the U.S., the platform's experience and scale will initially differentiate the business from its incumbent affiliated small commercial competitors and its access to Travelers' resources, infrastructure, processes and data will represent another distinct advantage over its independent competitors.

U.S. Small Businesses by Number of Employees



U.S. Small Businesses: 4.8 million

Small Business Premium by Business Size



U.S. Small Business Premium: ~\$100 billion

Source: Conning Insurance Research, U.S. Census Bureau Department of Commerce and Bureau of Labor Statistics, Department of Labor.

Quarterly InsurTech Briefing

Thought Leadership: InsurTech, Analytics and Modeling in the “Hype Cycle”



Alice Underwood

Head of Analytics

Willis Re

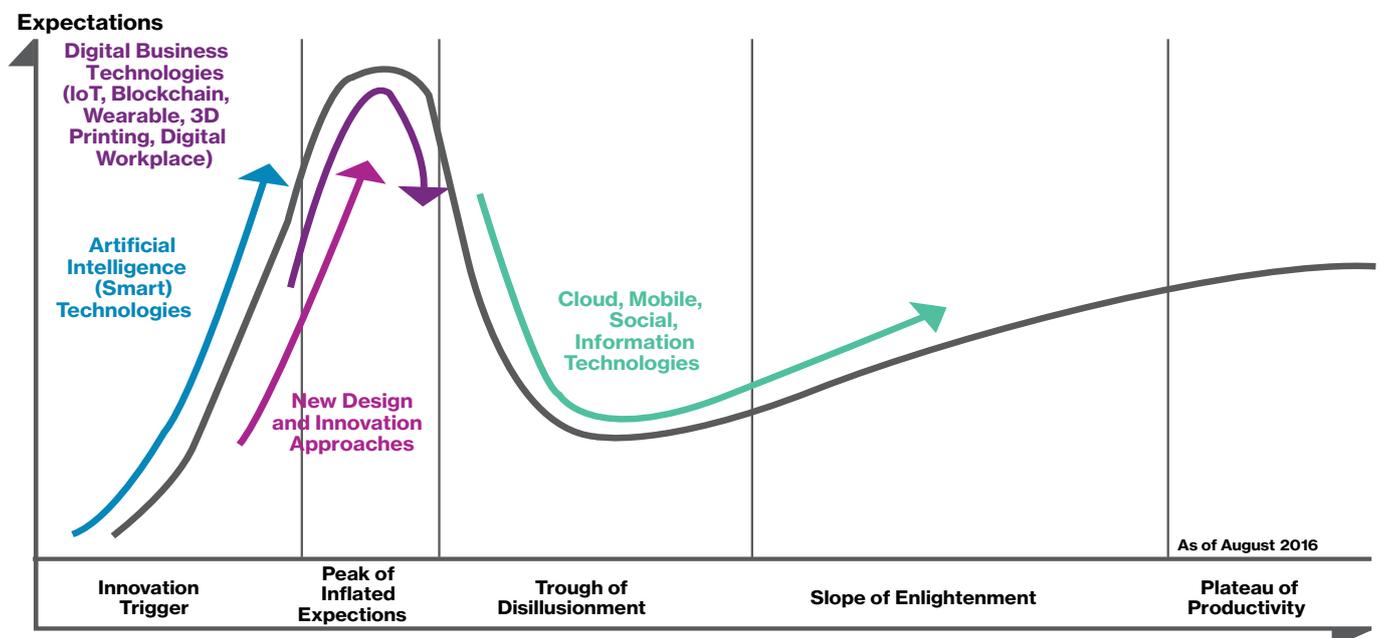
Hey, we all like shiny new toys and gadgets – technical analytics types like me perhaps more than most. Continuing and accelerating technological change provides a steady stream of fascinating new stuff. In our personal lives, we may pick up a cool new gadget just because it seems like fun, even if we’re not quite sure how we’ll use it. Sometimes it’s a dud: a lot of electronic keychain “pets” have been sent to virtual farms upstate, and honestly I’m not sure how much use I’m going to get out of my new translucent LCD slate – although it looks really cool.

Other times the experiment works phenomenally well – the public’s initial reaction to the iPad (“Who needs that? It’s just a giant iPhone without the phone!”) was quickly forgotten in the tsunami of useful applications.

But with the exception of R&D incubators, businesses rarely have the luxury to invest in new technology just because it seems cool. How can insurance leaders identify new technology that’s likely to add real value?

Looking Past the Hype

Technology research firm Gartner suggests that innovations tend to follow a “hype cycle” in which early expectations become overinflated, disillusionment sets in as the new technology meets business realities, and then gradually businesspeople develop useful and productive applications for those innovations that survive. The August 2016 document “Gartner’s 2016 Hype Cycles Highlight Digital Business Ecosystems” sets out the following map of megatrends across various innovations and industries.



Quarterly InsurTech Briefing

Thought Leadership: InsurTech, Analytics and Modeling in the “Hype Cycle”

Let's walk through today's landscape from right to left along the hype cycle, starting with newer technologies that are already on the “Plateau of Productivity” and working our way back to innovations yet in their infancy. Those relatively new technologies that have already proved themselves can offer lessons to apply in evaluating more recent innovations.

Already Beyond the Trough

In today's insurance market, **visual analytics** is a capability we almost take for granted: with increased computing power and speed, it's easier than ever to make data come alive through maps and graphics. Since humans tend to be visual creatures, analytics can interact with the data more effectively when they can see the relationships among variables. For example, at Willis Re we've found that our geospatial platform *SpatialKey* has greatly expended the kinds of insights we can bring our clients – in addition to helping our catastrophe modeling experts gather insights much more quickly. Analyses that might have taken hours or days in the old world of tabular data can be completed in just minutes. Maps are an obvious application for visual analytics, but providing similar capabilities for other types of data – whether in specific applications such as the graph analytics of *FNA* or the general business intelligence capabilities of applications like *Tableau* and *Tibco Spotfire* also enable people to interact with data more efficiently and effectively.

All insurance analytics is meant to be predictive, since we provide protection against events that may happen in the future. What's commonly called **predictive analytics** encompasses techniques such as generalized linear modeling and machine learning that only became practical with greater computing power and speed. Applied to large data sets, these techniques empower analysts to uncover connections between large numbers of variables in isolation or combination. Adoption of these techniques for ratemaking in the U.S. was slowed by the state regulatory system, but ratemaking is far from the only application.

Predictive modeling can support underwriting, enhance the efficiency of premium audits, and improve claims handling processes. And as regulators have grown increasingly comfortable with these advanced methods, software such as the commercial *SAS products* and *R freeware*, and insurance-specific systems like the *Willis Towers Watson Emblem / Radar suite* are now widely used in ratemaking as well as underwriting and claims. Insurers with old-fashioned rating plans already face severe anti-selection.

Moving Up the Slope

It doesn't take a rocket scientist to understand that eliminating wasted time and money will enhance profitability. And yet even processes that incorporate advances such as visual and predictive analytics still involve a slow, error-prone, and expensive human element. Any time data is re-keyed or a human operator must attach or detach a database, there's opportunity for error... and meanwhile a remarkable computing device (the human brain) is not being deployed in the most valuable way.

Workflow automation software such as *LavaStorm*, *Informatica*, and *Willis Towers Watson Unify* enables automation of analytical tasks, even complex multilayered analyses, so that the human operator need only press “start” like George Jetson and let the machine do the rest. In fact that “start” may also be automatable – triggered by preset parameters such as the uploading of a client's data.

