Foreword: Insurance in the Modular Economy

The roots of the InsurTech revolution can be traced to the internet boom of the 1990s and the simple notion of transitioning traditional commerce to the web. As this phenomenon gained traction in the following years, insurers’ websites increased in sophistication and aggregator engines emerged as the industry collectively sought to reduce distribution costs and improve customer experience. Some of them were successful: many more failed, and the industry reached a preliminary consensus that the fundamental value proposition for many insurance products is partially diminished by online distribution. It was hardly a disruptive change.

What has followed is more complex and profound. Technology and connectivity continue to serve as catalysts for the modular economy, where products and services in any value chain are repeatedly dissected into modules that interact with each other seamlessly for the benefit of the ultimate consumer. As consumer demand shapes the end product, some of the modules increase in relative value, while others become commoditized and lose value.

The value chain for the majority of industries can be simplified to four core segments: sales, materials, manufacturing and risk management. In the past, successful delivery of the ultimate product required meaningful vertical integration. For example, consider the personal transportation system for a city. Taxi corporations have historically distributed through an exclusive right to put “Taxi” signs on cars, have owned or taken the asset risk of their car fleets, employed drivers and bought insurance to offset risks they did not want to bear. Uber and its contemporaries identified that the true value of this system lies in access to the customer, while all other parts of the value chain can be compartmentalized and outsourced. Customer satisfaction lies mostly in the process of getting a ride and although driver behavior impacts satisfaction today, it may eventually disappear altogether with the popularization of self-driving cars. That is why valuation of the provider of the distribution module (Uber) has increased dramatically, at the expense of all the other modules in the value chain.

Claims Managers – Insurers of the Future?

In this report we focus on one of the insurance industry value chain’s most underestimated modules – claims management. It is a $170 billion global industry currently controlled approximately 90% by incumbents. And it is booming with innovation.

Using the Uber analogy, we can simplify the insurance value chain into sales (distribution), materials (capital / underwriting), manufacturing (claim payment) and risk management (reinsurance). Which insurance industry function will gain the most value over time?

Insurers are challenged with a product that does not lend itself to a frequent interaction with clients. There are only two points of contact: sale and claim payment. Though both create an opportunity to build or improve a client relationship, the importance of the sale often fades in comparison with the complexity and implications of the claim payment. Claims management can be the most powerful driver of customer satisfaction and retention. Today, it is not always a positive experience. Industry executives estimate that a customer who experiences a personal auto claim could be up to 40% less likely to renew their policy, regardless of the outcome.

Where is the True Value in the Industry?

Angel and venture capital invested in insurance is chasing the next unicorn – the insurance industry equivalent of Facebook or Amazon. In the search for value, investors are first asking questions about where the revolution will truly begin. Is it the new approach to distribution that will make the industry unrecognizable in the future? Is it a different approach to underwriting? Or is it the ability to effectively securitize risk and find access to the cheapest possible capital? For investors that build their thesis around disruption driven by risk mitigation, claims managers are particularly attractive. In our industry theme feature we interview executives at established claims management companies and review the universe of claims-focused start-ups to gain insight into how the claims management industry will evolve within the insurance value chain.
As an example, we provide a brief case study of a new initiative focused on automatic settlement of claims related to parcel delivery, illustrating how Willis Towers Watson is pioneering solutions to efficiently manage high volume low complexity claims.

We also look at the deal activity in the claims space with particular focus on Crawford’s acquisition of WeGoLook. The transaction is one of the largest strategic technology investments in the claims sector. It is also one of the most innovative. WeGoLook provides Crawford with a crowdsourcing network of 30,000+ “Lookers” that will go and collect required data / pictures of a loss within hours of notification. Crowdsourcing provides faster and cheaper claims management, but more importantly creates an opportunity to provide risk mitigation services in the future. Over time “Lookers” can become service providers, delivering health kits, facilitating equipment setup, etc. They can help mitigate risk as well as assess it.

**Risk Mitigation Dilemma**

One of the most disruptive scenarios that could result from the InsurTech revolution would be a change in underlying function of the insurance value chain, from volatility management (paying claims) to risk mitigation (making losses smaller). In our incumbent strategy feature, we look at Allstate’s progress to date on its strategic initiative to optimize its claims management processes. While Allstate’s claims service model already contemplates risk mitigation, it can be argued that a claims management conversation with a client provides an insurer with the most insight and greatest opportunity to improve risk mitigation going forward. In this scenario, claims management becomes an increasingly core function in the insurance value chain and accordingly assumes value at the expense of other functions, including distribution, underwriting and capital management. It will be interesting to observe whether incumbents’ initiatives to improve claims management processes will help customers mitigate risk, or if their efforts will focus exclusively on cost savings and improving customer experience.

One of the most difficult aspects of managing disruptive innovation is the fact that embracing it often means sawing off the branch on which you sit. Dedication to risk mitigation means proactively managing premium volume down. It can be difficult for some incumbents. Claims managers do not have that problem. They are built as a money-for-service model.

**Threat vs. Opportunity**

Our thought piece this quarter reflects on the pressure on the insurance value chain. It suggests that whether disruption beckons or opportunity unfolds is primarily a matter of perception relative to a company’s position in the value chain, amplified by how or the extent to which it chooses to embrace or reject innovative technology. We examine how, and with whom, incumbents can truly leverage technology to better meet or exceed client demands at a lower cost.

**InsurTech Investment Reaches Record Levels**

Finally, we review the record level of InsurTech deal activity experienced during the second quarter. Funding volume increased 248% to $985 million across a new high water mark of 64 transactions in Q2, while the $289 million of early stage funding volume and 27 technology investments by (re)insurers during the quarter each also represent record levels. The increase in funding volume was driven by the number of transactions, as well as several large capital-intensive carrier investments globally.

Thank you for the great reception and feedback we received following the publication of our first Quarterly InsurTech Briefing. We want to provide our clients with the most comprehensive and thought provoking analysis of the technological trends in the industry. To make it better, we welcome your suggestions.

In the search for value, investors are first asking questions about where the revolution will truly begin. Is it the new approach to distribution that will make the industry unrecognizable in the future? Is it a different approach to underwriting? Or is it the ability to effectively securitize risk and find access to the cheapest possible capital? For investors that build their thesis around disruption driven by risk mitigation, claims managers are particularly attractive.
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Consistent Cost Structure and the Search for Expense Efficiencies

Loss adjusting costs in the US property and casualty (P&C) industry have remained remarkably consistent in recent years, with the $61 billion of expense incurred in 2016 representing less than 2% compounded annual growth over the past 10 years. Change in loss adjusting expense (LAE) has mirrored the stagnant premium growth in the mature US P&C market, as indicated by the industry LAE ratio consistently hovering at its historical level of 12%.

The significant cost of claims adjudication suggests this area could be a target for incumbents and entrepreneurial businesses seeking to eliminate friction costs and inefficiencies within every aspect of the traditional insurance value chain. However, while many insurers perennially publicize their commitment to strategic initiatives focused on reducing LAE, the same companies are often prudent in considering the impact of the claims experience on their retention.

The claims experience represents a customer’s most meaningful interaction with their insurer and demonstrates the true value of the underlying insurance product. Historically, this hasn’t always been a positive experience — industry executives estimate that a customer who experiences a personal auto claim could be up to 40% less likely to renew their policy, regardless of the outcome.

Insurers utilize a variety of strategies for managing claims, with the primary objective of facilitating a satisfactory customer experience while capturing and cataloguing the underlying data so that it can be efficiently leveraged for incorporation into product development, underwriting, reserving and other insurance processes. Some large national carriers like Allstate handle the majority of claims internally with the goal of achieving greater customer satisfaction and improved retention while other insurers elect to outsource the claims function to third party providers to reduce expenses through a more variable cost structure.

US Statutory Loss Adjustment Expense (LAE) and LAE Ratio

![Graph showing US Statutory Loss Adjustment Expense (LAE) and LAE Ratio from 2007 to 2016.](willistowerswatson.com)
Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

The charts below illustrate the breakdown of US loss adjusting expenses, which are comprised primarily of claims adjusting services and employee compensation expenses, as well as an estimate of the percentage of third party administration (TPA) and field adjusting services outsourced to third party providers. Crawford estimates the outsourced P&C claims market to be approximately $16 billion globally. If we assume the global LAE ratio is consistent with the US LAE ratio of 12% and apply this figure to estimated global P&C premium of $1.5 trillion based on recent research from Munich Re, we can estimate global LAE of approximately $177 billion. Crawford's estimate of the size of the outsourced claims market therefore implies that third party claims service providers account for approximately 9% of global LAE. Below the pie charts is a summary of the operational models of the major insurance claims services segments, including selected key players in each area.

### US Statutory LAE by Category – 2016

- Net Claims Adjusting Services: 43%
- Salaries, Payroll Tax and Benefits: 42%
- Other Expenses: 15%

2016 U.S. Statutory LAE: $61 billion

### Global Internal vs. Outsourced LAE – 2016

- Estimated Outsourced LAE: 9%
- Implied Internal LAE: 91%

2016 Estimated Global LAE: $177 billion

<table>
<thead>
<tr>
<th>Segment</th>
<th>Independent Loss Adjusters</th>
<th>Third Party Administrators (TPAs)</th>
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<tbody>
<tr>
<td><strong>Key Players</strong></td>
<td>Crawford &amp; Company</td>
<td>McLarens</td>
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<td></td>
<td>Cunningham Lindsey</td>
<td>Engle Martin</td>
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<td></td>
<td>York SLA (York)</td>
<td>Worley</td>
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<td></td>
<td>VeriClaim (Sedgwick)</td>
<td>Sedgwick</td>
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<td>York Risk Services</td>
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<td>Gallagher Bassett (AJG)</td>
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<td></td>
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<td>Broadspire (CRD)</td>
</tr>
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<td></td>
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<td>UMR (UNH)</td>
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<tr>
<td><strong>Clients</strong></td>
<td>Principally insurance companies</td>
<td>Self-insured, public entities, insurance carriers, MGAs</td>
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<tr>
<td><strong>Lines of Business</strong></td>
<td>Property (small to large complex risks)</td>
<td>Workers' compensation</td>
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<td></td>
<td>Marine and energy</td>
<td>Liability</td>
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<td></td>
<td>Other specialties and niche insurance sectors</td>
<td>Disability management</td>
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<tr>
<td><strong>Revenue Model</strong></td>
<td>Per claim fee</td>
<td>Managed care (bill review, case management)</td>
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<td></td>
<td>Hourly or daily fee</td>
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<td></td>
<td>Plus travel and other out of pocket expenses</td>
<td>Multi-year contracts</td>
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<tr>
<td></td>
<td>Fees range from $75/hour to $300/hour –</td>
<td>Per claim fee/cost plus margin</td>
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<tr>
<td></td>
<td>– Dependent upon adjuster experience</td>
<td>Share of cost savings (medical bill review)</td>
</tr>
<tr>
<td><strong>Revenue Drivers</strong></td>
<td>Severe thunderstorms, snow, hail, tornadoes</td>
<td>Claims outsourcing</td>
</tr>
<tr>
<td></td>
<td>Large man-made and natural catastrophes</td>
<td>Claims frequency</td>
</tr>
<tr>
<td><strong>Brokers’ Role</strong></td>
<td>Brokers work with the insured</td>
<td>Brokers work alongside TPAs</td>
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<td></td>
<td>Goal to achieve max loss recovery from insurer</td>
<td>Goal to minimize cost for insured</td>
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<tr>
<td></td>
<td>Negotiates with loss adjuster on insured's behalf</td>
<td>Monitor/audit the TPA on insured's behalf</td>
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</table>

Source: Crawford & Company and Munich Re company filings and research and SNL Financial.
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Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

Evolution of the Claims Cycle – View from Claims Specialists
Outsourced insurance claims service providers are specialists by definition, based on their exclusive focus on this aspect of the insurance value chain. Accordingly, we expect these players are likely to have a particularly insightful perspective into the anticipated impact of emerging technologies and start-ups on the current P&C claims cycle. We spoke to several TPAs and loss adjusters to better understand how they expect the claims servicing industry to change in the next several years.

The table below includes a summary of some of the most prevalent trends driving innovation in the sector based on our conversations with each firm. On the following pages we have included overviews of the claims companies that participated in this report, complete responses from company executives from each claims company to a series of questions about the future of claims management and the role that they expect their firm to play in its evolution, and finally, a summary of our findings from an industry survey that we provided to each executive.

Industry Trends – The Future of Claims Management

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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| **Decreasing Claims Volumes**      | • Claim frequency in relation to exposure continuing to fall in many lines of business  
• Sensors for monitoring homes and business are proving effective in claims prevention and mitigation  
• Despite the long-term downward trend, volatility may increase with potential for spikes in severity |
| **Catastrophe Activity**           | • Relatively low catastrophe activity in 2013 – 2016 following two of the costliest years in US history in 2011 and 2012, in terms of insured catastrophe losses  
• Claims operations require flexibility to scale quickly to meet demand spikes following future events  
• Technology is increasingly capable of providing advanced warning of events, reducing the risk and severity of business interruption |
| **Increasing Use of Sensors**      | • Increasing penetration of connected sensors and devices in homes and businesses is resulting in reduced frequency and severity of claims  
• New data sources focused on loss prevention and incident management  
• Claims prevention strategies increasingly aligned with customer-facing programs |
| **Digital Disruption**             | • Customers expect insurers to engage through multiple channels and are requiring them to develop omni-channel communication capabilities  
• Accurate and transparent information about claims status made available online or through mobile applications  
• Commercial and corporate clients continue to seek advice from brokers – claims service is increasingly a key source of differentiation |
| **Improving Risk Management**      | • Large businesses have significantly improved risk management capabilities in recent years  
• Better data and clearer visibility into cost of risks are likely to result in decreased overall claims volumes from large commercial policyholders  
• Management of severe incidents becoming core capability as frequency of severe events increases |
| **Modernized Technology**          | • Technology platforms delivering enhanced and more specific segmentation, streamlined workflows, more efficient core processes and improved productivity  
• Advanced technology (i.e. drones) changing the role of claims professionals; greater demand for complex adjusting skills  
• Automated settlement for smaller, more straightforward claims with no indication of fraud |

Source: Company filings, websites and press releases.
### Q2 2017 Industry Theme

**Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management**

<table>
<thead>
<tr>
<th>Company Overview</th>
<th>Approximate Business Mix</th>
<th>Business Overview</th>
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<tbody>
<tr>
<td><strong>Genpact</strong></td>
<td>NA</td>
<td>- Global professional services firm Genpact (NYSE: G) acquired BrightClaim and its associated company, National Vendor, in May 2017. - Transaction combines BrightClaim's US onshore claims depth with Genpact's digital and analytics capabilities in order to serve as a strategic transformation partner for P&amp;C insurance carriers. - Brightclaim is an end-to-end claims solutions provider to P&amp;C industry for auto and low to medium complexity personal and commercial lines insurance claims. - Provides centralized claims solutions combined with field resources. - Genpact’s insurance services include P&amp;C claims management, P&amp;C underwriting, life insurance, analytics &amp; actuarial, insurance finance and accounting and IT for insurance.</td>
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<tr>
<td><strong>Crawford</strong></td>
<td>International 43% Broadspire 9% U.S. Services 21% Garden City Group 27%</td>
<td>- Largest public independent provider of global claims management solutions with 8,900+ employees in 700+ offices in 70+ countries. - Clients include multinational carriers, brokers and local insurance firms. - Offers integrated claims and consulting services to P&amp;C, workers’ compensation and medical management insurers through four segments. - US Services segment includes field operations, technology services, catastrophe services and Contractor Connection (managed repair). - International segment provides claims management services outside of the US. - Broadspire is US TPA; Garden City provides legal settlement services.</td>
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<tr>
<td><strong>Cunningham Lindsey</strong></td>
<td>NA</td>
<td>- Leading provider of loss adjusting, claims management and risk solutions to insurers, brokers and risk managers. - Global operating platform of 6,000+ employees in 600+ offices located throughout 60+ countries. - Group includes a range of businesses working on all parts of the risk cycle, including pre- and post-loss. - Expertise in fraud, surveying, engineering, construction, forensic accounting, training, fire origin, environmental risk and contractor management. - Investor group led by CVC completed $934 million recapitalization in December 2012.</td>
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<tr>
<td><strong>Davies</strong></td>
<td>Property 12% Casualty 36% Compliance/Regulatory 25% Motor 27%</td>
<td>- Delivers TPA and specialist technical services in the UK and Ireland. - Specializes in P&amp;C, motor and other niche lines of business. - Technical services include loss adjusting, surveying, fraud investigation, credit hire and motor impact defense and supply chain solutions. - Clients: intermediaries, Lloyd’s, UK and global insurers, large self-insureds. - With staff of 800+ employees, Davies handles 200,000+ claims annually for 100+ clients, managing more than £1.2 billion of annual claims spend. - Completed seven acquisitions over the past four years. - HGCC acquired majority equity stake in Davies in January 2017.</td>
</tr>
<tr>
<td><strong>ESIS®</strong></td>
<td>NA</td>
<td>- Risk services company that designs customized pre- and post-claim solutions while also being an extension of clients’ culture and business processes to jointly define goals and objectives. - Offers a wide variety of risk and absence management solutions, including auto, general and professional liability, workers’ compensation and absence management to commercial clients, captives and MGAs across all industry verticals. - Products offered globally through self-insured, high deductible, carriers, public entities, programs, complex/cat losses, alternative risk solutions and other areas. - Payments made on behalf of clients are expected to exceed $9 billion in 2017, roughly equivalent to an insurance carrier’s loss and small part of its LAE. - Risk management segment comprised 13% of total A.J. Gallagher Group revenue in 2016.</td>
</tr>
<tr>
<td><strong>GallagherBassett</strong></td>
<td>Corporations/Private Businesses 62% Insurers/Government Schemes 27% Public Sector 8% Other 3%</td>
<td>- Risk and claims management service company providing risk control, full life cycle claims management and analysis and consultation to assist clients in reducing claim frequency and severity. - Services clients including insurance carriers, corporations and other privately owned businesses, public sector entities, MGAs/MGUs, captives and associations through four segments - Payments made on behalf of clients are expected to exceed $9 billion in 2017, roughly equivalent to an insurance carrier’s loss and small part of its LAE. - Risk management segment comprised 13% of total A.J. Gallagher Group revenue in 2016.</td>
</tr>
<tr>
<td><strong>York</strong></td>
<td>Managed Care 43% Worker’s Comp 11% Insurance Services 12% Property 24% Liability 10%</td>
<td>- Specially focused TPA operating through 5,000+ employees in 85+ offices in the US, London and Latin America. - Offers TPA and claims adjusting, managed care and pooling, risk control and technology services through specialized business segments focusing on self-insured/ high deductible, carriers, public entities, programs, complex/cat losses, alternative risk solutions and other areas. - Broad customer base includes 5,800+ public entities, 300+ program administrators/ MGAs/carriers, 500+ self-insured/deductible clients. - 20+ acquisitions since 2009 including CareWorks (2014) and Avizent (2011). - Onex acquired majority stake in York at $1.3 billion enterprise valuation in October 2014.</td>
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Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

Describe the claims cycle today for your addressable market. What role does your business play? How do you expect this process will change over the next five years? What role will your business play in the future claims cycle?

Today the claim process is driven primarily by manual effort, with a high voice component and significant reliance on staff adjusters for damage assessment. The industry is transitioning to more of a self-service environment, with companies leveraging third party service providers for outside assessments and damage estimates and instituting business rule driven claim outcomes to fast track an increasing number of claims. Genpact handles various end-to-end (E2E) claim processes for global insurers and multiple lines of business leveraging onshore and offshore partnership models.

Over the next five years, by fully embracing digitization, carriers will be moving toward larger degrees of virtual handling and straight-through-processing. Carriers will be looking for progressive solution providers like Genpact with a combination of digital technology innovations and deep domain knowledge in order to transform their E2E claims process. The focus will be customer-centric and include seamless integration of online and mobile channels, improved performance across the front, middle and back offices and application of advanced analytics to add value.

Genpact Cora uses integrated advanced technologies across three key areas: digital core, data analytics and artificial intelligence, to provide point solutions within the Claims Suite focusing on decision support, intake automation and customer experience.

Crawford provides complete business process outsourcing, as well as specific activity-based solutions. We play a role in the entire claims life cycle – from first notice of loss (FNOL), all the way through subrogation. We bring deep expertise related to individual P&C lines of business, including property, general liability, motor, cyber, product recall, specialty and other lines with a specific focus on several industries including agriculture, food, aviation, retail, health care, manufacturing, legal and other sectors. To provide some more detail, I will describe two examples.

On one end, consider a volume property loss – something that isn’t particularly complex, so in terms of actual indemnity or cost dollars, it would be in the thousands rather than in the hundreds of thousands. There are changes to how the FNOL takes place so that a smart triage is occurring. Information is processed efficiently which enables us to identify triage opportunities based on the characteristics of the claim, the complexity and the actual demographic of the claimant. We can adjust and reserve all the way through payment, and even provide the insured with contractors to make the repair. There are also opportunities to utilize new technologies to reduce cycle time – from certain circumstances where we are able to automatically adjudicate auto or home losses where the customer can self-service with video or pictures, to desk adjusting, to situations where we can utilize our crowdsourcing platform, WeGoLook, or our market leading managed repair provider, Contractor Connection, as well as situations where we continue to utilize our traditional adjusting model.

For a more complex workers’ compensation claim, the process is very dynamic based on the complexity, the peril, the line of business and the potential measures that can be taken based on the specific activity. For example, for an injured worker who is prescribed opioids for pain, we are using predictive modeling throughout the process to ensure that we are providing the appropriate treatment, so that something that starts out as an injury with some pain doesn’t lead to chronic pain and opioid abuse. In these situations, there are a variety of treatments available, including clinical, behavioral or other alternatives. Of course, this is just one component of an E2E process.

In regards to how processes are going to change, there is so much at play here. One macro change is clearly that the world is going to be immersed in sensor technology. Products are going to be built with fewer manufacturer defects, which are increasingly measured, monitored and eliminated before they occur. There should be a change in frequency, but also an increase in severity, because everything is going to be “smart.” If you have fire or wind-driven damage, walls that have a “smart” element are going to be more expensive. There is also going to be a shift from property to liability because when manufacturers infuse products with more sensor technology, like self-driving cars or even accident avoidance technology, there is going to be an increase in liability. Another change is clearly just a dramatic reduction in the chain of activity. As described above, the first notice of loss will go directly to payment and payment will be electronic. It will show up in your electronic wallet. That’s a dramatic collapse. Information analytics and artificial intelligence are dramatically collapsing the time frame and improving efficacy. Processes for more complex claims that are less cut and dry are likely to take longer to compress. It’s going to be an interesting mix of data analytics, root causes, lawyers, jurisdiction, etc. In terms of what role we’re playing, we’re looking at all of these macro trends and then some. As you guys are well aware, given Willis Towers Watson’s role in general, a dramatic change in the capital structure in the industry has led to infrastructure-light companies. So a lot of companies that are emerging, that are willing to take first dollar risk, are doing so without having the claims organizations inside their companies. These are outsourcing opportunities. On these macro changes, we’re trying to understand the implications and we’re proactively establishing our response.
Describe the claims cycle today for your addressable market. What role does your business play? How do you expect this process will change over the next five years? What role will your business play in the future claims cycle?

**Cunningham Lindsey**

**Jane Tutoki**
Chief Executive Officer

We assist clients with pre-loss as well as post-loss services. Post-loss services cover the spectrum of a claim's life, from FNOL to claim settlement. The core of our business is loss adjusting, which incorporates loss estimation, policy adherence and restoration.

We expect our spectrum of services to be in higher demand over the next five years as insurers seek to streamline their claims departments. Insurers will be required to partner with fewer suppliers that can make the investment in continuous improvement and that ensure compliance with the ever-changing regulatory environment.

**Davies Group**

**Dan Saulter**
Chief Executive Officer

Davies Group provides an E2E claims capability – from FNOL through to repair and settlement. Our cross class claims solutions span property, casualty and motor, both as a TPA and as a provider of technical services, such as loss adjusting, building reinstatement and vehicle repair and hire. We will continue to play an integral role in the claims cycle as we invest significantly in capability whilst adapting to client needs and market changes.

**ESIS**

**Joe Vasquez**
President

ESIS provides E2E solutions that cover pre- and post-loss services designed to prevent or mitigate financial exposures. Our team is an extension of the risk, safety, and human resources departments of our clients. Working directly with these departments and claimants, we focus on providing a high degree of customer service through customized offerings that produce superior outcomes at the program level as well as on a claim-by-claim basis.

As the claim process continues to evolve, we foresee a consistent focus on the use of technology and data to enhance our customers’ overall experience through the development and utilization of new technological capabilities.

At the adjuster level, we have moved away from the traditional check-the-box mentality and evolved into targeting specific claims that have the potential for increased exposure due to additional, and often times, unrecognized risk factors. At a more aggregate level, our focus is on program design and evaluation to continuously identify opportunities for program enhancements, leverage those opportunities with existing or new programs as well as measure and monitor program results.

Although our roles as outlined above are not likely to change, the tools, techniques and expertise brought to the process will continue to evolve with the claim process.

**Gallagher Bassett**

**Scott Hudson**
President & Chief Executive Officer

The services provided by Gallagher Bassett today span the full claim life cycle, and in some cases go beyond it. They include:

- Risk control/loss prevention
- Policy services, including policy information management and in some cases rating, where requested by carrier clients
- Claims management, from loss intake through settlement and closure, including pursuit of recoveries and other services that may be requested by clients
- Use and management of third parties, whenever necessary and desirable
- Training and consultation of clients and their associates, for purposes of reducing claim frequency and severity

While we are always looking for opportunities to expand our business, we are content with the range of services we provide today, which excludes little other than underwriting – i.e., taking risk ourselves. Our focus in the future will be on enhancing and deepening our capabilities with additional investments in predictive analytics and related decision-support tools, capitalizing on our vast wealth of data and experience to enhance and selectively automate claim handling practices, and recruiting and training the industry’s best professional workforce.
York’s comprehensive suite of integrated insurance solutions means that the claim cycle for us starts prior to the claim with loss control to prevent or mitigate claims and continues beyond the claim to strategic claim analysis and risk/claim management program improvements developed in partnership with our clients. When a claim occurs, the process varies somewhat by line of business but includes strategic claim management:

- Online and telephonic reporting of claims
- Claim triage and assignment
- Claim investigation, assessment of liability and damages
- Litigation management (should the claim involve litigation)
- Negotiation, resolution and subrogation/recovery
- Analysis and recommendations

For all claims we leverage technology to create a positive experience for all stakeholders, reduce frictional costs, and improve efficiency and communication. Most importantly, we use data science to focus and target claims and managed care expertise to deliver just-in-time information to adjusters to help them reduce claim durations and costs, and get injured workers back to health and back to work as quickly as possible.

We continue to explore ways to streamline claims processes to remove as many adjuster touches as possible with automation and data science. The adjuster role will never be eliminated for many types of claims, especially those involving injuries. We can, however, use smart technology to replace or reduce burdensome administrative activities. The more adjusters can focus on the elements of claim handling where their expertise and an empathetic connection with the injured worker or claimant brings value, the faster we can move through the process to resolution and the better service we can deliver to clients and claimants.

In addition, the data we gather in the course of managing claims informs our risk management information system and drives effective stewardship reporting to and partnership with clients to help them continually improve their risk and claim management programs.
Q2 2017 Industry Theme
Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

Describe your current strategic priorities as they relate to improving the claims cycle and streamlining the claims process. Are there any new technologies with claims applications that you are focused on incorporating into your business?

Genpact is focused on delivering practical digital and automation solutions which complement the claims process and better support policyholders. High volume and low complexity claim processing is the target area for automation and simplification. Genpact combines key digital technologies and design thinking to deliver differentiated outcomes for our customers. The following aspects of our value proposition enable Genpact to reduce claims costs and improve process efficiency and customer satisfaction.

a. Genpact Cora supports multi-channel intake and workflow capabilities to manage the E2E claims cycle. This solution, embedded with predictive analytics, triages to fast track or complex handling through a scoring methodology and assists in early determination of subrogation and Fraud Special Investigations Unit referral.

b. Genpact’s First Notice of Loss solution provides predictive analytics and machine learning algorithms to segment a claim based upon its complexity so that it can be routed to an adjuster based upon their skillset. Key amongst this is the straight through processing (STP), flagging functionality which identifies a claim which can bypass standard adjudication cycles and be sent directly for settlement.

c. Genpact’s Claims Fraud Analytics solution uses a proprietary suite of analytics coupled with Business Process Management (BPM) and voice capability, to provide an E2E fraud solution to assist in the detection, investigation and prevention of fraud throughout the life cycle of claims.

d. Genpact’s Claims Subrogation solution provides a suite of analytics models coupled with BPM and voice capability which helps identify recovery potential for a claim and prioritizes it for action by a recovery team. Case management features exist to automate subrogation demands.