Analysts sometimes worry that automation takes them “further from the data”. And yes, back in the dark ages when I had to type numbers into a spreadsheet from a faxed document, there were some details I spotted along the way. But the value of that “closeness to the data” is trivial compared to the time saved with automation – and properly designed diagnostics will do a better job of spotting data anomalies than my weary eyes, so that I can spend my time actually thinking about those anomalies and what they mean.

“Even processes that incorporate advances such as visual and predictive analytics still involve a slow, error-prone, and expensive human element. Any time data is re-keyed or a human operator must attach or detach a database, there's opportunity for error... and meanwhile a remarkable computing device (the human brain) is not being deployed in the most valuable way.”

Quarterly InsurTech Briefing

Thought Leadership: InsurTech, Analytics and Modeling in the “Hype Cycle”

Another concern, and a real one, is that automation can make certain jobs obsolete. The 2016 movie “Hidden Figures”, which brought into a long-deserved spotlight the amazing contributions that African-American women made to the U.S. space program, reminds us that “computer” was once a job title rather than a type of machine. But as Dorothy Vaughan realized, change means opportunity: she taught herself and her staff the new programming language FORTRAN, and embraced the power of technology to enhance her career and that of her team members. Today’s actuaries, catastrophe modelers, statisticians, and financial analysts can learn much from her example. Invariably automation relieves human beings of the rote and tedious parts of the job, freeing us to focus on more interesting questions that unlock hidden value.

Cloud environments offer the potential to reduce infrastructure costs and create greater flexibility and computational speed, since the footprint can be scaled up or down as needed and parallel processing can cut run times. The “megatrends” shown above suggest that cloud technology is moving towards productivity. Already in the insurance industry, many analytics-related cloud technologies have become the norm. Web-based rating engines, for example, are commonplace, especially in the context of direct-to-consumer personal lines distribution... and increasingly for the small business segment as well.

Some insurers and regulators are uneasy about the data security issues presented by software-as-a-service and cloud computing technologies. Yet many of the vulnerabilities that give rise to concern are already present in existing business processes. What, after all, is a cloud environment other than a data center operated by a vendor? Many insurers’ own data centers match that description – we just don’t use the word “cloud” to describe them. Even when the insurer operates its own data center, can it claim to devote the same degree of resource and expertise to data protection and digital resilience as specialist cloud providers?

It’s clear that both automation software and cloud computing will be the norm for the insurance industry before long. Human resistance to change is the main obstacle to realizing value from these innovations. Companies that embrace that change more quickly will gain competitive advantage – just as companies that integrated visual analytics and predictive modeling have done.

“Automation relieves human beings of the rote and tedious parts of the job, freeing us to focus on more interesting questions that unlock hidden value.”

Peak Hype

Technologies at or near “peak hype” demand an extra degree of caution. There’s high excitement about **telematics and telesensing**, for example – for good reason. Within just the past few years, telematics has allowed usage-based insurance products to move into the mainstream. Increasingly, vehicles come equipped with accelerometers and other sensors that can quickly, cheaply, and reliably record and transmit data about driving patterns. Have an older car, but still want usage-based insurance? No problem – there’s an app for that. But that doesn’t mean insurers need to collect and analyze all the data themselves: programs such as *Willis Towers Watson DriveAbility* offer access to a wider pool of data and analysis results to jump-start entry into UBI.

However hot a topic telematics and telesensing may be, it’s wise to exercise caution about just how the technology actually affects specific insurance lines of business. Wearable health monitors can inform life and health insurers about their risks, and wearable devices can improve workplace safety; smart home technology and telesensing such as that offered by *Pillar Technologies* can make underwriting more efficient, enhance loss prevention, and speed claims reporting and processing; inventory scanning and smart process control systems have similar potential in commercial lines. But it’s far from clear that a usage-based model will make sense in all of these lines.

Quarterly InsurTech Briefing

Thought Leadership: InsurTech, Analytics and Modeling in the “Hype Cycle”

Similarly, **blockchain** is very much in the spotlight – but there are a lot of people throwing the term around without really understanding what it means. Fundamentally, a blockchain (see [Wikipedia - Blockchain](#)) is a distributed database that can record transactions in a verifiable, secure, and permanent way. Digital currencies such as Bitcoin rely on blockchain technology to verify transactions and avoid “double spending.” It’s also possible to use blockchain to create “self-executing” **smart contracts**. But as the [Ethereum hack](#) showed the world, using software code as a legal contract also means that hacking becomes a way of discovering contractual loopholes.

For this “peak hype” innovation, insurance leaders should spend the time to know what the terminology means before leaping to potentially expensive conclusions. Blockchain and smart contracts have excellent potential in the worlds of microinsurance and parametric insurance, where contracts are of necessity simple and standardized. The relevance to other parts of the insurance world – where customized contracts and specialized expertise are required – remains to be seen.

Climbing the Slope

Almost every insurance professional has a story about a policy or claim where crucial data was “there” but not accessible when needed because it had been tucked away into a freeform text field, a handwritten note, or a deleted voice mail. **Text mining** algorithms and other **artificial intelligence** approaches can wring insights from archives that once seemed intractable. The applications developed by [Praedicat](#) suggest the potential for identifying, quantifying, and profitably underwriting even emerging risks in pharmaceuticals and other products. Firms like [Amodo](#) seek to use data from smartphones and other connected devices to develop targeted marketing and products, while others like [Diggeria](#) are looking to give consumers more control over how and with whom they share data. [Gain Compliance](#) uses text mining and semantic modeling in order to help companies improve data quality and consistency.

It’s likely that innovations like these will have a meaningful effect on the insurance industry, but mainstream adoption may still lie a decade or more in the future. As only a small percentage of insurers have begun to deploy such technology, firms that do not seek to occupy the “bleeding edge” may wish to take an approach of watchful waiting, encouraging technology-savvy entry level staff to remain aware of developments so that when text mining and artificial intelligence reach “peak hype”, up and coming leaders will be in a better position to assess the potential costs and benefits.

The Cycle Will Go On

Like the underwriting cycle, the hype cycle will go on. It may amplify or flatten; it may speed up or slow down for particular technologies. But as long as there are new discoveries there will be enthusiasm bubbles and deflated expectations. And as with the underwriting cycle, awareness is the first step toward developing a strategy to master it.

Especially when confronted with an apparently mysterious new technology – and analytics and IT team members eager to play with the latest, shiniest toy – business leaders must balance enthusiasm with a healthy skepticism. At the same time, we must never dismiss a new idea because it’s “not the way we’ve always done it,” or overlook an innovation that could generate value in a less splashy way.

It’s important for leaders to demonstrate an open mind to innovation, and encourage those new to the industry to learn about new technologies and explore potential applications. But we must also not be afraid to “fail fast” and drop technologies and applications that don’t prove out. If you discover a useful business function for translucent LCD slates, let me know – but until then, I’m not going to require my analysts to use them just because they look cool.

“Text mining algorithms and other artificial intelligence approaches can wring insights from archives that once seemed intractable.”