With the BrightClaim acquisition, Genpact can now offer comprehensive contents services, including fulfillment, direct repair programs and daily catastrophe and liability adjusting services and solutions. As a result, Genpact will also focus on:

e. Genpact’s Desk Review Loss Estimate capability includes solutions for estimate review, photo estimating and development of rules-based auditing to increase productivity and value. It is natural to include oversight on the repair process and include our own network of repair facilities / contractors and managing those repairs we send on behalf of our clients.

f. Genpact’s Inspection Platform, using computer vision technology, can be leveraged for all assessment and inspection activities, regardless of the purpose, manner of collection or media source. The specific solution consists of using digital imagery to view the property/damages, ingesting images, calculating the severity score and using machine learning algorithms to automate adjudication of claims.

g. Genpact provides a truly differentiated, Digital Appraisal Service solution with mobile capabilities (for automobile and property damage appraisals) which allows carriers to connect with customers or partners in real time to complete inspections instantly, enable customer self-service inspections that improve the customer journey and reduce costs by using their national inspector network.

h. Genpact’s Drone Service capability for roof inspections and CAT losses allow carriers to move away from hazardous, hands-on, time-consuming property inspections to an efficient, safe and expedient process. Reducing the cycle time of a claim has a big impact on customer retention. Given their portability and ability to cover distances quickly, the use of drones greatly reduces cycle time and improves customer experience. This is especially critical during CAT situations where there is an increased number of claims and a limited number of adjusters. The solution captures images and videos and integrates with the Claims SOE for distribution and analytics, provides the ability to take real-time measurements of roof slopes and combines data from different sensors, artificial intelligence and historical analysis to provide a complete actionable result.
Q2 2017 Industry Theme
Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

Describe your current strategic priorities as they relate to improving the claims cycle and streamlining the claims process. Are there any new technologies with claims applications that you are focused on incorporating into your business?

Ken Fraser
EVP and Chief Strategic and Development Officer

We are focused on delivering three points of value to our clients – reduced LAE or indemnity loss costs, improved customer experience, of which cycle time is one component, and providing clients with a better alternative to investing directly in claims. Our strategic priorities are centered around four things. We are reinventing the claims space through initiatives like WeGoLook and Contractor Connection. We are building more discrete, broader and deeper expertise in complex claims, based on our expectation that liability and specialty risk are going to become increasingly important as the world continues to become more complex as new technologies are incorporated into our daily lives. We are adding information solutions to our product offering, as I described in the opioid abuse example, including advanced and predictive analytics to drive the right treatment. Finally, the fourth thing we are doing is embracing new staffing paradigms in the industry. WeGoLook is an example of positioning ourselves for the future where we expect to see more innovation, such as crowdsourcing adjusters for volume claims.

I would also like to add that, given our scale and our scope, we are truly a global company with 45% of our revenues outside of the US. We have to make sure that we are innovating in our local markets and then lifting those processes and dropping them into other markets. Along with our reach and the entrepreneurial culture of our business, this is one of the most significant benefits of our global and decentralized operating structure.

Jane Tutoki
Chief Executive Officer

As a leading service provider in the claims space our strategic intent is to work with our clients to meet their goals for claims management. This includes:

1. Reducing claim life
2. Reducing indemnity spend
3. Improving the customer experience, particularly in the personal lines segment
4. Developing alternative service offerings that challenge existing processes by delivering on reduce claim cycle life as noted above in 1, 2, 3
5. Reducing the process cost per claim

Cunningham Lindsey has created our Clarity suite of technology solutions. Clarity represents a comprehensive suite of technology services designed to meet the demands of the insurers and their insureds. We have leveraged and continue to look for new technology tools to deliver on our strategic objectives and to deliver an industry leading Clarity solution. Notable examples include:

- MiClaim: responsive website built to work on mobile phones, tablets and desktops, enabling personal lines and small commercial insureds to view and interact with their claim on demand. It includes real-time updates and policyholder “to do” lists, allowing the insured and claims handler to work in partnership. This reduces the settlement times while increasing customer satisfaction with the claims process.

- Clarity Connect: a video conference streaming technology allows claims handlers to reduce claim life cycles and claims expenditure by ensuring the correct resources are deployed immediately on every claim. The technology enables a two-way, real-time video conversation to be held between the insured and claims handler with their smartphone or iPad device. Our customer surveys have shown that using this technology to conduct a triage of the damage early in the process is viewed positively by insurers/brokers and the insured.

- Clarity iSite: using drone, cloud and mobile video technology to produce a narrated visual summary of a claim site. The adjuster uploads the narrated video directly from the iPad. All stakeholders get an early view of the claim and likely issues.

- Clarity Reporting – provides insurers and corporations with a suite of analytics to manage and monitor the claims under management with Cunningham Lindsey.

Dan Saulter
Chief Executive Officer

We have invested significantly in Cq, our claims work flow platform that integrates all our claims data. This drives insight and customer experience but also the ability to feed seamlessly into our clients’ own systems. It allows us to manage claims, make decisions much more quickly, identify fraud patterns and use this information to develop claim strategies with clients. We invest in drones and smart phone video technology to reduce the claims lifecycle.
Describe your current strategic priorities as they relate to improving the claims cycle and streamlining the claims process. Are there any new technologies with claims applications that you are focused on incorporating into your business?

Joe Vasquez  
President

It is important to understand the TPA relationship occurs at two levels: program and claim. Therefore, we have to take into consideration the corresponding cycles and relevant technological influences for each level.

At the program or partnership level, ESIS' strategic priorities include developing a technology toolkit that supports the consultative and critical thinking components of the client partnership with a concentration on access and analysis of data, improving the client experience through self-service options, and streamlining workflow to eliminate administrative tasks.

We also strive to create a pipeline of talent, focusing on skill-based hiring of new graduates. Completing the roll out of a three tier certification program through ESIS Achievement Academy is another priority at the program level. Implementing such a program will further enhance skills in the areas of product knowledge, critical thinking, relationship and project management, and data interpretation. The approach also provides the partnership leader with a path for career development.

At the claim level, ESIS' strategic priorities include continued focus on identifying talent using a competency-based model to bring new individuals into ESIS who have critical claim resolution abilities. Along with superior talent acquisition, ESIS is dedicated to integrating predictive models in the claim handling process. We continue to identify additional opportunities that can impact claim file-outcomes as well as our service model. Lastly, ESIS makes a priority out of streamlining tools that allow our adjusters to focus on critical junctures as opposed to non-value tasks.

Scott Hudson  
President & Chief Executive Officer

Gallagher Bassett is making a wide range of investments in claims management technology and practices. They include:

a. Reengineering of the loss intake process to take full advantage of the service improvement potential of mobile devices – we are already in production with a mobile loss reporting application that integrates reported loss information across multiple channels (e.g., mobile, PC, phone), and speeds processing of claims through to settlement, payment, and closure

b. Implementation of a state-of-the-art claims management system, already in production in selected non-US locations and slated for implementation in the US to direct workflows, automate tasks that do not require human involvement, and provide enhanced management information – among many other intended benefits

c. Predictive models to support, and where appropriate, fully automate decision-making, among them claim segmentation and assignment, reserving, clinical intervention, and litigation avoidance and management

d. Increased specialization among professional staff to enable more granular claim segmentation and development of ever-deeper expertise to improve cycle times, service, and outcomes

Rick Taketa  
President & Chief Executive Officer

The foundation of our claims strategic priorities is the belief that a focus on three fundamental principles will determine our long-term success: Maintaining an excellent work environment for our associates; delivering a consistent and best-in-class customer and stakeholder experience; and focusing on quality with the aspiration of ‘zero defect’ in our claims handling. Strategic and tactical initiatives will need to support our achievement of these goals.

We continue to optimize technology in the area of data science and predictive analytics to proactively identify claims where we can leverage our claim and managed care expertise to deliver superior results. This includes getting injured workers back to health and back to work faster, shortening claim duration, reducing claim costs, maximizing subrogation opportunities and effective investigation of fraud.

Another big focus area for York is using emerging hardware and software technology as they relate to mobile applications, wearable technologies and artificial intelligence / machine learning that engage the injured worker in their recovery, facilitate their participation in the claim process, and help us resolve claims faster. In all cases, our goal is to leverage technology to improve not only our outcomes and our client’s total cost of risk but also the claim experience, which we consider to be the most important factor, whether it is the experience of the claimant or injured-worker, the experience of the adjuster, the experience of the insured, and the experience of the carrier.
# Q2 2017 Industry Theme

Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

<table>
<thead>
<tr>
<th>For claims within your addressable market, which technologies do you think will have the largest impact on reducing claims cycle time and improving customer satisfaction over the next five years?</th>
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</thead>
</table>
| **Howard Rogers**  
*BrightClaim Chief Executive Officer*  
The self service model allows customers to process claims straight through with no-touch or low-touch interventions from the insurer. Alternate methods of inspection and damage handling will have the greatest impact on cycle time which is also a proxy for customer satisfaction. Customers want a seamless, omni-channel claims experience, meaning they want ease and consistency whether reporting a claim through their smartphone, reviewing their claim status online from their desktop computer or receiving a notification to their tablet. Technology will be used to further strengthen communications, accelerate claims and cater to customer preferences. Mobilization of customer-centric data powered by big data analytics and provided through self-service options will be expected. Ambient technologies such as dynamic workflow, IoT and collaboration capabilities will enable execution across the entire claims process. Claims profiles on the cloud coupled with digital security will allow the many parties involved in a claim to simultaneously share data with ease. This includes cloud based document management and the ingesting, reading and processing of different types of unstructured data through various media sources. All of these technologies serve to reduce claims cycle time and improve customer experience. |
| **Ken Fraser**  
*EVP and Chief Strategic & Development Officer*  
Technology is changing many industries, including the insurance industry. We embrace the disruption this will bring to the claims management sector and are already investing in emerging technologies that will make a huge impact over the next five years, such as big data algorithms, artificial intelligence and deep learning. What’s more important is how we will piece these together to bring better, faster, lower cost solutions to clients that show demonstrable benefits to their clients – the consumers! |
| **Jane Tutoki**  
*Chief Executive Officer*  
There is no specific technology that we can point to at this time. The future will require us to combine a number of new and emerging technologies with new business processes and service delivery models to accelerate decision making, improve the quality of decisions while reducing the cost to manage claims. This will include machine best learning, drones, 3D imagery, mobile tools. |
| **Dan Saulter**  
*Chief Executive Officer*  
Automation, robotics and video will increasingly play an important role in the claims cycle. We deploy the best solution to each claim, layering new technologies alongside our more than 800 strong team of claims professionals. |
Q2 2017 Industry Theme
Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

For claims within your addressable market, which technologies do you think will have the largest impact on reducing claims cycle time and improving customer satisfaction over the next five years?

ESIS®

Joe Vasquez
President

There are three key technologies that will have the largest impact on reducing claim cycle time and help to improve customer satisfaction over the next five years: claim systems, data and analysis tools, and client and claimant technologies. ESIS is investing in each of these areas in the following ways:

New claim systems – New systems will eliminate decades of enhancements which have resulted in a non-cohesive patchwork of technology that has plagued our industry. ESIS is continuing to invest in technology that can achieve accurate and efficient claims handling through The ESIS Claims Operating System (ECOS). This system will create an environment that streamlines processes, captures more data, and allows for the use of analytics on the fly to support the experience of claim professionals at all levels.

Data extraction and analysis tools – Improved analysis and data extraction tools provide faster access in a digestible format to ESIS’ Partnership Services team. The ESIS Quarterly Partnership Analysis Tool (QPAT) is a first step in this evolution. QPAT is the foundation for a new approach to more productive conversations with clients about their program. ESIS utilizes these conversations to review outcomes and processes, address circumstances as they arise, and provide feedback on the program changes that were identified during previous evaluations. Another tool we offer is ESIS ExPO®, which turns data analytics into decision-making information, evaluates the potential effectiveness of primary care physicians on up to 11 unique performance metrics, and measures outcomes on a total cost per claim basis.

Client and claimant technologies – ESIS is embracing the inclusion of our clients and the claimant in the claims management process by offering tools that enable greater control over programs. An example of this is ESIS Global RiskAdvantage® (GRA), which allows users to track all newly reported claims and to receive customizable claim alerts via our mobile application. On the claimant side, ESIS has developed a suite of claims management tools specifically designed for injured workers, such as ESIS MyView, an instrument that provides users with access to their workers’ compensation claim information through a personal computer, tablet or smartphone. Additionally, our Integrated Disability Management solution, ESIS Spherical™, is designed to benefit both the employer and employee by taking a holistic view of total absence within a given organization to maximize productivity and employee health. Our sophisticated software assists employers to stay fully compliant in all jurisdictions and avoid the risk of penalties and fines for non-compliance. Finally, ESIS’ event intake tools are designed to help facilitate rapid claims response and maximize claim outcomes. For example, ESIS on Call™ for Construction and ESIS on Call™ Environmental Incident Response provide claimants with FNOL capabilities through an easy-to-use mobile application. Additionally, ESIS Telemedicine provides injured workers access to virtual physician consultation for immediate assessment, cost savings, and improved return to work.

This will differ substantially by line of coverage. In the personal lines space, where speed, service, and convenience are paramount, taking the claimant experience mobile, automating not just routine administrative tasks but complex judgments (e.g., likelihood of fraud, litigation potential), and employing state-of-the-art technologies to address security and privacy concerns will be areas of focus.

In lower frequency but higher severity commercial lines like professional liability, product liability, and workers’ compensation, speed and service will be important, but there will be greater emphasis on the contribution that technology can make to things like reducing claim frequency, preventing seemingly simple claims from escalating into more severe ones, and optimizing medical treatment to get injured parties healthy and able to resume living as they were prior to becoming injured. The technologies with the greatest impact on these priorities include those above but with greater emphasis on machine learning, data virtualization tools for mining big data sources such as Hadoop, and predictive analytics.

We believe that artificial intelligence, which includes far more than predictive analytics, will have the largest impact. What we know today about predictive analytics is only the tip of the iceberg. The next five years will see a significant expansion into data science that includes prescriptive analytics, NLP or natural language processing engines, pattern recognition models, self-education of machines, and autonomous operation. The ability to integrate these innovations and empower our employees to make the best decisions in their work will have the biggest impact on reducing the claims cycle and improving customer satisfaction.
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Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

List any investments you have made or partnerships you have established with technology/InsurTech companies. Describe what you are looking to accomplish through technology/InsurTech investments or partnerships and your specific objectives for each investment/partnership.

As of May 3, 2017, Genpact has acquired BrightClaim and its associated company National Vendor, both leading providers of integrated claims solutions to the US P&C insurance market. The acquisition marries domain expertise with advanced technologies to fundamentally change how insurers manage the claims process, allowing carriers to create a seamless claims experience for their customers.

With this acquisition, Genpact has gained deeper domain expertise in the US P&C insurance claims market, and has strengthened its portfolio of digital technologies and fraud detection capabilities. The acquisition also includes BrightServ, a BrightClaim associated company, which has a nationwide network of contractors and offers carriers a direct repair program along with content fulfillment. Genpact can leverage this to provide cost-effective and faster claims settlement services, which is expected not only to reduce claims payouts for insurers, but also to improve the customer experience.

Genpact

Howard Rogers
BrightClaim Chief Executive Officer

Crawford

Ken Fraser
EVP and Chief Strategic & Development Officer

Cunningham Lindsey

Jane Tutoki
Chief Executive Officer

Dan Saulter
Chief Executive Officer

ESIS

Joe Vasquez
President

ESIS®

Evan Greenberg, CEO of Chubb Limited, the parent company of ESIS, has stated that: “Embracing the digital age requires investing in our digital future, and we have an objective nothing short of transforming into a digitally integrated enterprise from top to bottom.” Our organization’s technological investment strategy is a two-pronged approach tantamount to Mr. Greenberg’s top-to-bottom digital integration focus. We directly invest in the improvement of client, claimant and partner facing technologies while also leveraging Chubb investments from an efficiency perspective. We are committed to providing consultative and innovative solutions to drive superior results for our clients’ programs and operate as an extension of their risk management departments, aligning combined goals to form a collaborative partnership.

An example of our investment and focus on technology is evident in the development of our Quarterly Partnership Analysis Tool (QPAT). By focusing on providing a highly visual and interactive tool, we knew this product would be quite different from our traditional lineup. The insurance industry thrives on data, but much of it is presented and analyzed in spreadsheets at deep levels of detail. To be useful for our account executives, we knew we had to present the metrics in an easily digestible form, one that would clearly communicate the key message and also provide a way to dig down into the underlying numbers.

ESIS is focused on designing a friendly user interface and simple charts with limited controls for optimal flexibility. By understanding our users, we took a restrained approach to tailor the functionality to their skill level and needs. By giving clients greater control over their programs through powerful data so that they might proactively address opportunities with an ESIS partnership leader before they become larger concerns, QPAT serves as a testimony to our investment in technological strategy.

The vast majority of the investments we have made to date have been in-house, though we have used design firms and systems integrators to assist with the development itself. The exception to this was the acquisition of Countrywide Accident Assistance Limited (CAA), which significantly strengthened GB’s repair network and the technology with which to manage it. We are in dialogue with other InsurTech companies, and in some cases just looking for the right market opportunity on which to build a partnership.

We are working with the two largest technology companies in the world, one of the largest data science shops in the world, and a number of mid-sized firms and start-ups across a number of spaces. The thing to remember about partnerships, especially with the smaller firms, is that they are almost exclusively experts in their particular field. York’s DNA is one of specialization, not generalization, so we are very comfortable in this model: bringing together experts from different fields to create a best-in-class solution.
Discuss whether you believe that innovation in claims over the next five years is more likely to be driven by sustaining or disruptive technology advancements. Note: sustaining technologies improve the performance of established products along the lines by which they have been historically valued by customers, while disruptive technologies introduce a new value proposition that was not previously available.

Claims is still and always will be about loss cost containment and severity control. We expect that companies will continue to leverage technology to enable the high volume / low complexity processing and activities such as fraud detection and subrogation handling. Enabling self-service, straight through processing and simplifying workflow will also continue.

For less complex claims, there will be a significant shift from the traditional field staff inspection to other methods of inspection. High complexity product lines will not have as significant of an impact due to the need for expertise and the severity / opportunity cost.

Claims evolution will be driven by a complementary blend of both sustaining and disruptive innovations. The technologies used are a means to the end. How the technologies are used and for what purpose will dictate the innovation method. (Genpact's heritage of process expertise, deep domain knowledge and thoughtful use of technology is why Genpact out-competes the competition.) Carriers will need sustaining innovations to hold onto their existing market and will also need disruptive solutions to forge new markets and adopt new business models.

It's both. We are advancing our existing technology-based claims systems every year to improve performance and margins. At some point, however, we have to assess the value of a totally different platform that removes pre-ordained processes and replaces them with more streamlined, faster self service solutions that the consumers of tomorrow will embrace. Claims apps that not only secures claims information but also, based on data algorithms, can immediately offer a claims settlement are already here. In the near future, the majority of personal lines claims will be settled with no human engagement.

The speed of technology enhancements makes it very difficult to determine whether innovation will come from both sustaining and disruptive technologies. The common response is sustaining technologies as most companies are focused on improving what they have rather than taking their company into a new value proposition.

The future of claims rests with a combination of both sustaining and disruptive technology advancements. The core principles of claims management will be retained, but will likely be refined through enhancements to sustaining technologies such as primary claim systems, interfaces to transmit data, and the continuing development of embedded analytics. The continued evolution of communication-related technologies will also further the engagement of the claimant and ancillary vendors into the claims process. The disruptive side of technology is more likely to take place in the area of medical, diagnostic and treatment. While robotics and artificial intelligence are receiving a lot of attention as disruptive technologies, it is unclear as to how automation and removal of human interaction will work in the claim process.

The claim value proposition itself, consisting of a mix of price (recall that the claim is the fulfillment of the insurance product), service, convenience, speed, and security (i.e., the financial stability of the insurer as well as the ability to secure claimant information), is unlikely to change in any fundamental way over the next five years. By the definition above, innovation in claims is therefore more likely to be driven by sustaining technologies. The ability to deliver against this value proposition, however, will change significantly. Big data and the tools of data science will continue to improve pricing. Technologies like driverless cars and wearables will begin to reduce claim frequency. Mobile devices, predictive analytics and decision support/automation will streamline the claim experience, thereby improving service, convenience, and speed. Artificial intelligence and machine learning will improve outcomes for underwriters and policyholders who retain a significant share of risk. Most of these technologies are already available and in use. As is always the case, absorbing and learning how best to use them is what will take time.

It will most certainly be a combination of the two. We all know that insurance is massive ship that changes direction slowly. While the culture is changing rapidly, as demonstrated by this very document, the depth and breadth of the industry itself will require a sustained advancement overall. That being said, there are pockets of opportunity where we can see totally disruptive models. These will likely come in lines and businesses that are nascent now. I believe the theory of innovation diffusion will be proven in this industry with an acceleration towards disruption in the latter stages of the five year window.
Describe the role that you believe claims services companies will play in the future insurance value chain. Do you expect that incorporating new technologies into the claims process to build a more interactive relationship with your clients will present an opportunity to expand by performing additional insurance functions outside of claims?

Our role will continue to be complementary services and/or E2E claim handling. The methods and technology will be adapted over the next five years to fit the carriers’ footprint and customers’ expectations. This can be very different among insurers. Some are low cost / low touch / online type carriers and some are high cost / high touch, with a customer base that is willing to pay for expert advice and hand holding.

Claims is still, and will remain, a very traumatic and emotional experience for the average person. For this reason, the process will always require some degree of expert involvement and human touch. Genpact will continue to help carriers strike the right balance of technology, expertise and customer effort.

As we continue to build a more interactive relationship with our clients through the use of advanced analytics and geolocation in conjunction with machine learning and business process management, the opportunity to create additional value for our clients by applying this information to underwriting and loss control will increase. Historical data coupled with location intelligence, weather forecasts, social media and other sources can provide invaluable information to assist with loss control and more accurate underwriting. Claims inspection and appraisal services can also be used by underwriters and risk managers for loss control purposes. Claims services companies can provide key insights into risk management and augment their services in that manner.

The overall answer is yes. We recently met with the a large carrier in London to talk about ways we are building deep expertise to support their strategy and become a significant component of their selling proposition, because they are concerned about being remediated to a panel. They want to distinguish themselves by partnering with a claims company.

Another example is Contractor Connection. It’s an amazing story. We’re effectively providing an alternative solution for our insurer clients so that their clients get a managed repair solution. Our net promoter score, which is a broadly accepted metric used to determine customer satisfaction and experience, is higher than the highest rated JD power rated company’s net promoter score for claims by a large margin. We’re impacting indemnity substantially and reducing LAE with an entirely different solution from our competitors.

Our recent acquisition, WeGoLook, is consumer focused and friendly and is another example where we can improve a customer’s experience by reducing the cycle time with a differentiated solution. They dramatically reduce the time it takes to settle claims from two to three weeks to two to three days with less disruption on the insured, better images of the damage and lower cost to the insurer. Improving the insured's experience is increasingly seen as a “branding” moment by carriers fighting for similarly priced business in a competitive market. WeGoLook responds very well to the dual positive experiences where both insured and insurer benefits from a positive disruptive change to the status quo.

We believe that claims service companies play an essential role in the insurance value chain, providing technical expertise and process excellence. Claim services companies ultimately provide the insurance companies with a variable cost base, which improves operating performance but also provides operating flexibility.

Claims service companies will play an integral part in the value chain only if they continue to adapt to client needs, embrace new technologies and invest in their people. Those firms which continue to evolve will undoubtedly unlock opportunities beyond the insurance market. For example, earlier this year Davies acquired Cynergie, which will provide additional specialist capability to our clients, including complaints and regulatory services, alongside its insurance claims and insurance services offerings. We plan to invest in Cynergie’s capability in order to add new clients in regulated sectors.

Claims service companies play many roles outside of the strict definition of claims management. These roles correlate to the size and goals of respective clients. A trend that continues to grow is the reduction of risk management departments involvement in administration. This is in part due to departmental resource reduction and growing TPA capabilities, expertise, and improvements in the use of data and analytics to identify opportunities for improvement and better results. ESIS defines itself as a risk services organization providing claims management among a number of additional offerings available to clients to help prevent and mitigate risk.
Describe the role that you believe claims services companies will play in the future insurance value chain. Do you expect that incorporating new technologies into the claims process to build a more interactive relationship with your clients will present an opportunity to expand by performing additional insurance functions outside of claims?

Scott Hudson
President and Chief Executive Officer

Claims services companies, particularly those like Gallagher Bassett who are making investments aimed at better serving the carrier market, will continue to expand the role they play in the insurance value chain. They will continue their enablement of investors and talented underwriting professionals to enter the carrier market, secure in the knowledge that claims will be expertly managed and outcomes first-rate. Mature carriers will continue to find opportunities to work with claims services companies to improve results in underperforming claim operations, in niche lines of business, and to enable greater focus on other competencies.

Additional opportunities for expansion include risk control/loss prevention and enhanced support for product pricing and underwriting. From the perspective of both the policyholder and the carrier, the best of all claims is the one that never occurs. Claims service providers can contribute to loss prevention in a variety of ways. Detailed and high quality claim data is the raw material needed to isolate loss prevention opportunities that are not obvious to the naked eye. Together with sophisticated tools for analyzing claim data; real-time information from wearables and vehicle telematics; and health, safety, and environmental consulting services, they are the makings of a comprehensive offering designed not just to handle claims but to prevent them from occurring in the first place.

Similarly, high quality claim data, including timely and accurate reserve estimates, is essential to the proper pricing of insurance products and making good underwriting decisions. Leading claim service providers are making significant investments in data scientists, data quality assurance tools, and end use tools for underwriters to use in analyzing claim data for pricing and product profitability analysis.

Rick Taketa
President and Chief Executive Officer

York currently offers diverse insurance solutions, not just claims management, and we continually look to expand the services we offer to provide comprehensive, customized solutions for our clients. Claims is nearly the last stage in the risk chain and as such, it can and must inform the preceding stages and shape the information cycle. The information that is developed from the claims experience will change the understanding, underwriting and management of risk. While many are using claim data today in some manner, there is a vast amount of untapped potential in the claim data, such as behavioral and psychological patterns and hyperlocal information.

Developing a more interactive relationship not only with customers but with claimants and injured workers will help us continue to streamline and expedite claim processing, deliver better outcomes and reduce our clients’ total cost of risk.
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Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

The charts below summarize responses from executives of each of the claims companies displayed on the preceding pages to an industry survey that we provided to each company.

Which strategy are you most focused on incorporating into your business/improving your existing capabilities over the next five years?

- Claims processing software providing improved automation throughout claims cycle, data aggregation and/or analysis (37%)
- Mobile applications providing improved client communication throughout the claims cycle (13%)
- Multiple strategies / other (50%)

Other Options That Received No Responses
- Drones/technologies providing remote inspection capabilities
- Partnerships with non-claims focused service providers performing inspection/adjustment services (e.g. direct repair programs)

How are you most likely to invest in and incorporate new technologies into your business over the next five years?

- Develop capabilities internally (50%)
- Partnerships and/or minority investments in technology/InsurTech companies (17%)
- Other strategies (33%)

Other Options That Received No Responses
- Acquire technology/InsurTech companies

What percentage of P&C claims do you believe are settled on a fully automated/“touchless” basis with no direct involvement from employees of the insurer or outside claims service providers?

- Today: Less than 5% (100%)
- Five Years From Today: 10 – 20% (67%), 20 – 30% (16%), Less than 5% (17%)

What percentage of all P&C claims do you believe are settled internally by the insurer, without the use of a third party claims service provider?

- Today: 60 – 80% (33%), 20 – 40% (50%), Greater than 80% (17%)
- Five Years From Today: 60 – 80% (33%), 40 – 60% (50%), 20 – 40% (17%)
## Q2 2017 Industry Theme

Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

### New Entrants – Solutions for Managing Claims in the Modular Economy

We have also reviewed the universe of claims-related InsurTech companies. Selected new entrants are categorized based on their core value proposition and summarized in the following table.