Quarterly InsurTech Briefing

The Data Center: InsurTech by the Numbers

Deal Activity Slows

- **InsurTech funding volume of \$283 million in Q1 2017**
 - 4% increase from \$271 million in Q4 2016; 64% decline year-over-year from \$783 million in Q1 2016
 - 38 total transactions in Q1 2017 represents 12% decline from 43 transactions in Q4 2016 and 36% decline year-over-year from 59 transactions in Q1 2016
 - Increasing international activity – U.S. accounted for 67% of transactions since 2012 but only 47% in Q1 2017
 - Early stage (Seed/Series A) transactions comprised 66% of total transactions in Q1 2017
 - P&C funding volume declined 25% from Q4 2016 and 52% year-over-year from Q1 2016
 - 23 P&C transactions in Q1 2017 represents 15% decline from 27 P&C transactions in Q4 2016 and 45% decline year-over-year from 42 P&C transactions in Q1 2016
 - L&H funding volume increased 51% from Q4 2016 but declined 70% year-over-year from Q1 2016
 - 15 L&H transactions in Q1 2017 represents 6% decline from 16 L&H transactions in Q4 2016 and 12% decline year-over-year from 17 L&H transactions in Q1 2016
- **Decline in funding likely results from start-ups moving from fundraising to product launch stage**
 - Technology driven life insurance distribution platform Ladder Financial launched in January 2017
 - Slice Labs expanded availability of its on-demand homeshare preview release to Colorado, Maryland, Massachusetts, Texas and Washington (initially launched in Iowa) and launched a preview release of a proprietary on-demand per use insurance product to select ridesharing drivers in March 2017
 - Fabric Technologies launched its accidental death life insurance product in 32 states in March 2017
 - Urban millennial focused P&C insurance platform Jetty launched in March 2017
 - Individual personal item insurance platform Tröv expects to launch in the U.S. in 2017

Increasing Focus on Distribution

- **74% and 53% of Q1 2017 P&C and L&H transactions, respectively, involved companies focused on insurance distribution, compared to 61% and 42%, respectively, of all such transactions since 2012**
 - Includes digital lead generation, brokerage and MGA platforms

Corporate Investment Trend Persists

- **25 private technology investments by (re)insurers in Q1 2017 represents a decrease of 4% from 26 investments in Q4 2016 and an increase year-over-year of 4% from 24 investments in Q1 2016**
 - Increased focus on international investments with 48% of private technology investments by (re)insurers involving a U.S. based technology company in Q1 2017 compared to 65% of all such transactions since 2012
- **(Re)insurers continue to target strategic technology investments**
 - Northwestern Mutual and Helvetia each launched corporate investing units in Q1 2017
 - Validus announced it will invest \$25 million in Aquiline's specialist InsurTech fund in February 2017
 - Baloise announced partnership with investment & advisory firm Anthemis to invest CHF 50 million in European, UK and U.S. based start-ups to drive forward Baloise's digital revolution in February 2017
 - QBE announced its intention to invest a minimum of \$50 million into partnerships with InsurTech companies with a particular focus on data analytics in the U.S., UK, Israel and Australia in March 2017
 - Australian financial services firm AMP Group shut down its corporate venture arm, AMP Ventures, in January 2017

Continued Emphasis on Partnerships

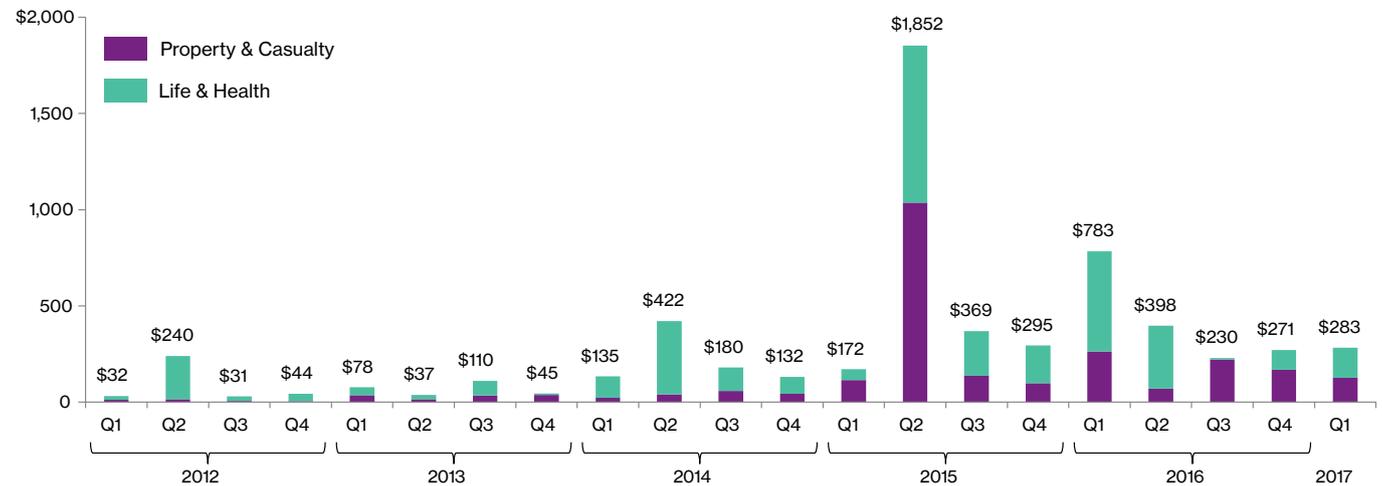
- **(Re)insurers continue to partner with technology companies to explore thematic areas, including connected car, alternative distribution, smart home and other areas; selected notable examples include:**
 - American Family partnered with TrueMotion and Automatic on a new app-based driver safety program
 - Nationwide established a distribution partnership with Sure for a renters insurance product
 - CSAA partnered with Lyft to offer policyholders Lyft credits as an alternative to rental replacement
 - Markel will provide capacity for a personal trainers product underwritten by Next Insurance
 - Generali partnered with Google Nest, who will provide home thermostats to Generali policyholders
 - Aviva established a life insurance joint venture with Tencent and Hillhouse Capital in Hong Kong

Quarterly InsurTech Briefing

The Data Center: InsurTech by the Numbers

Quarterly InsurTech Funding Volume – All Stages

(\$ in millions)

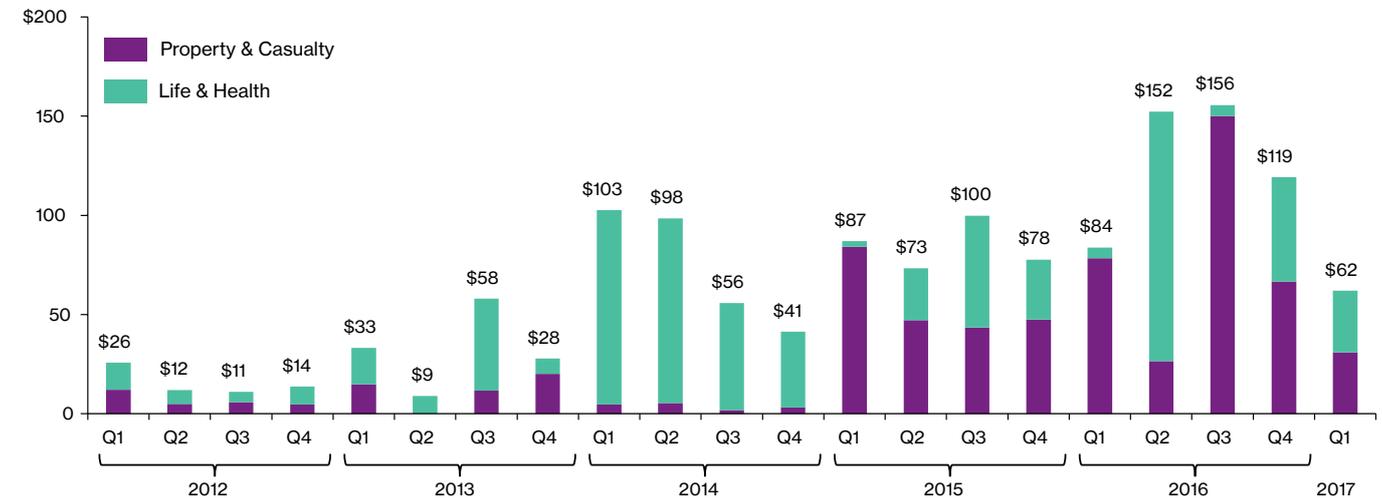


Deal Count

P&C:	5	2	4	3	5	4	11	8	8	6	11	8	12	13	13	18	42	18	30	27	23
L&H:	8	7	7	10	15	8	10	4	11	16	19	15	13	18	15	22	17	16	8	16	15

Quarterly InsurTech Funding Volume – Early Stage

(\$ in millions)



Deal Count

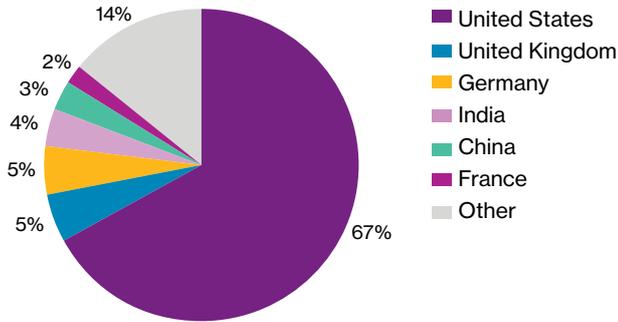
P&C:	4	1	4	3	4	2	5	5	4	2	5	6	8	8	8	13	33	9	23	20	15
L&H:	6	3	6	7	8	4	6	4	7	9	16	8	7	8	10	18	8	9	4	11	10

Quarterly InsurTech Briefing

The Data Center: InsurTech by the Numbers

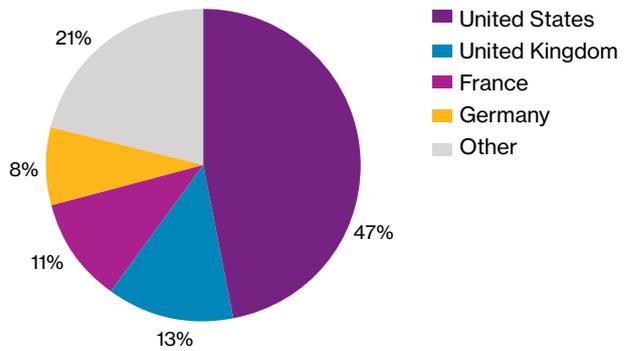
InsurTech Transactions by Target Country

2012 – Present



2012 – Q1 2017 Transactions: 541

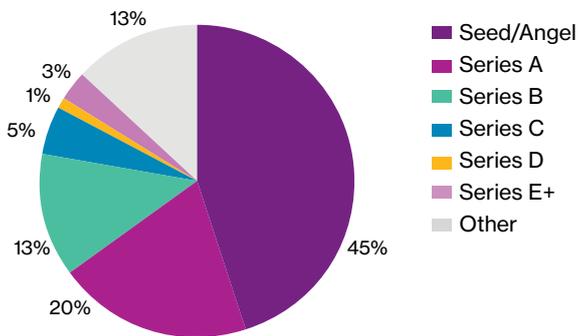
Q1 2017



Q1 2017 Transactions: 38

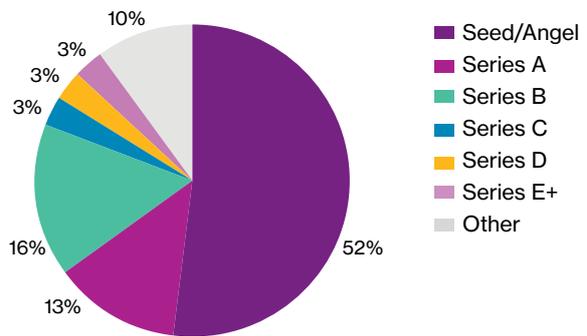
InsurTech Transactions by Investment Stage

2012 – Q1 2017



2012 – Q1 2017 Transactions: 541

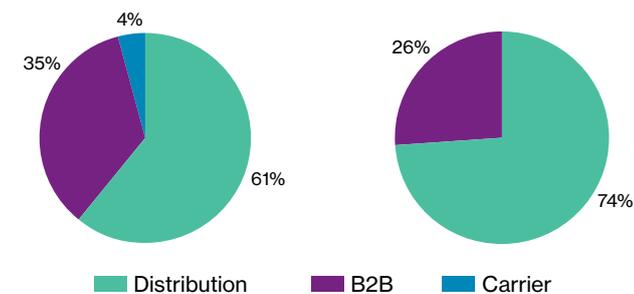
Q1 2017



Q1 2017 Transactions: 38

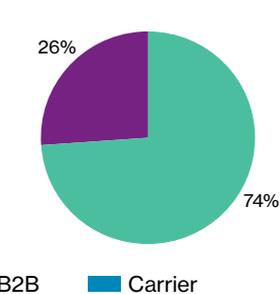
P&C InsurTech Transactions by Subsector

2012 – Q1 2017



2012 – Q1 2017 P&C Transactions: 271

Q1 2017



Q1 2017 P&C Transactions: 23

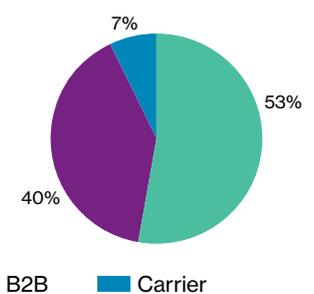
L&H InsurTech Transactions by Subsector

2012 – Q1 2017



2012 – Q1 2017 L&H Transactions: 270

Q1 2017



Q1 2017 L&H Transactions: 15

Quarterly InsurTech Briefing

Q1 2017 InsurTech Transactions – P&C

(\$ in millions)