($ in millions)

<table>
<thead>
<tr>
<th>Company</th>
<th>Capital Raised</th>
<th>Disclosed Investor(s)</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Mobile Applications for Improved Consumer Service/Communication Throughout Claims Cycle</strong></td>
<td></td>
<td></td>
<td></td>
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<td>Snapsheet</td>
<td>33.5</td>
<td>Commerce Ventures, F-Prime Capital, Genstar Capital, IA Capital Group, Intact Ventures, Liberty Mutual, USAA, Other Investors</td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td>Self-service mobile app for estimating auto insurance claims by photo</td>
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<td></td>
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<td></td>
<td>Offers a full suite of products to help carriers, adjusters and customers analyze claims efficiently</td>
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<td></td>
<td></td>
<td></td>
<td>Enables insurers to handle approximately 90% of auto claims virtually within ~30 days</td>
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<td></td>
<td>Clients receive claims estimates in an average of 2.7 hours after photos are received</td>
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<td></td>
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<td></td>
<td>Hired Andy Cohen as COO in June 2017 (previously CNA VP of Worldwide Field Operations)</td>
</tr>
<tr>
<td>Claim Di</td>
<td>2.0</td>
<td>500 Startups, CyberAgent Ventures, dtac Accelerate, Golden Gate</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Thailand based mobile app connecting drivers with auto insurers</td>
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<td></td>
<td></td>
<td></td>
<td>Allows users to inspect, report and file personal auto claims in real-time</td>
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<tr>
<td></td>
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<td></td>
<td>Designed to provide improved on-demand communication for consumers throughout claims process</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Insurer partners include Allianz, AXA, Chubb, Generali, Liberty Mutual and others</td>
</tr>
<tr>
<td>Better</td>
<td>1.1</td>
<td>Designer Fund, Initial Capital, Individual Investors</td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td>Mobile app that helps users manage their health insurance and out-of-pocket medical bills</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Users enter insurance and personal information and upload photos of medical bills</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software can review bills, identify incorrect or missing information and file claims with insurers</td>
</tr>
<tr>
<td>OpenClaims</td>
<td>0.6</td>
<td>Undisclosed Investors</td>
<td>Amsterdam based online platform specifically servicing motor insurance claims</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Offers insurers, leasing companies and fleet owners an online platform to manage their customers’ motor insurance claims with access to a managed repair network of auto body shops</td>
</tr>
<tr>
<td>AutoClaim</td>
<td>–</td>
<td>ABT Holdings</td>
<td>Advanced proprietary real-time mobile claims documentation and management system</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>App allows users to place, track and manage claims and access legal, health, driver assistance, managed repair and rental car services</td>
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<td></td>
<td></td>
<td></td>
<td>App can be utilized by all drivers including commercial fleets, municipalities and government agencies</td>
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<td></td>
<td>Acquired by ABT Holdings, a diversified investment holding company, in June 2015</td>
</tr>
<tr>
<td>Hejin Online</td>
<td>–</td>
<td>Bojiang Capital, Redpoint Ventures</td>
<td>China based big data platform that provides insurance services to consumers and insurers</td>
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<tr>
<td></td>
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<td></td>
<td>Online insurance claim platform Lipeibao seeks to minimize claims cycle time to payment</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Mobile app Baodonbao facilitates carrier/consumer communication and policy management</td>
</tr>
<tr>
<td>MotionsCloud</td>
<td>–</td>
<td>Protechting</td>
<td>Germany based mobile claims adjustment app for property and contents claims</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aims to help claims adjusters improve productivity, reduce claim cycle time, get claims estimation in real-time and improve customer experience</td>
</tr>
</tbody>
</table>

(a) Includes Lightbank, Montage Ventures, OCA Ventures and Pritzker Group.
## Q2 2017 Industry Theme

Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

($ in millions)

<table>
<thead>
<tr>
<th>Company</th>
<th>Capital Raised</th>
<th>Disclosed Investor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Claims Processing Software for Improved Communication, Analysis and/or Automation Throughout Claims Cycle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Tractable | 9.8 | ▪ Entrepreneur First  
▪ Ignition Partners  
▪ Zetta Venture Partners  
▪ Individual Investors | ▪ Builds artificial intelligence systems with a technological focus on deep learning for computer vision  
▪ Applications for insurance, preventative maintenance and medical imagery  
▪ Provides AI review for insurers to improve claim accuracy, consistency and objectivity |
| ClaimKit | 4.6 | ▪ Flyover Capital  
▪ Mid-America Angels  
▪ Undisclosed Investors | ▪ Deploys experienced claim consultants to collect and organize data for use by desk adjusters  
▪ Replicates on-site file organization, collects electronic data and generates a searchable claim file  
▪ RiskGenius leverages policy analytics technology to allow users to analyze policies in minutes |
| ClaimForce | 2.0 | ▪ MK Capital  
▪ Origin Ventures  
▪ Undisclosed Investors | ▪ Claim service and communications platform that enables insurance claim professionals and fully vetted claim service providers to interact directly and efficiently through a single point of access  
▪ Flexible platform can be used by claim representatives directly or ClaimForce can manage process  
▪ Clients receive access to a nationwide network of over 22,000 claim service providers |
| FraudScope | 1.6 | ▪ Atlanta Startup Battle  
▪ GRA Venture Fund  
▪ Mosley Ventures  
▪ Service Provider Capital  
▪ Spider Capital Partners  
▪ TechSquare Labs | ▪ Data analytics platform that aims to reduce medical billing claims fraud  
▪ Uses novel data analytics techniques to prioritize suspicious medical insurance claims for investigation to save money lost to fraud, waste and abuse |
| RightIndem | 0.6 | ▪ Eos Venture Partners  
▪ Startupbootcamp | ▪ UK based digital self-service insurance claims platform for multiple insurance verticals  
▪ Global platform currently operating pilot products for auto, home and marine insurance  
▪ Improves productivity at reduced cost for insurers with better user experience for customers  
▪ Reduces claims cycle time and required administrative support for insurers; improves customer satisfaction |
| ControlExpert | – | ▪ General Atlantic | ▪ Germany based automotive industry service provider that develops products and services to digitize manual claims and maintenance processes for insurers, fleet operators, leasing firms, repair shops, car dealers, auto manufacturers and motor vehicle experts |
| DropIn | – | ▪ Plug and Play Accelerator | ▪ On-demand, live video platform for analyzing underwriting risk and streamlining claims process  
▪ Enables customers to leverage streaming video and high-resolution photos captured using smartphones or drones to achieve better insight into the intricacies of auto and property damage  
▪ Clients include P&C insurers, MGAs, TPAs and managed repair networks |
| Enservio (Solera) | – | ▪ Solera (100%) | ▪ Largest US provider of SaaS-based software and services to the property insurance marketplace  
▪ Offers robust contents software product suite with world class contents claim services  
▪ Utilized by carriers and claims professionals looking to increase customer satisfaction and retention  
▪ 250+ clients with 400+ employees  
▪ Acquired by Solera in August 2016 from Bain Capital and Matrix Partners |
## Q2 2017 Industry Theme

Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

($ in millions)

<table>
<thead>
<tr>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Claims Processing Software for Improved Communication, Analysis and/or Automation Throughout Claims Cycle (Continued)</strong></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
| Spex | – | J.S. Held (majority) Management | Digital property inspection and reporting platform for managing complex disaster-related claims  
Collaborative interface allows mobile devices in the field to interact with desktop software  
Professional inspectors are primary users; clients include P&C carriers, agencies, TPAs, claims adjusters, restoration firms, PSP's, contractor networks, residential and commercial contractors, FEMA, NFIP, government, structural engineers and hazmat specialists  
Acquired by J.S. Held, a construction consulting portfolio company of Lovell Minnick, in May 2017 |
| **Drones/Technologies Providing or Enabling Remote Inspection Capabilities** |
| Airware | 92.5 | Andreessen Horowitz Caterpillar Ventures GE Ventures Google Ventures Intel Capital Kleiner Perkins RRE Ventures Other Investors | Provides technologies that enable businesses to plan, fly and analyze aerial data to drive business outcomes including operational cost savings, enhanced worker safety and improved decision making  
Solutions tailored to insurance, mining and quarrying and construction  
Insurance solution enables insurers to utilize autonomous commercial drones for rapid and safe collection of high-resolution imagery of properties for underwriting, loss prevention, and claims inspection  
Enables companies to improve customer experience by evaluating property condition and identifying risk attributes for more informed and accurate underwriting and reducing claim cycle time |
| PrecisionHawk | 29.0 | Bob Young DuPont Innovate Indiana Fund Intel Capital Millenium Tech NTT DoComo USAA Verizon Ventures Yamaha Ventures | Terrestrial data acquisition and analysis company providing an end-to-end solution for the use of unmanned aerial vehicles (UAVs) for data collection and related analysis software tools  
Owns terrestrial data software provider DataMapper, satellite imagery provider, Terraserver and the Low Altitude Traffic and Airspace Safety platform for drones, LATAS  
Industry tailored solutions include aggregates, agriculture, construction, energy and insurance  
Insurance offering is primarily focused on providing aerial imaging and analysis software for use in underwriting and claims processes for property and crop insurance |
| Kespry | 26.0 | DCM Ventures H. Barton AM Lightspeed Ventures Rothenberg Ventures Spectrum 28 Wilson Sonsini | Designs and builds drone systems that allow businesses to collect and analyze aerial imagery  
Full-stack automated and integrated system allows users to collect, analyze and share aerial information  
Serves customers across aggregates, insurance and roofing and construction industries  
Strategic alliance with John Deere to service John Deere customer job sites globally  
Insurance solutions enable quick transmission of aerial data to optimize underwriting and reduce claims costs and settlement time |

(a) Includes John Chambers, Next World Capital, First Round Capital, Felicis Ventures, Firelake Capital, Promus Ventures, Shasta Ventures, Y Combinator, Lemnios Labs and other undisclosed investors.
## Q2 2017 Industry Theme

**Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management**

($ in millions)

<table>
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<tr>
<th>Company</th>
<th>Capital Raised</th>
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<tbody>
<tr>
<td><strong>Drones/Technologies Providing or Enabling Remote Inspection Capabilities (continued)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BetterView</td>
<td>1.6</td>
<td>500 Accelerator 500 Startups Arena Ventures Chestnut St. Ventures Compound Ventures Haystack Partners MetaProp Plug and Play Accel Router Ventures Undisclosed Investors</td>
<td>Utilizes a network of independent UAV operators to inspect properties in the US for various needs across insurance, construction and real estate. Provides insurers and loss adjusters with access to a nationwide network of independent UAV operators to inspect commercial and residential properties and infrastructure, software and analysis tools for use in underwriting and claims processes. Imagery is analyzed qualitatively by human experts and analysis is included in an actionable report.</td>
</tr>
<tr>
<td>Converge Industries</td>
<td>0.6</td>
<td>Samsung NEXT Techstars Undisclosed Investors</td>
<td>Software that facilitates the direct use of drones by insurance claims professionals. Expedites training requirements and automates regulatory compliance processes for drone systems. Enables adjusters to access images and companies to track and manage fleets of drones and pilots.</td>
</tr>
<tr>
<td>Aerobotics</td>
<td>0.0</td>
<td>Startupbootcamp</td>
<td>South Africa based data analytics company using aerial imagery and machine learning algorithms to provide solutions tailored to specific industries including agriculture, agri-insurance and mining. Provides farmers and insurers with an end-to-end solution to lower costs of crop insurance and provide real-time data to insurers for use in underwriting and claims processes.</td>
</tr>
<tr>
<td>WeGoLook</td>
<td>–</td>
<td>Crawford (85%) Management (15%)</td>
<td>Online platform that provides on-demand field inspection and verification services. Field agents can upload a photo of the claim along with reports for clients. Operates through nationwide network of 30,000 field agents (“Lookers”). Crawford acquired 85% stake in WeGoLook at $42.5 million enterprise valuation in December 2016.</td>
</tr>
<tr>
<td><strong>Roadside Assistance</strong></td>
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<td></td>
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<tr>
<td>HONK Technologies</td>
<td>13.8</td>
<td>Alpoint Ventures Double M Partners Expansion VC Karlin Ventures Structure Capital Venture 51 Individual Investors</td>
<td>On-demand mobile app for tow, tire change, jump start, fuel and lock out services for more than 55,000 trucks nationwide (24/7). Offers faster ETAs than other roadside assistance companies with guaranteed pricing starting at $49 (no membership fee). Partnership with farmers to white label technology could be worth $150 million.</td>
</tr>
<tr>
<td>Urgent.ly</td>
<td>8.7</td>
<td>Allianz Ventures Blu Venture Investors CIT GAP Funds Forte Ventures INFINITI LAB Select Venture Partners Verizon Ventures Undisclosed Investors</td>
<td>On-demand roadside assistance service designed for the on-demand economy and connected vehicle revolution. Delivers quick and safe roadside assistance with flat rate pricing and cashless payment (no membership fee). Also provides accident alert detection technology and roadside tracking for families.</td>
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<tr>
<td>Company</td>
<td>Capital Raised</td>
<td>Disclosed Investor(s)</td>
<td>Description</td>
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<tr>
<td>Understory Weather</td>
<td>9.5</td>
<td>4490 Ventures, Andrew Payne, Bolt Innovation Group, CSA Partners, gener8tor, Monsanto, RRE Ventures, SK Ventures, VTF Capital</td>
<td>Weather data and analytics company providing real-time, surface level data generated by dense grids of weather stations. Provides datasets and graphical views of movement and intensity of weather events for better insight and early detection of risks for use by insurers and agricultural and utility companies. Hyper-local weather monitoring networks record individual hailstone impacts, wind gusts and even rain drops and compile this environmental data into actionable reports to improve claims efficiency.</td>
</tr>
<tr>
<td>Carpe Data</td>
<td>6.6</td>
<td>Aquiline, Socal Intelligence</td>
<td>Data mining, aggregation and analytics company that utilizes social and web data to help insurers improve rating processes and identify fraudulent claims.</td>
</tr>
</tbody>
</table>
Q2 2017 Industry Theme
Technology Advancements and Evolving Consumer Expectations Driving Innovation in Claims Management

Case Study: Automatic Claims Settlement – Turning Theory into Practice

Automated claims payment is particularly relevant in an environment where there are large numbers of very small claims. Willis Towers Watson is pioneering solutions to tackle these sort of scenarios, for example the management of claims related to parcel delivery, leveraging decision engine technology and sophisticated analytics to put automated claims handling into practice.

In this case, the existing current parcel tracking application or service can be extended to become the First Notification of Loss (FNOL) solution. The client uses this App to notify the provider: “I have not received my parcel.” This is illustrated in figure 1.

The FNOL portal calls for details from the main system to confirm the parcel’s position and interrogates the customer records to add what, if anything, is known about the reasons for the potential non-delivery.

The claim particulars are then fed into Willis Towers Watson Radar Live decision engine which, after calling upon any secondary internal and external data sources to provide additional insight and context to the claim, looks at the data, runs the data through the payment algorithm, generating a trust score and responds to the Portal to process the claim.

In parallel, the automated system enables real-time development of payment rules (with machine learning capability) and scenario testing to enable the gradual expansion of automatic settlement.

Targeted elements of the payment rules include:

- Data about the sender and recipient to determine an internal rating score.
- The use of address data from external sources to determine any trends about delivery failures.
- Checking of reference data to confirm the value of the item lost falls within acceptable margins (using claims or external data).
- Application of a set of rules that determine threshold automatic payment conditions in different scenarios – perhaps related to country of origin, business unit and other macro variables.
- Calculation of the score and application of the appropriate workflow: Auto payment; Normal payment; More information required; or Investigate.

The decision engine will also interface with the portal and admin systems to execute the activity and feed into offline reporting.

Blending Technology and Domain Expertise

Advancement in technology is enabling claims functions to evolve rapidly and deliver greater efficiency and improved customer experience, while also increasing claims cost control through more effective deployment of resources and sophisticated targeting of cases requiring investigation. In our view, those embarking on this journey achieve the best outcomes when they blend technology and business domain expertise to design their end-to-end solution and integrate insurance analytical software effectively.