Date	Company	Funding Round	Total	Investor(s)	Description
01/05/17	Converge	–	0.6	<ul style="list-style-type: none"> ▪ Samsung NEXT ▪ Techstars ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ Provides drone management for insurance claims adjusters
01/06/17	Swyfft	7.5	7.5	<ul style="list-style-type: none"> ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ Technology driven homeowners quoting platform
01/17/17	Bought By Many	9.5	9.5	<ul style="list-style-type: none"> ▪ Munich Re/HSB Ventures ▪ Octopus Ventures 	<ul style="list-style-type: none"> ▪ Develops specialized coverages with insurers for individuals ▪ Long-tail focus (pet, homeowners, gadget, private health)
01/25/17	Cuvva	1.9	2.9	<ul style="list-style-type: none"> ▪ LocalGlobe ▪ Barclays Accelerator ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ Provides hourly auto insurance sold through mobile app
02/08/17	Cybewrite	0.2	0.2	<ul style="list-style-type: none"> ▪ 500 Accelerator 	<ul style="list-style-type: none"> ▪ Cyber security predictive analytics platform ▪ Enables data-driven automated underwriting for cyber insurance
02/10/17	Sure	6.3	8.9	<ul style="list-style-type: none"> ▪ Assurant Growth Investors ▪ Other Investors^(a) 	<ul style="list-style-type: none"> ▪ Mobile application to purchase on-demand insurance ▪ Focuses on personal lines products (renters and baggage)
02/14/17 & 03/28/17	InMyBag	0.4	0.4	<ul style="list-style-type: none"> ▪ Hambro Perks ▪ Individual Investors 	<ul style="list-style-type: none"> ▪ Emergency (same-day) recovery service for devices and data ▪ Announced two funding rounds in Q1 on 2/14/17 and 3/28/17
02/17/17	Wecover	0.5	0.5	<ul style="list-style-type: none"> ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ France based collaborative auto platform (via Credit Mutuel Arkea) ▪ Lower rates via incentive based system based on community diversity
02/21/17	Fluo	2.1	2.1	<ul style="list-style-type: none"> ▪ Credit Mutuel Arkea ▪ Evolem Fund 	<ul style="list-style-type: none"> ▪ France based advisor engine focused on optimizing insurance coverages
02/22/17	TravelCar	15.8	22.4	<ul style="list-style-type: none"> ▪ MAIF Avenir ▪ PSA Group ▪ Network Finances 	<ul style="list-style-type: none"> ▪ Airport parking and peer-to-peer car rental platform
02/22/17	EverQuote	13.0	37.6	<ul style="list-style-type: none"> ▪ Link Ventures ▪ Oceanic Partners ▪ Other Investors^(b) 	<ul style="list-style-type: none"> ▪ Data driven online auto insurance marketplace in U.S. ▪ Platform unites agents/carriers with prospective customers ▪ Multi-channel marketing campaign management/optimization
02/23/17	CreditEase Insurance Agency	11.0	11.0	<ul style="list-style-type: none"> ▪ CreditEase ▪ IDG Capital Partners 	<ul style="list-style-type: none"> ▪ Network of finance/wealth management providers in China ▪ Services 251 cities and 93 rural areas in China and Hong Kong

Note: Blue font denotes current round investor(s).

(a) Includes current round investors ff Venture Capital and IA Capital Group and non-current round investors Fosun Kinzon Capital and Montage Investors.

(b) Includes Savano Capital Partners, SecondAlpha, Stratim Capital and T Capital Partners.

Quarterly InsurTech Briefing

Q1 2017 InsurTech Transactions – P&C (continued)

(\$ in millions)

Date	Company	Funding Round Total		Investor(s)	Description
03/02/17	PolicyPal	–	0.0	<ul style="list-style-type: none"> ▪ 500 Start-ups ▪ Undisclosed Investors ▪ Startupbootcamp 	<ul style="list-style-type: none"> ▪ Singapore based mobile insurance quoting application ▪ Provides digital analysis of existing insurance coverages ▪ Enables identification of protection gaps
03/06/17	The Floop	15.9	15.9	<ul style="list-style-type: none"> ▪ Direct Line ▪ Fosun International ▪ United Electronics 	<ul style="list-style-type: none"> ▪ UK based autonomous telematics systems provider ▪ Clients include insurers and auto organizations
03/06/17	Smallticket	0.0	0.0	<ul style="list-style-type: none"> ▪ Startupbootcamp 	<ul style="list-style-type: none"> ▪ South Korea based peer-to-peer insurance distribution platform
03/09/17	Weather Analytics	17.0	32.8	<ul style="list-style-type: none"> ▪ Tokio Marine HCC ▪ W.R. Berkley ▪ Other Investors^(c) 	<ul style="list-style-type: none"> ▪ Technology-driven provider of global climate intelligence ▪ Aggregates historical, current and forecasted weather content in online database with risk mitigation tools and predictive analytics
03/13/17	Covered	0.1	0.1	<ul style="list-style-type: none"> ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ Online/mobile insurance quoting and comparison platform
03/16/17	Insurify	4.6	6.6	<ul style="list-style-type: none"> ▪ MassMutual Ventures ▪ Nationwide Ventures ▪ Other Investors^(d) 	<ul style="list-style-type: none"> ▪ Online auto insurance quoting and comparison platform
03/16/17	WorldCover	–	0.1	<ul style="list-style-type: none"> ▪ CreditEase ▪ Y Combinator 	<ul style="list-style-type: none"> ▪ Peer-to-peer insurance business connecting farmers in developing economies with alternative capital-backed insurance coverage
03/16/17	Simplesurance	21.2	32.7	<ul style="list-style-type: none"> ▪ Allianz Ventures ▪ Rakuten Ventures ▪ Rheingau Ventures ▪ Other Investors^(e) 	<ul style="list-style-type: none"> ▪ Technology solutions provider enabling cross-selling of insurance products at the point-of-sale in e-commerce transactions ▪ Integrates into the checkout process of online shopping sites to offer a one click experience for customers
03/21/17	Ledger Investing ^(f)	0.1	0.1	<ul style="list-style-type: none"> ▪ Y Combinator 	<ul style="list-style-type: none"> ▪ Scalable, cost-efficient marketplace for securitizing insurance risk ▪ Transfers risks to capital markets via issuance and distribution of ILS
03/31/17	Limex	–	–	<ul style="list-style-type: none"> ▪ Alexander Samwer ▪ Picus Capital 	<ul style="list-style-type: none"> ▪ Germany based technology driven digital insurance manager targeting mid-sized businesses

Note: Blue font denotes current round investor(s).

(c) Includes In-Q-Tel, Maryland Department of Business & Economic Development and undisclosed investors.

(d) Includes Giorgos Zacharia and Rationalwave Capital.

(e) Includes current round investor Route 66 Ventures and non-current round investors Assurant Growth Investors, Fines Holding, German Start-ups, Groger, Ilgner Leeheim, KfW and Mountain Partners.

(f) Ledger Investing is reportedly close to securing an additional \$5 million of seed finding from Accel Partners, 500 Start-ups, Signal Fire, Massmutual Ventures and AmWINS Group but has not formally announced the transaction as of publication of this report.

Quarterly InsurTech Briefing

Q1 2017 InsurTech Transactions – L&H

(\$ in millions)