This approach of combining decision engine technology with advanced analytics, including machine learning, is already being used in other areas of the insurance value chain, like underwriting and pricing, to optimize performance and deliver competitive advantage.
Transaction Spotlight
Crawford Acquisition of WeGoLook

Partnership with Technology Start-Up to Lead On-Demand Field Services

Crawford & Company’s acquisition of a majority equity interest in WeGoLook (WGL) in January 2017 marked one of the largest strategic investments to date in an emerging InsurTech start-up focused on the claims sector. Making the first investment through its newly formed corporate venture capital arm, Crawford Innovative Ventures (CIV), Crawford reportedly paid $36.1 million for 85% of the membership interests in WGL, implying an enterprise value of $42.5 million for a business that generated approximately $7 million of revenue in 2016. WGL’s CEO, Robin Smith and COO, Kenneth Knoll, collectively retained the remaining 15% of membership interests. Crawford expects the venture to be slightly dilutive in 2017, but accretive beginning in 2018, driven by WGL’s attractive growth prospects and expected strategic benefits based on how the business will complement Crawford’s existing capabilities.

Founded in 2009 and headquartered in Oklahoma City, WGL is an enterprise-focused crowdsourcing platform that provides personalized, on-site data capture for inspections and low-complex tasking services across the US. The company combines the power of mobile technology with a human network of 30,000+ “Lookers” and can task an individual Looker anywhere in the US within hours of receiving the instruction from WGL’s automated notification system. Utilizing WGL’s proprietary verification application, Lookers provide the prescribed data and picture requirements immediately. Though the company has a diverse revenue base of insurance and non-insurance inspection services, the majority of its customers are concentrated in auto and property insurance, auto dealerships, commercial real estate, banking, heavy equipment auction and e-commerce. Today, roughly 80% of WGL’s revenue is derived from insurance based on the strong volume from carriers utilizing its services. WGL’s network of Lookers has quickly scaled from 7,400 in 2012 to over 30,000 today.

Compelling Strategic Rationale

At the announcement of the acquisition, Crawford published an investor presentation outlining its strategic rationale for the transaction. Key benefits identified by Crawford include:

- Clients are demanding that the claims process become faster and cheaper. While Crawford will continue to rely heavily on its experienced, best in class, field services operation for many of its claims, WGL will augment its service offerings to provide a more complete suite of products to customers.

Source: Crawford company filings and press releases.

WGL – How it Works

1. Order Report
   Place order online via website, customer portal or application program interface

2. Agent Dispatched
   Looker meets on-site contact to perform inspection, verification or custom task

3. Quality Assurance (QA) Review
   WGL team is available seven days a week for QA reviews and support

4. Receive Report
   Review current data (photos, videos, measurements, answers to custom questions, etc.) and make informed decisions

WGL – Network Growth (# of Lookers)

<table>
<thead>
<tr>
<th>Year</th>
<th># of Lookers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>7,400</td>
</tr>
<tr>
<td>2016</td>
<td>30,000+</td>
</tr>
</tbody>
</table>

+305% Growth
+42% CAGR

Quarterly InsurTech Briefing Q2 2017
WGL has a significant anchor client in the insurance industry and services a few other major insurance carriers. These relationships are growing and Crawford sees significant potential for WGL to leverage Crawford's relationships to enhance its already impressive growth.

WGL's value proposition provides a new service to Crawford's existing clients to better address high volume, low severity claims, reduce claims handling fees, and help guard against fraud. WGL has developed a core product centered on logistical dispatching and a mobile platform that empowers a contingent, on-demand mobile workforce.

Crawford's expected value for the acquisition primarily resides in WGL's:
- Cutting-edge mobile application
- 30,000+ Looker community
- Energized leadership team
- Low cost claims management enhancement service
- Significant reduction in fulfillment time

Crawford placed value on WGL's growth prospects and how the strengths of both companies complement each other to ensure future growth.

Expected synergies are three-fold:
- Crawford and WGL clients will be provided a better and more complete service offering.
- Crawford will leverage its relationships in the insurance industry to grow WGL's business.
- Crawford will be able to introduce WGL to international markets, expanding the Crawford portfolio of products and services worldwide while expanding WGL's footprint.

Crawford is initially focusing on market penetration within the US, but expects WGL's business model will be deployable in other major markets such as Canada, the UK and Australia.

This acquisition further expands Crawford's presence in adjacent markets and lessens its dependence on weather and other events out of its control, helping to deliver more predictable financial results and top line growth.

WGL is a key piece of Crawford's future high volume claims management model which will provide an economical, high quality, customized, fast and efficient claims inspection service to this sector of the claims industry.

WGL Gains Support, Expertise, Industry Knowledge and Resources from a Leading Global TPA

To get additional perspective on the value Crawford can add as a partner to WGL, we spoke to WGL Chief Executive Officer, Robin Smith. Robin's biography is included below, followed by her complete responses to a series of questions about the strategic value of the transaction for Crawford and WGL, as well as the company's growth prospects and potential new opportunities under Crawford's ownership.

Robin Smith – WGL Chief Executive Officer

Robin Smith leads WGL with current and long-term growth strategies to increase domestic and international market opportunities. She is responsible for the overall success of the company and ultimately represents the final work product of her team. Robin frequently speaks at industry events relating to technology, the sharing economy and innovation within the insurance industry. Her experience in e-commerce and enterprise solutions, combined with her early entry into the on-demand economy, make Robin a unique voice in tech and the gig economy.

Robin's passion for creating custom solutions for her clients has always been an integral part of her career success. She leads the sales and marketing team as they create custom workflows utilizing technology combined with WGL's large network of independent contractors to produce efficiencies and cost savings for clients.

Clients are demanding that the claims process become faster and cheaper. While Crawford will continue to rely heavily on its experienced, best in class, field services operation for many of its claims, WGL will augment its service offerings to provide a more complete suite of products to customers.
Crawford Acquisition of WeGoLook

Q&A with Robin Smith, WeGoLook Chief Executive Officer

Describe how WeGoLook's inspection capabilities complement Crawford's existing claims inspection services?

WeGoLook's inspection capabilities are rooted in digital tools and innovative mobile technology that are effective in ultimately increasing claims efficiency and cost effectiveness. Crawford is the world's largest publicly listed independent provider of claims management solutions to insurance companies and self-insured entities. Together, Crawford and WeGoLook will expedite claims management by leveraging WeGoLook's network of over 30,000 on-demand inspectors in the field to deliver the agility and mobility necessary to tackle claims in almost real time. Through mobile technology, local, onsite Lookers can manage low complexity inspections or custom tasks in a matter of hours, if not minutes, helping customers to respond more quickly to their policyholders and reduce total loss costs.

A good example of how WeGoLook is providing a very fast flow of information surrounds scene inspections (where no contact is required). Within seconds of the order notification, the WGL platform notifies multiple Lookers closest to the property / area of accident to solicit the data capture for scene inspection. The first Looker to accept the order drives directly to the location, follows the instructions provided within the mobile application and submits photos and answers questions within 15-20 minutes. The uploaded data is then reviewed by the Quality Assurance Team in Oklahoma City, a scene diagram is completed and a final report is delivered to the claim file and/or ordering user within an hour or less.

Crawford and WeGoLook are leading the industry by leveraging the gig economy to create an extensive network of mobile workers. Crawford's global presence and leadership in the insurance industry, coupled with WeGoLook's innovative mobile platform, sets the foundation for disruption in the industry. Crawford will be able to respond to claims faster and streamline costs through our innovative mobile technology and a very robust contingent network of independent contractors, while WeGoLook will have the opportunity for global expansion and access to Crawford's world-class insurance expertise and supply chain.

WeGoLook is an agile technology platform, enabling integration of additional platforms such as live video streaming, mobile target technology for measurements, 3D imagery and more. Ultimately, our clients will gain a significant advantage through this solution by being able to shorten cycle times on high volume claims.

Discuss growth opportunities on which WeGoLook is currently focused (both within and outside of the insurance sector).

We are targeting a number of growth opportunities inside and outside the insurance industry. Today, enterprise clients are utilizing Lookers to augment and supplement their own field labor force at a much lower cost.

The low complexity, yet high volume tasking can be performed on-demand by Lookers versus an expensive employee driving a fleet vehicle. Good examples of these tasks include: vehicle photos, property photos, requesting and picking up police reports, delivering and executing total loss documents, scene inspections, asset verifications, pre-risk assessments and more.

Providing desktop property adjustment reports within 48 hours or less is now possible with fast, onsite data capture from Lookers to experienced adjusters behind the desk (or by sending data quickly and cost-effectively from the field to a carrier's own desk support). Beyond this, we are excited about our latest service offering, a software development kit (SDK) for "assisted self-service" that insurers can integrate into their current digital platforms, allowing carriers to empower policyholders through mobile technology. With this SDK, policyholders, body shops, fleet drivers, a carrier's field assignment employees or any third parties can capture their own data that is critical for their insurance policies. Frankly, the asset data capture can be utilized within any industry vertical (valet claims at hotels, slip and trip data, commercial property data, vehicles in transit, heavy equipment cataloging, assets for sale, etc.). For example, the third party can provide information about vehicle condition, mileage and property data, while following a range of custom tasking instructions based on an enterprise client's need, all at scale with the same reporting requirements. WeGoLook manages the workflow for this "assisted self-service" for carriers experiencing low adoption of mobile app engagement by policyholders.

We see another massive opportunity in the health care sector, with the ability to deliver health kits and to facilitate patient equipment setup, which enables the patient to provide daily updates to a healthcare provider. WeGoLook’s network can provide routine services and supplies to rural residents.

Another opportunity lies in the Auto/OEM sector, where services and use cases are extensive, ranging from fleet condition reports, dealership solutions, site audits, remote financial document execution, license plate pickup, tradeshow inspections, new vehicle delivery, courtesy vehicle pickup, delivery for maintenance and more.

We are also focused on additional consumer marketplace opportunities, based on the ability to service individuals on sites such as eBay Motors, where we provide buyers with more information to make confident purchasing decisions. Sellers or Lookers can catalog assets for sale and push data to the marketplace (autos, marine, heavy equipment, etc.).

How will Crawford's ownership and global claims expertise assist WeGoLook in gaining scale?

WeGoLook is going global! We’ve already expanded to Canada, but are positioning ourselves to ramp up services in Australia, the UK, and elsewhere, to bring our gig economy platform to the world. Crawford’s established global presence will be critical to our future market expansions. Soon, Lookers will be in London, Belfast, Melbourne, and around the world, transforming the global landscape of insurance. Having the expertise, industry knowledge and resources of the world's largest TPA behind WeGoLook certainly places us in a unique position within the technology and insurance space.

How much of WeGoLook's insurance revenue is originated through Crawford and what percentage of network usage is for Crawford clients? How do you expect this to change over time?

Currently, only 2% of WeGoLook’s insurance revenue is originated through Crawford but this will change significantly over the next several months. The acquisition took place earlier this year and WGL already has several Crawford clients in the onboarding queue.
Transaction Spotlight
Crawford Acquisition of WeGoLook

Q&A with Robin Smith, WeGoLook Chief Executive Officer

Does WeGoLook have other strategic insurance partners outside of Crawford? If yes, are you focused on expanding these arrangements and/or establishing new partnerships?

Yes, WeGoLook is eBay Motors official inspection arm and we plan to expand to U.K. and Canada with eBay platform soon. We also have several very strong relationships within the banking/financial vertical and plan to expand services within this area.

Are the capabilities provided by WeGoLook a significant source of differentiation for Crawford compared to its claims services competitors? Do other claims handling companies have similar crowdsourcing field inspection capabilities?

WeGoLook is a significant source of differentiation for both itself and Crawford, which is why this partnership is so powerful. Crawford now has an international footprint with the ability to capture data in any form along with performing custom tasks. For example, with WeGoLook, Crawford can offer pickup of any recalled device or item (think exploding electronics, paint, food items) along with fast data capture and live video streaming during CAT events or workers’ comp incidents.

Do insurers have the type of tools WeGoLook has? Simply put, no. What we are doing at WeGoLook is creating extremely efficient new processes by combining the technology, an impressive network of qualified contractors and a call center to create custom ON-DEMAND services at an extremely low cost. The WGL platform matches the task to the skill set of the Looker. For example, if a document needs to be notarized and the policyholder speaks only Spanish, the platform will solicit only notaries who speak Spanish. This efficiency results in an extremely fast flow of data delivery.

Yes, many insurers are attempting to digitize processes and increase efficiency through mobile innovation – but WeGoLook is not just a mobile technology platform. We are also a platform featuring thousands of qualified individuals and a call center with account managers, project managers, order fulfillment, asset verification, development and more.

Are any of WeGoLook’s Lookers insurance claims professionals? How is this tracked? Do these Lookers provide additional value in the inspection process? Is there a plan to grow this section of the network? Discuss how increasing the amount of insurance claims professionals in its network would improve WeGoLook’s value proposition.

WeGoLook has many professionals in our repertoire of on-demand Lookers. Our partnership with Crawford has substantially increased this, as we continue to onboard their IAs, CAT adjusters and more. However, over the past seven years, we have been very strategic about growing our Looker community, as I have always known this was our largest asset and biggest barrier to entry. The WeGoLook Community Team has been actively recruiting licensed drone operators (on-demand drone footage, anyone?), certified heavy equipment operators, licensed diesel mechanics, realtors, notaries, process servers and more. Ultimately, our goal is to provide ANY client within ANY industry with a labor force customized for their needs, anywhere in the world!

We track all certifications and information on our Lookers within their profiles, allowing Lookers to manage their own data accordingly. We have recently added additional licensed adjusters and auto appraisers to our community of on-demand workers, due to regulatory requirements in certain states. Credentials and professional designations of all Lookers are tracked in our system, allowing the end user to specify what is needed for each job so we can match requirements to a qualified candidate. These licensed Lookers, like others who are notaries or licensed inspectors, provide an additional level value to our consumers and enterprise customers. This will only increase in the future through our partnership with Crawford.

Discuss the current and historical levels of growth for WeGoLook’s community of Lookers. Are there any geographic areas of concentration or areas that are lacking coverage? How important is continued growth of the network to maximizing WeGoLook’s value to Crawford/other strategic partners?

In 2010, WeGoLook had two employees and a network of only a few thousand on-demand Lookers. Now, we have grown to over 125 employees with a footprint of well over 30,000 on-demand workers. Continued growth in global markets is critical for WeGoLook and Crawford. This is why WeGoLook is actively expanding to new markets and industries; such as Canada and the UK. As our network of Lookers expands, so too does our ability to bring innovative mobile technology solutions to our enterprise clients in various industries.

How far does the WeGoLook acquisition go towards advancing Crawford’s digital agenda? Are there other areas of Crawford’s business where you are focused on technology investment opportunities?

The acquisition of WeGoLook is just one component of Crawford’s digital agenda. Not only are we looking at strategic acquisitions and partnerships, but the company is also investing heavily in IT. This is evidenced by the hiring of Crawford’s new chief information officer, Hilton Sturisky. Hilton has experience transforming legacy IT environments into modern technology ecosystems and has successfully overcome challenges that face the insurance marketplace, such as digital disruption, mobility and analytics. Our investment in IT is enabling Crawford to stay at the forefront of the industry and to support customers with the tools and data analytics/insights that will drive success in their businesses.

WeGoLook is an extremely agile company, with the ability to integrate multiple technologies and company APIs very quickly, allowing Crawford clients the same benefit.

In terms of acquisitions, last year Crawford Innovative Ventures (CIV) was created, which is a new entity formed to enable Crawford to invest in strategic acquisitions and partnerships. WeGoLook was the first acquisition made by CIV. Crawford is continuing to identify, examine and assess other opportunities to add value in the claims continuum with a robust pipeline of opportunities that are in active discussions. You can expect to see more from Crawford on this front, as all company entities are finding new ways to provide technology solutions to clients and the investment in technology is purposeful and exciting.
Insurance Claims Process – Incumbent Perspective

How do policyholders describe the insurance claims process? After an insured experiences a claim, dissatisfaction often results from an often manual, linear and/or low-tech process that has changed little in recent years. While some incumbents may defend the status quo as necessary to ensure process consistency, cost management and to meet all regulatory or legal requirements, others have become acutely aware of the importance of capitalizing on the meaningful opportunity to re-invent the claims process by utilizing technology to reduce or even eliminate inefficiencies embedded in legacy systems and processes.

Allstate, a leader in the insurance industry for decades, recently embarked upon an effort to streamline its claims process.

Broadly, the initiative is focused on creating an integrated digital enterprise in which data, algorithms, advanced technology and process redesign are each implemented across the organization to improve process effectiveness and efficiency and to strengthen Allstate’s core customer value proposition. Within the broader initiative is a strategy focused on claims innovation – moving away from manual and linear processes towards a digitized real-time service model in which more claims activity takes place in parallel and customers are given more control of the process.

“We will dramatically simplify and streamline the claim handling process, using automated loss notification, real-time processing, predictive damage estimates, self-service capabilities and electronic payments. Imagine the future process for the same claims to be something more like this; we receive and automated notification of loss from the car; the customer can upload photos of damage; a predictive system evaluates the damages and produces a value; fraud models run behind the scenes; and electronic payment is generated instantly to the customer within seconds of uploading the photos.”

– Matt Winter – President, the Allstate Corporation
(Bank of America Merrill Lynch Insurance Conference – February 15, 2017)

Allstate Claims Today… A Linear Service Model

First Notice of Loss (FNOL) → Coverage Determination → Mitigation → Liability Determination → Damage Determination → Payment

Allstate Claims Tomorrow… A Digitized Real-Time Service Model

“Notification/Payment” → “Protection” → “Prevention” → “Restoration”

Business Outcomes

- Lower expenses
- Greater consistency and accuracy
- Quicker processing / cycle time
- More customer and agency owner control
- Faster speed to market

Source: Company filings and presentations.
In this segment, we outline several of Allstate’s recently announced initiatives designed to streamline its claims process. These include QuickCard Pay, efforts to leverage drones and aerial imaging for home inspections, and Allstate’s new QuickFoto Claim feature in the Allstate mobile application. Each of these initiatives represents a component of Allstate’s digitized, real-time claims service model that will replace its legacy linear service model to improve the claim experience for its customers.

QuickCard Pay

In an October 2016 press release, Allstate announced a new, instant claims payment method – QuickCard Pay – in collaboration with MasterCard, which leverages the Mastercard Send payment platform. Allstate QuickCard Pay is the only payments service of its kind in the P&C industry that reaches virtually all US debit card accounts – including non-Mastercard debit cards, enabling real-time payment to claimants anytime and anywhere in the US.

“Allstate continues to innovate on behalf of our customers and claimants,” says Allstate’s Chief Claims Officer, Glenn Shapiro. “QuickCard Pay gives claimants an immediate and secure payment method and helps to deliver on the promise of a fast, fair and compassionate claims experience.”

Drones and Aerial Imaging

In a May 2017 press release, Allstate announced that it was gearing up to use drones to assess property damage claims in four states. The multi-state launch is Allstate’s latest publicized effort to leverage drone technology and represents a major step forward in the company’s use of aerial imagery in the claims assessment process.

“Allstate has been at the forefront of drone research for more than two years now,” says Glenn Shapiro. “Aerial imagery is a key innovative technology that can improve the speed and efficiency of our property inspection process and help us deliver a faster, more modernized claim experience for our customers.”

The use of drones will be just one component of Allstate’s multi-faceted aerial imaging strategy. In addition to the use of drones, Allstate will use a variety of other tools, including piloted airplanes and satellite images, as a means to leverage emerging technologies and digital capabilities.

Drones represent a valuable tool in the claims assessment process as these devices are able to capture up to 4K resolution images, that allow an adjuster to examine a property in extreme detail – down to the individual roof shingle. After the initial deployment in Colorado, New Mexico, Oklahoma and Texas, Allstate plans to consider using aerial imagery in other parts of the country to assess wind and hail claims as well as for other types of exposures.

QuickFoto Claim Feature

In May 2017, Repairer Driven News published an article in which Allstate described its intention to transition more vehicle damage claims to its new QuickFoto Claim feature available to customers through the Allstate mobile application. Beginning in Texas and California, Allstate ceased using its drive-in inspection stations and is encouraging its customers to use the QuickFoto claims feature to submit vehicle claims virtually.

“Findings from a recent test validated that QuickFoto Claim continues to be a viable option for inspecting vehicle damage and showed that customers embrace this option,” Allstate Auto Claims Line Management Director Sandee Lindorfer wrote in a recent message to Good Hands direct repair network shops. “For this reason, Allstate has begun a countrywide transition from drive-in inspection centers to a virtual experience. By this summer, we expect the vast majority of drivable auto claims to be virtually inspected countrywide – starting with Texas and California.”

The QuickFoto Claim feature allows customers to submit vehicle claims virtually in three easy steps. First, the customer is prompted to take a picture of the damaged area of the vehicle through the QuickFoto Claim feature in the Allstate mobile app, together with pictures of the area around the vehicle and a picture of the vehicle’s VIN number and odometer. According to statistics from Allstate, approximately 90% of customers that opted to use QuickFoto Claim have been able to complete the photography themselves, without having to seek assistance from an agent.
Progress = LAE Improvement?

A review of Allstate’s loss adjustment expense (LAE) ratio compared to the overall P&C industry indicates that the company’s efforts to streamline its claims process, such as the initiatives described on the previous page, have yielded expense improvement and enabled Allstate to outperform the broader P&C market. By breaking down LAE further into its core components of defense and cost containment (D&CC) and adjusting and other (A&O), we can see that defense and cost containment is the primary source of Allstate’s competitive advantage, while the company’s adjusting and other expense ratio lags the broader industry.

It is worth noting, however, that all companies do not view LAE independently as a key indicator of claims processing efficiency. For example, Progressive, itself a P&C industry leader in terms of LAE ratio, focuses on the need to optimize total loss and LAE expense. This accounts for the impact of LAE on the underlying loss ratio, meaning that if LAE expense is too high, there will be diminishing returns on underlying loss ratio improvement and if LAE expense is too low, underlying loss expense will increase due to claims inaccuracy or fraud.

Progressive contends that optimizing the claims management process by incorporating technology to increase claims processing efficiency can shift this balance, targeting a lower LAE ratio to achieve maximum impact on overall loss and LAE economics to the carrier.

“We are now doing it at the lowest LAE in the industry,” said Progressive Chief Executive Officer Glenn Renwick in May 2014. “A really phenomenal textbook case of moving this curve and trying to find the many thousands of things that actually make up the claims process, which seem so obscure if you’re not really invested in the business.”

As Allstate continues its journey towards delivering a digitized, real-time claims service model, we expect that its ability to embrace emerging claims technologies will represent a significant opportunity to achieve expense savings while providing insureds with a more personalized customer value proposition that is aligned with current consumer expectations. While reducing cost and improving the claim experience appear to be primary objectives of Allstate’s claims initiative, the extent to which the company’s efforts will ultimately help customers mitigate risk will depend on the ability of the underlying technology to effectively synthesize claim data into actionable recommendations to reduce the likelihood of future claims.

As the claim process evolves to increasingly incorporate available data and the latest technology advancements, early adopters, like Allstate, will initially enjoy a competitive advantage. However, over time, consumers may eventually demand risk mitigation, as well as claims processing efficiency from their insurance providers. As the landscape of technology-enabled claims service providers grows, incumbents will gain opportunities to cost-effectively outsource aspects of their claims handling process. Low cost and strong customer experience will eventually be requirements to compete, but truly differentiated players will be comprehensive risk managers, focused on reducing claim frequency through risk mitigation, in addition to providing a cost-efficient and streamlined claim experience for customers.

### LAE Ratio and Components – Allstate vs. P&C Industry

<table>
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<th>Year</th>
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Source: Dowling & Partners Securities, LLC, Company filings and SNL Financial.
Thought Leadership

Threat vs Opportunity? InsurTech is Largely a Matter of Perspective

Andrew Newman
President and Global Head of Casualty
Willis Re

The Insurance value chain is under pressure. Whether disruption beckons or opportunity unfolds is primarily a matter of perception relative to a company’s position in the value chain. This is further amplified by how or the extent to which it chooses to embrace or reject innovative technology.

This article is, hopefully, not yet another homage to technology, using Netflix as the fable to extol the virtues of embracing it. However, it is a serious attempt to ensure that insurers focus hard on both how and with whom they can truly leverage technology to better meet or exceed client demands at a lower cost.

The fact is that the vast majority of InsurTech companies do not want to go to war with incumbents in our industry, and very few are driving disruption for disruption’s sake. Their overwhelming focus tends to be on leveraging technology to create value within the insurance value chain – not collapsing it. Incumbents have options: they can embrace the technology that InsurTech companies usher in where they see internal and external improvement or they can reject it, although the latter seems either courageous or short-sighted. Unimaginable as it would have been a decade ago, maybe insurers in that camp consider the regulatory framework as de facto immunity against the threats from alternative sources of capital leveraging technology (or vice versa). However, those barriers are not insurmountable.

In many cases, the temptation within the current value chain will be to seek to accommodate technology – in other words to harness parts of it within the existing model as an accoutrement, rather than unleashing the full power that can fundamentally challenge the status quo. Change is awkward and painful but not as painful as being rendered increasingly inefficient and ultimately redundant.

At Willis Re, we are observing an increasing number of insurers and reinsurers constraining the extent to which they engage with InsurTech companies in order to defend themselves. Yet, the available technology is invariably complementary to most current processes in our industry. We should look to embrace this, not ignore or reject it, or keep it at arm’s length. It is not the technology that is disruptive, but the degree to which a competitor can successfully wield the technology compared to another.

After all, in their most basic form, insurers are simply pools of capital targeting a profit by accessing pools of insurance risk and leveraging superior risk selection, exact risk pricing, effective claims resolution and operational efficiency. The more successful tend to be able to connect the industry holy trinity:

1. Proximity to clients
2. Access to the lowest average cost of capital across the business cycle
3. The ability to gain tangible advantage optimizing all forms and sources of information

It is not the technology that is disruptive, but the degree to which a competitor can successfully wield the technology compared to another.

Technology generally, and InsurTech specifically, will be significant in changing all three and has the potential to collapse large swathes of the value chain. This is nothing new, but modern, innovative technology such as artificial intelligence (AI), applications of big data, and machine learning has accelerated this change to unprecedented levels of speed, cost and transparency. Furthermore, with the widespread proliferation of portable smart-technology, distribution channels and user experience (UX) platforms have been blown wide open and brought to our armchairs.

The vast majority of InsurTech companies do not want to go to war with incumbents in our industry, and very few are driving disruption for disruption’s sake. Their overwhelming focus tends to be on leveraging technology to create value within the insurance value chain – not collapsing it.
Thought Leadership

Threat vs Opportunity? InsurTech is Largely a Matter of Perspective

The Current InsurTech Environment Demystified

Consequently, although keeping track of the technological capabilities that InsurTech companies are bringing to market can be quite daunting, it can be enormously beneficial. It is estimated that there might be as many as 1,500 recognized InsurTech companies globally at this moment in time. The diversity within this cohort is broad, from the ‘simple’, such as expediting a single process, to full-stack, end-to-end online insurance companies regulated in several geographies, with underwriting, rating, pricing and claims capabilities.

Within Willis Re we place InsurTech clients and prospects into five distinct categories based on whether the primary focus is structural innovation, distribution, sales/marketing, data/analytics, or claims/fraud.

Each tech silo individually offers evidence of changes taking place in the value chain. For example, app technology on smartphones is transforming the distribution ecosystem by improving the customer experience, getting closer to the customer and thereby improving client proximity, one of the holy trinities mentioned before.

Similarly, in data and analytics, the insurance industry has cultivated decades of premium and claims information from which it seeks to improve its risk assessment and pricing. New sources of information are available, however, which can, and I suggest will, begin to replace the industry’s accumulated proxy data with real-time data. Modern sensors embedded in or on physical assets have the capacity to measure and broadcast internal and external data that not only improves the accuracy of risk quantification and concomitant pricing but accelerates the notification of threats and reduces the ultimate cost of losses. And since improved pricing and the reduced cost of claims addresses both sides of the profitability equation, the obvious conclusion is that new information not only conveys advantage to those who harness it but threatens those who don’t. These new sources of data and information have the potential to rapidly dismantle the data-related barriers to entry in the insurance industry and accelerate the participation of alternative capital as it gravitates towards business models with an intrinsic data-driven advantage, whether in sourcing, selecting or pricing risk.

The Pace of Change

Nonetheless, paranoia about InsurTech remains strong across the industry. For many, the fast pace of change is naturally alarming, but while InsurTech, and the associated modern technology leveraged by insurance start-ups, has been labelled as imminently ‘disruptive’, the truth of the matter is more nuanced and varies depending on customer type, complexity, size, product and territory. As we see it, the real challenge for the incumbent market place is avoiding the temptation to only engage with InsurTech companies to leverage short-term gains while simultaneously constraining their true potential in order to preserve the status quo.

The more research Willis Re undertakes, the more we observe that InsurTech businesses can profoundly complement insurers’ books of business and fortify core competencies. And this is a trend we see going in only one direction, as illustrated by the increasing number of partnerships between old and new (colloquially ‘MatureTech meets InsurTech’).