Date	Company	Funding Round Total		Investor(s)	Description
01/05/17	Namely	50.0	153.1	<ul style="list-style-type: none"> ▪ Altimeter Capital ▪ Four Rivers Group ▪ Greenspring Assoc. ▪ Matrix Partners ▪ Scale Venture Ptnrs ▪ Sequoia Capital ▪ True Ventures ▪ Other Investors^(a) 	<ul style="list-style-type: none"> ▪ Cloud-based HR and employee benefits management platform ▪ Provides tech-enabled employee benefits administration software ▪ Diverse carrier relationships with variety of large health insurers ▪ Partnership with Cigna for Namely Employee Benefits Exchange
01/09/17	Jamii	0.8	1.0	<ul style="list-style-type: none"> ▪ Undisclosed Investors ▪ Bill & Melinda Gates ▪ Seedstars World ▪ tiphub 	<ul style="list-style-type: none"> ▪ Micro-health mobile policy management platform targeting low-income/informal sectors in Africa
01/19/17	Fabric Technologies	2.5	2.6	<ul style="list-style-type: none"> ▪ Bessemer Partners ▪ BoxGroup ▪ Brainchild Holdings ▪ Maveron ▪ Red Sea Ventures ▪ RGAx ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ Consumer focused digital life insurance distribution platform ▪ Places premium with Vantis Insurance (Penn Mutual Life) ▪ Strategic partnership with RGA to provide product development, capital and data resources to support Fabric Technologies
01/27/17	MIO Assicuratore	0.3	0.3	<ul style="list-style-type: none"> ▪ H-Farm ▪ Pi Campus ▪ Vito Lomele 	<ul style="list-style-type: none"> ▪ Italy based digital life and P&C broker and management platform ▪ Comparison platform with real-time premium calculation
02/01/17	GoCo	2.5	4.3	<ul style="list-style-type: none"> ▪ ATX Seed Ventures ▪ GIS Strategic Ventures ▪ Salesforce Ventures ▪ Undisclosed Investors ▪ OneDigital H&B ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ Digital HR and employee benefits management platform ▪ Integrates with existing payroll providers (ADP, Intuit, Paychex)
02/08/17	Regard	0.2	0.2	<ul style="list-style-type: none"> ▪ 500 Accelerator 	<ul style="list-style-type: none"> ▪ Consumer focused digital income insurance distribution platform
02/08/17	BenRevo	0.2	0.2	<ul style="list-style-type: none"> ▪ 500 Accelerator 	<ul style="list-style-type: none"> ▪ Digital health insurance platform connecting carriers, brokers, employers
02/15/17	HealthSherpa	6.6	6.6	<ul style="list-style-type: none"> ▪ Core Innovation Capital ▪ Andreessen Horowitz ▪ Innovation Endeavors ▪ Kapor Capital ▪ Plug and Play Accel. 	<ul style="list-style-type: none"> ▪ Consumer focused digital health insurance comparison platform ▪ Provides access to plans from over 200 carriers ▪ Partnerships with agents, brokers, employers and non-profits
02/16/17	Neosurance	0.3	0.3	<ul style="list-style-type: none"> ▪ Matteo Carbone ▪ Pietro Menghi ▪ Horizon 2020 	<ul style="list-style-type: none"> ▪ Technological service provider offering mobile technology solutions to insurers to improve customer experience and engagement

Note: [Blue](#) font denotes current round investor(s).

(a) Includes Bullpen Capital, Lerer Hippeau, Vayner RSE and other individual investors.

Quarterly InsurTech Briefing

Q1 2017 InsurTech Transactions – L&H (continued)

(\$ in millions)

Date	Company	Funding Round Total		Investor(s)	Description
03/09/17	Pokitdok	-	48.7	<ul style="list-style-type: none"> ▪ GIS Strategic Ventures ▪ Other Investors^(b) 	<ul style="list-style-type: none"> ▪ Application program interface (API) for health businesses ▪ Powers real-time streamlined healthcare transactions
03/14/17	Benefix	0.5	0.5	<ul style="list-style-type: none"> ▪ Undisclosed Investors 	<ul style="list-style-type: none"> ▪ Provides software to improve quoting for agencies and agents
03/17/17	Otonova	16.1	16.1	<ul style="list-style-type: none"> ▪ b-to-v ▪ Other Investors^(c) 	<ul style="list-style-type: none"> ▪ Germany based digital insurance distribution platform ▪ Provides health and supplementary coverages via online platform
03/20/17	Xiaoyusan Insurance	14.0	14.0	<ul style="list-style-type: none"> ▪ Matrix Partners China ▪ Tianshili Capital ▪ Sequoia Capital China 	<ul style="list-style-type: none"> ▪ China based digital insurance distribution platform ▪ Established data partnerships with large Chinese technology companies and distribution partnerships with Chinese insurers
03/30/17	Decisely	60.0	60.0	<ul style="list-style-type: none"> ▪ Two Sigma Private Inv. ▪ EPIC Insurance Brokers 	<ul style="list-style-type: none"> ▪ Provides health benefits, insurance and a technology platform for HR administration to small business in the U.S.
03/30/17	Otherwise	1.7	1.7	<ul style="list-style-type: none"> ▪ 360 Capital Partners ▪ BPI France ▪ Francois Leneveu 	<ul style="list-style-type: none"> ▪ France based peer-to-peer health insurance broker ▪ Utilizes behavioral analysis supported by community management and machine learning to segment individuals by risk profile ▪ Enables individual members to reduce overall cost of insurance

Note: Blue font denotes current round investor(s).

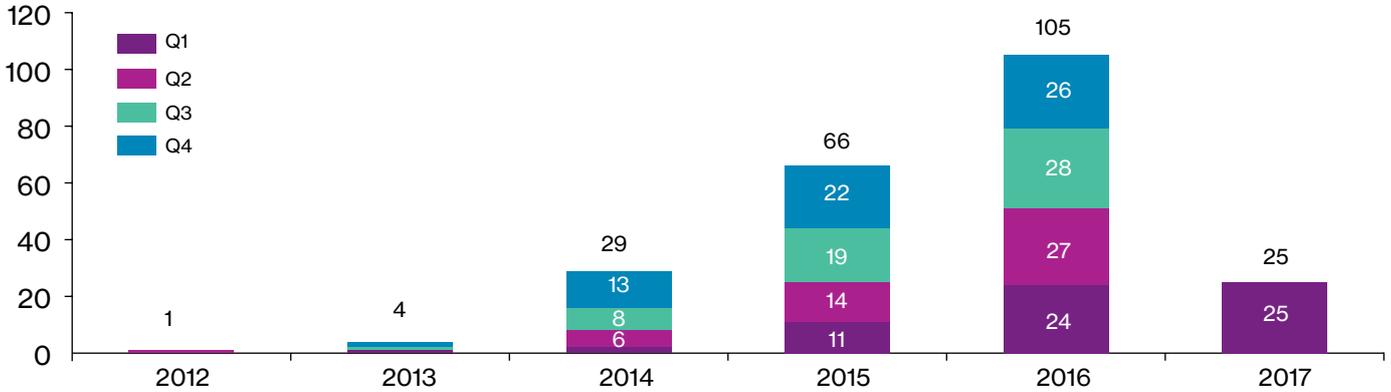
(b) Includes Ballast Fund, CRV, FFP Holdings, Healthy Ventures, Lemhi Ventures, McKesson Ventures, New Atlantic Ventures, New Ground Ventures, Rogers Venture Partners, Subtraction Capital, individual investors and undisclosed investors.

(c) Includes Holzbrinck Ventures, STS Ventures, Tenelmann Ventures and Vorweck Direct.

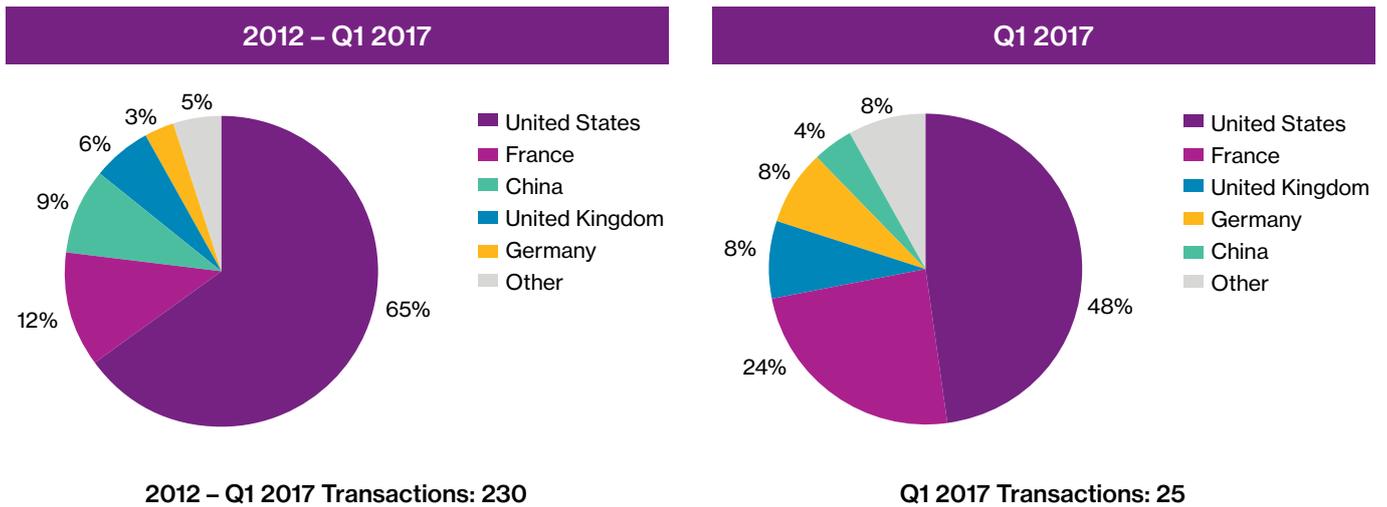
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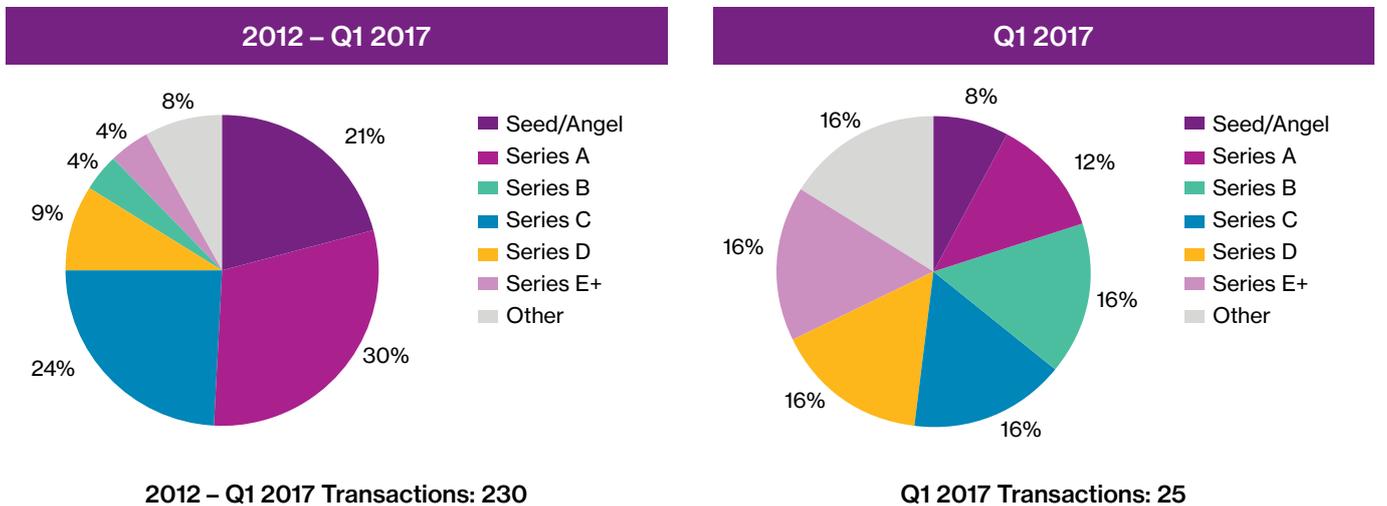
Private Technology Investments by (Re)insurers



Private Technology Investments by (Re)insurers by Target Country



Private Technology Investments by (Re)insurers by Investment Stage



Quarterly InsurTech Briefing

Q1 2017 Private Technology Investments by (Re)insurers

(\$ in millions)

Date	Company	Funding Round Total	(Re)insurer Investor(s)	Description
01/06/17	Networked Insights	30.0 77.4	▪ AmFam Ventures	<ul style="list-style-type: none"> Technology service transforming the way companies make marketing investments by informing decisions with real-time data Enterprise-class analytics solutions uncover audience interests that brands use to connect with their target customers
01/13/17	MicroDoN	2.9 2.9	▪ MAIFAvenir	<ul style="list-style-type: none"> France based social and solidarity economy start-up Provides micro-donation solutions to companies and communities
01/17/17	Bought By Many	9.5 9.5	▪ Munich Re/HSB Ventures	<ul style="list-style-type: none"> Develops specialized coverages with insurers for individuals Munich Re invested in and will provide capacity to Bought By Many
01/17/17	FLYR	8.0 14.3	▪ AXA Strategic Ventures	<ul style="list-style-type: none"> Applies predictive analytics and machine learning to the travel search industry to forecast prices and offer products to maximize revenue
01/19/17	Fabric Technologies	2.5 2.6	▪ RGAx	<ul style="list-style-type: none"> Consumer focused digital life insurance distribution platform Places premium with Vantis Insurance (Penn Mutual Life) Strategic partnership with RGA to provide product development, capital and data resources to support Fabric Technologies
01/26/17	Rippleshot	2.8 4.0	▪ CMFG Ventures	<ul style="list-style-type: none"> Cloud-based platform allowing issuers, merchants and processors to detect fraud through machine learning and data analytics
01/26/17	Needelp	1.6 1.6	▪ MAIFAvenir	<ul style="list-style-type: none"> France based peer-to-peer home service platform that enables individuals looking for help with small jobs to connect with evaluated and verified "jobbers" hoping to supplement their income
01/26/17	CUneXus Solutions	- 6.7	▪ CMFG Ventures	<ul style="list-style-type: none"> Develops software solutions for credit unions and banks Comprehensive pre-screened lending (CPL) strategy to reduce loan acquisition cost, increase sales volume and enhance customer experience
01/31/17	SoundHound	75.0 114.1	▪ Sompo Japan ▪ Samsung Ventures	<ul style="list-style-type: none"> Provides voice-enabled AI/conversational intelligence technology including mobile speech recognition for developers and business owners Consumer product (Hound) focused on music exploration/sharing
01/31/17	Auxmoney	15.0 208.0	▪ Transamerica Ventures ▪ AEGON ^(a)	<ul style="list-style-type: none"> Peer-to-peer loan marketplace that allows private consumers to borrow from private investors for personal loans of €1k to €25k
02/01/17	GoCo	2.5 4.3	▪ Guardian Life	<ul style="list-style-type: none"> Digital HR and employee benefits management platform Integrates with existing payroll providers (ADP, Intuit, Paychex)
02/06/17	Folio	16.0 16.0	▪ Mitsui Sumitomo	<ul style="list-style-type: none"> Offers algorithm-based services that act as automated money managers for lower fees and initial capital than traditional services

(a) Denotes previous round investor that did not invest in current round.

Quarterly InsurTech Briefing

Q1 2017 Private Technology Investments by (Re)insurers

(\$ in millions)

Date	Company	Funding Round	Total	(Re)insurer Investor(s)	Description
02/07/17	CXA Group	25.0	33.0	▪ RGAx	<ul style="list-style-type: none"> ▪ HR management platform enabling businesses to consolidate vendors ▪ Offers digital claims, health data and payment processing between employees, companies, insurers and providers
02/22/17	TravelCar	15.8	22.4	▪ MAIFAvenir	<ul style="list-style-type: none"> ▪ Airport parking and peer-to-peer car rental platform
02/23/17	AT Zuche	58.2	129.9	▪ CPIC	<ul style="list-style-type: none"> ▪ Peer-to-peer auto rental platform operating in 12 Chinese cities with over one million users and 100,000 registered vehicles ▪ Mobile app provides telematics/maintenance related data
03/06/17	The Floww	15.9	15.9	▪ Direct Line ▪ Fosun	<ul style="list-style-type: none"> ▪ UK based autonomous telematics provider to insurers/auto organizations
03/07/17	GuestToGuest	35.0	40.9	▪ MAIFAvenir	<ul style="list-style-type: none"> ▪ France based online platform allowing users to exchange their home or apartment during their vacation
03/09/17	Weather Analytics	17.0	32.8	▪ Tokio Marine HCC ▪ W.R. Berkley	<ul style="list-style-type: none"> ▪ Technology-driven provider of global climate intelligence ▪ Aggregates historical, current and forecasted weather content in online database with risk mitigation tools and predictive analytics
03/09/17	Pokitdok	-	48.7	▪ Guardian Life	<ul style="list-style-type: none"> ▪ Application program interface (API) for health businesses ▪ Powers real-time streamlined healthcare transactions
03/16/17	Insurify	4.6	6.6	▪ MassMutual Ventures ▪ Nationwide Ventures	<ul style="list-style-type: none"> ▪ Online auto insurance quoting and comparison platform
03/16/17	Simplesurance	21.2	32.7	▪ Allianz ▪ Assurant Growth Investors	<ul style="list-style-type: none"> ▪ Enables cross-selling of insurance products at e-commerce point-of-sale ▪ Integrates into checkout process of online shopping sites
03/23/17	Drivemode	6.5	8.5	▪ Mitsui Sumitomo ▪ MS&AD	<ul style="list-style-type: none"> ▪ Distracted driving solution providing safe platform for smartphone users with seamless connectivity to all existing apps
03/27/17	Owlstone Medical	5.0	26.3	▪ Aviva	<ul style="list-style-type: none"> ▪ Developed breathalyzer for clinical diagnostics and precision medicine with applications in cancer, inflammatory and infectious disease
03/28/17	Wheeliz	1.1	1.1	▪ MAIFAvenir	<ul style="list-style-type: none"> ▪ France based platform for sharing handicap accessible adapted cars
03/30/17	Ledger	7.0	8.5	▪ MAIFAvenir	<ul style="list-style-type: none"> ▪ Provides security solutions for cryptocurrencies and blockchains
04/06/17 ^(a)	Tröv	45.0	84.0	▪ Munich Re/HSB Ventures ▪ Sompo Japan	<ul style="list-style-type: none"> ▪ Provides single item coverage for loss, theft, accidental damage, etc. for any duration via mobile app

Note: Non (re)insurer investors not displayed.

(a) Q2 2017 transaction.

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Q1 2017 Strategic (Re)insurer Partnerships

Date	Company	(Re)insurer Partner(s)	Description
01/03/17	Fitbit	<ul style="list-style-type: none"> UnitedHealthcare 	<ul style="list-style-type: none"> UnitedHealth plan participants who get wearable devices can earn up to \$1,500 in annual wellness incentives
01/16/17	Googlenest	<ul style="list-style-type: none"> Generali 	<ul style="list-style-type: none"> Generali homeowners customers in Germany can purchase technology driven policy and receive a Nest thermostat Product sold through Cosmos Direkt (direct platform)
01/16/17	Bought By Many	<ul style="list-style-type: none"> Munich Re/HSB Ventures 	<ul style="list-style-type: none"> Munich Re invested in and will provide capacity to Bought By Many, which develops specialized coverages for groups of individuals based on social media and search data
01/18/17	Next Insurance	<ul style="list-style-type: none"> Markel 	<ul style="list-style-type: none"> Next Insurance will underwrite professional and general liability coverages for personal trainers on behalf of Markel
01/19/17	Fabric Technologies	<ul style="list-style-type: none"> Penn Mutual Life RGAx 	<ul style="list-style-type: none"> Penn Mutual Life (via subsidiary Vantis) will distribute life insurance products through Fabric RGA providing supportive product development, capital, data resources
01/20/17	Sure	<ul style="list-style-type: none"> Nationwide Ventures 	<ul style="list-style-type: none"> Nationwide to distribute renters insurance through Sure Customers can get instant quote, purchase coverage and pay premiums via Sure mobile app
01/20/17	Hillhouse Capital, Tencent	<ul style="list-style-type: none"> Aviva 	<ul style="list-style-type: none"> Chinese firms Hillhouse Capital (hedge fund) (40%) and Tencent (tech/e-commerce company) (20%) each acquired minority stakes in Aviva HK
02/07/17	Automatic	<ul style="list-style-type: none"> AmFam Ventures 	<ul style="list-style-type: none"> Automatic will provide connected-car telematics technology to new American Family auto policyholders, who have the opportunity to earn discounts of up to 40% based on results
02/09/17	Qualia	<ul style="list-style-type: none"> Stewart 	<ul style="list-style-type: none"> Title agents will be able to obtain Stewart rate information, create policy jackets and issue closing protection letters directly through Qualia, a title settlement software provider
02/22/17	Lyft	<ul style="list-style-type: none"> CSAA 	<ul style="list-style-type: none"> CSAA will offer policyholders going through claims process up to \$200 in Lyft credits as an alternative to a rental car
02/23/17	TrueMotion	<ul style="list-style-type: none"> AmFam Ventures 	<ul style="list-style-type: none"> TrueMotion will be a part of American Family's new app-based driver safety program developed in partnership with Automatic
03/01/17	ETMoney	<ul style="list-style-type: none"> HDFC Life 	<ul style="list-style-type: none"> Personal finance app ETMoney will launch an the first group term insurance plan based on the spend pattern of users in partnership with HDFC Life
03/05/17	Hibob	<ul style="list-style-type: none"> Aviva 	<ul style="list-style-type: none"> Israeli start-up Hibob is developing a platform for managing human resources and insurance for SMEs with Aviva
03/13/17	Openbay	<ul style="list-style-type: none"> State Farm 	<ul style="list-style-type: none"> Openbay, an online marketplace for automotive maintenance and repair, will offer discounts to customers logging on through State Farm's website (does not offer collision repair)
03/15/17	Human Longevity	<ul style="list-style-type: none"> MassMutual Ventures 	<ul style="list-style-type: none"> Human Longevity, a database for interpreting the human genome, will offer its whole genome sequencing service to MassMutual policyholders and employees
03/21/17	Roost	<ul style="list-style-type: none"> Desjardins 	<ul style="list-style-type: none"> Desjardins (3rd largest home owners insurer in Canada) policyholders will be eligible to receive a free Roost Smart Leak Detector
03/21/17	ModiFace	<ul style="list-style-type: none"> Dai-Ichi Life 	<ul style="list-style-type: none"> Dai-Ichi will leverage ModiFace's industry leading facial tracking and simulation technology
04/04/17 ^(a)	Jetty	<ul style="list-style-type: none"> Munich Re/HSB Ventures State National 	<ul style="list-style-type: none"> Distributor targeting urban residents with modern lifestyles Business written on State National paper; Munich Re will provide capacity and assist with product development
04/06/17 ^(a)	Tröv	<ul style="list-style-type: none"> Munich Re/HSB Ventures Sompo Japan 	<ul style="list-style-type: none"> Provides single item coverage for any duration via mobile app Munich Re had existing partnership and recently led Series D funding; Sompo invested with the aim of introducing product in Japan

(a) Q2 2017 partnership.

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Additional Information

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

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