MatureTech Meets InsurTech – A Benefit to All

If managed properly, technologies that improve efficiency and outcome are game changers. Why wouldn’t an incumbent player in our industry seek to harness that capability? Yet, to date, there has often been a magician’s smokescreen placed around InsurTech companies and their transformative
Thought Leadership

Threat vs Opportunity? InsurTech is Largely a Matter of Perspective

capabilities, creating the illusion that many are the industry’s foe. The reality is that the processes of sourcing capital and overcoming regulatory hurdles are more complex than forging alliances. New entrants would prefer to leverage their technology to provide solutions for the incumbents instead of seeking to replace them.

The claims space is already starting to show how, through strategic partnerships, insurers, loss adjusters and other third-party adjuster are cooperating to use the technological expertise of InsurTech companies. This ranges from the use of real-time, high-resolution photo imagery to outsourced claims handling through state of the art chatbots. By utilizing these capabilities, the claims experience can be improved for consumers (and lest we forget, claims is invariably the only time that a policyholder spends considerable time communicating with insurers). Costs are being driven down and insurers are able to differentiate themselves through excellent claims services. Fraud is being tackled aggressively and insurers have a fair greater chance of improving their customer retention rates.

The Value Chain

Any technology which compresses the insurance value chain, allowing more direct access to capital for the consumer and creating high capacity for disintermediation, does of course have the potential to be disruptive to brokers, insurers and reinsurers alike. Doing nothing or the bare minimum seems an increasingly blinkered choice. Just as the Luddites failed in the 19th century to reverse the impact of technology by attacking weaving machines, so too will those who hope that technology will pass by the insurance industry and move into some other less threatening biosphere.

Today’s insurance business model is rooted in the industrial-age notion that the key participant is the capital provider and, by extension, the risk taker. The hypothesis is that the risk taker is entitled to the majority of the reward, based on a time when capital was scarce. However, along has come technology – permeating the sector and tipping the balance of power between the providers of capital and the authors of ideas dramatically in favor of the entrepreneurs.

This is consistent with the post-industrial age which has fundamentally reordered the hierarchy of priorities; lowering the importance of (now plentiful) physical capital and raising the prominence of human capital – brainpower is not capital intensive.

In the insurance world, where technology has the potential to eliminate barriers to entry, weaponize data and create new forms of information from which to more precisely gauge risk, thereby lubricating the appetite of alternative capital, who, frankly, can afford not to engage in the brave new world? As such, could we be looking at a new insurance company structure of the future?

Time to Change your Perspective?

These dynamics create massive opportunity and on an unimaginable scale. The good news is that we could be looking at the greatest dislocation in the insurance industry in 100 years, and if you’re a start-up looking for guidance on how to enter the insurance industry, give our team a call, we are constantly looking for companies with good ideas looking to shake up the industry. Likewise, for the incumbent insurers and reinsurers in our ever-changing industry, looking to utilize and maximize the opportunities being created by Schumpeter’s gale of widespread creative disruption being driven by InsurTech, we urge you to connect with us. We can help you collaborate in a way that will both ensure your historic book of business is protected, and also offer you the opportunity to partake in the increased risk origination pool entering the growing marketplace.
Deal Activity Picks Up

- InsurTech funding volume of $985 million in Q2 2017
  - 248% increase from $283 million in Q1 2017; 148% increase year-over-year from $398 million in Q2 2016
  - *64 total transactions in Q2 2017 is most experienced in any quarter to date,* represents 68% increase from 38 transactions in Q1 2017 and 88% increase year-over-year from 34 transactions in Q2 2016
  - Increasing international activity – US accounted for 65% of transactions since 2012 but only 45% of transactions in Q2 2017
  - *Early stage (Seed / Series A) funding volume reached a record level of $289 million in Q2 2017,* these transactions comprised 63% of total transactions in the quarter

- P&C funding volume increased 127% from Q1 2017 and 71% year-over-year from Q2 2016
  - 34 P&C transactions in Q2 2017 represents 48% increase from 23 P&C transactions in Q1 2017 and 89% increase year-over-year from 18 P&C transactions in Q2 2016

- Life and health (L&H) funding volume increased 347% from Q1 2017 and 113% year-over-year from Q2 2016
  - 30 L&H transactions in Q2 2017 represents 100% increase from 15 L&H transactions in Q1 2017 and 88% increase year-over-year from 16 L&H transactions in Q2 2016

- Increased funding driven by record levels of deal activity, as well as several large capital-intensive carrier investments globally

- Carrier start-ups comprised 9% and 23% of Q2 P&C and L&H InsurTech investments respectively, compared to 5% and 9% respectively of all such transactions since 2012

- Acko General Insurance closed a $30 million Series A round in May 2017

- Bright Health closed a $160 million Series B round in June 2017

- Clover Health closed a $130 million Series D round in May 2017

- Digit Insurance received a $60 million Series A investment from Fairfax in June 2017

- Gryphon Insurance closed a $230 million Series A round in June 2017

- Singapore Life closed a $50 million Series A round in April 2017

Continued Concentration in Distribution Sector

- 64% and 42% of Q2 2017 P&C and L&H transactions respectively involved companies focused on insurance distribution, compared to 61% and 41% respectively of all such transactions since 2012

  - Includes digital lead generation, brokerage and MGA platforms

Elevated Incumbent Investment Activity

- *31 private technology investments by (re)insurers in Q2 2017 is most experienced in any quarter to date,* represents an increase of 19% from 26 investments in Q1 2017 and an increase year-over-year of 15% from 27 investments in Q2 2016

- Several start-ups now count multiple (re)insurers among their strategic investors

  - Cyber GRX has now received investments from Aetna Ventures and MassMutual Ventures

  - Dispatch Technologies has now received investments from Assurant Growth Investing and Liberty Mutual Strategic Ventures

  - Lemonade has now received investments from Allianz Ventures and XL Innovate

- Next Insurance has now received investments from Markel Ventures, Munich Re / HSB Ventures and Nationwide Ventures

  - One has now received investments from American Family Ventures, AXA Strategic Ventures and MassMutual Ventures

  - Sure has now received investments from AmTrust Financial, Assurant Growth Investing and Nationwide Ventures

  - Trov has now received investments from Munich Re / HSB, Sompo Japan and Suncorp Group

Continued Focus on Small Business

- Several small business focused start-ups received new investments and/or established new partnerships during the quarter

  - Bunker closed a $6 million Series A round in May 2017

  - Embroker established a partnership with Zenefits in June 2017 to transfer Zenefits P&C program customers to Embroker

  - Next Insurance closed a $35 million Series A round in April 2017 and is currently discussing partnership opportunities with American Express (American Express Ventures invested in Next in June 2017)

Claims Technology Emerging as New Area of Focus

- (Re)insurers targeting strategic investments in, and partnerships with, technology start-ups with claims management applications

  - Snapsheet closed a $12 million Series D round in June 2017

  - Spex was acquired by J.S. Held, a construction consulting company owned by Lovell Minnick

  - Ageas announced a partnership with Tractable in May 2017 to leverage Tractable’s AI technology to help manage the performance of its motor claims

  - Farmers announced a partnership with HONK Technologies in June 2017 to white label HONK’s roadside assistance service to Farmers

  - ControlExpert received an undisclosed investment from General Atlantic in May 2017

  - Business process outsourcing provider Genpact acquired BrightClaim in May 2017
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 | 34 |
| L&H: | 8 | 7 | 7 | 10 | 15 | 8 | 10 | 4 | 11 | 16 | 19 | 15 | 13 | 18 | 15 | 22 | 17 | 16 | 8 | 16 | 15 | 30 |

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 | 21 |
| L&H: | 6 | 3 | 6 | 7 | 8 | 4 | 6 | 4 | 7 | 9 | 16 | 8 | 7 | 8 | 10 | 18 | 8 | 9 | 4 | 11 | 10 | 19 |
The Data Center
InsurTech by the Numbers

InsurTech Transactions by Target Country

2012 – Q2 2017

- United States: 65%
- United Kingdom: 15%
- Germany: 2%
- China: 4%
- India: 4%
- France: 6%
- Other: 5%

Q2 2017

- United States: 45%
- United Kingdom: 9%
- France: 5%
- Germany: 6%
- India: 2%
- Other: 15%

2012 – Q2 2017 Transactions: 605
Q2 2017 Transactions: 64

InsurTech Transactions by Investment Stage

2012 – Q2 2017

- Seed/Angel: 21%
- Series A: 12%
- Series B: 5%
- Series C: 5%
- Series D: 2%
- Series E+: 13%
- Other: 13%

Q2 2017

- Seed/Angel: 31%
- Series A: 31%
- Series B: 8%
- Series C: 5%
- Series D: 5%
- Series E+: 6%
- Other: 5%

2012 – Q2 2017 Transactions: 605
Q2 2017 Transactions: 64

P&C InsurTech Transactions by Subsector

2012 – Q2 2017

- Distribution: 61%
- B2B: 34%
- Carrier: 5%

Q2 2017

- Distribution: 64%
- B2B: 27%
- Carrier: 9%

2012 – Q2 2017 P&C Transactions: 305
Q2 2017 P&C Transactions: 34

L&H InsurTech Transactions by Subsector

2012 – Q2 2017

- Distribution: 50%
- B2B: 41%
- Carrier: 9%

Q2 2017

- Distribution: 41%
- B2B: 35%
- Carrier: 23%

2012 – Q2 2017 L&H Transactions: 300
Q2 2017 L&H Transactions: 30
## The Data Center
### Q2 2017 InsurTech Transactions – P&C

($ in millions)

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<tr>
<td>04/04/17</td>
<td>Groundspeed Analytics</td>
<td>2.0</td>
<td>ManchesterStory Group, Michigan Angel Fund, Taapen Hill Ventures</td>
<td>Data analytics platform that uses machine learning for commercial insurance data automation to help brokers and carriers improve financial performance</td>
</tr>
<tr>
<td>04/06/17</td>
<td>Trov</td>
<td>45.0</td>
<td>Anthemis Group, GuideWire Group, Munich Re / HSB, Oak HC / FT Partners, Sompo Holdings, Suncorp Group</td>
<td>On-demand insurance provider covering everyday consumer items. Provides single item coverage for loss, theft, accidental damage, etc. for any duration via mobile app. Munich Re had existing partnership and recently led Series D funding; Sompo invested with aim of introducing product in Japan</td>
</tr>
<tr>
<td>05/02/17</td>
<td>Tribe</td>
<td>–</td>
<td>Zeev Ventures</td>
<td>Digital insurance distribution platform seeking to transform the insurance experience for small businesses.</td>
</tr>
<tr>
<td>05/09/17</td>
<td>Next Insurance</td>
<td>35.0</td>
<td>Am. Express Ventures, Markel Ventures, Munich Re, Nationwide Ventures, Ribbit Capital, TLY Partners</td>
<td>Digital insurance distribution platform seeking to transform the insurance experience for small businesses.</td>
</tr>
<tr>
<td>05/11/17</td>
<td>BetterView</td>
<td>–</td>
<td>500 Accelerator, 500 Startups, Arena Ventures, Crowdstreet, Compound Ventures, Haystack Partners, MetaProp, Plug and Play Accelerator, Router Ventures, Undisclosed Investors</td>
<td>Utilizes a network of independent UAV operators to inspect properties in the US for various needs across insurance, construction and real estate. Provides insurers and loss adjusters with access to a nationwide network of independent UAV operators to inspect commercial and residential properties and infrastructure, software and analysis tools for use in underwriting and claims processes.</td>
</tr>
<tr>
<td>05/13/17</td>
<td>Cover</td>
<td>5.8</td>
<td>Anthemis Group</td>
<td>Switzerland based B2B2C company that provides suite of insurance products to companies, which they can append to their consumer-facing products to capture additional revenue.</td>
</tr>
<tr>
<td>05/17/17</td>
<td>Drive Spotter</td>
<td>0.5</td>
<td>Global Ins. Accelerator, Grinnell Mutual, Invest Nebraska, Techstars, Voss Distributing</td>
<td>Video analytics platform supporting commercial driver safety. Offers proprietary product that monitors driver alertness for fleet management to P&amp;C insurers as a safety incentive.</td>
</tr>
<tr>
<td>05/20/17</td>
<td>Lemonade</td>
<td>–</td>
<td>Aleph, Allianz Ventures, General Catalyst, Google Ventures, Sequoia Capital Israel, Sound Ventures, Thrive Capital, Turk Ventures, XL Innovate</td>
<td>Licensed insurance carrier offering homeowners’ and renters’ insurance powered by artificial intelligence and behavioral economics through a direct-to-consumer online platform.</td>
</tr>
<tr>
<td>06/05/17</td>
<td>Tribe</td>
<td>–</td>
<td>BearingPoint</td>
<td>Oslo based distribution platform that markets insurance through social networks, offering discounts to customer friends and family.</td>
</tr>
<tr>
<td>05/02/17</td>
<td>One</td>
<td>15.5</td>
<td>AGL Partners, American Family Ventures, AXA Strategic Ventures, Camp One Ventures, Centara Growth Partners, HAQ Asia Pacific, MassMutual Ventures</td>
<td>Integrated cloud-based platform designed to transform the way insurers interact with customers. Comprehensive solution includes policy administration, rating, billing data analytics, CRM, payment processing and agency management and enables insurers to modernize operations and offer superior solutions to customers.</td>
</tr>
<tr>
<td>05/08/17</td>
<td>bisure</td>
<td>4.4</td>
<td>Blu Direkt</td>
<td>Germany based digital insurance comparison and distribution platform targeting small businesses.</td>
</tr>
<tr>
<td>05/09/17</td>
<td>ComparaOnline</td>
<td>2.5</td>
<td>Endeavor Catalyst, Kazek Ventures, Launchpad Accelerator, Ribbit Capital, Rise Capital, Simon Nixon, Undisclosed Investors</td>
<td>Chile based online personal insurance comparison platform that allows consumers to make informed purchasing decisions. Enables insurers and banks to expand their distribution channels for insurance and financial products and lower customer acquisition costs.</td>
</tr>
<tr>
<td>05/10/17</td>
<td>InsureStreet</td>
<td>0.7</td>
<td>Individual Investors, FinTech Innovation Lab</td>
<td>London based online platform offering a risk-based renters’ insurance product that can reduce required security deposit.</td>
</tr>
<tr>
<td>05/11/17</td>
<td>Bunker</td>
<td>6.0</td>
<td>American Family Ventures, Comcast Ventures, Hiscox, LaunchCapital, Omidyar Network, Route 66 Ventures</td>
<td>Operates contract-related insurance marketplace initially aiming to improve the insurance experience of small businesses with gig economy workers. Offers products to gig economy businesses and individual workers.</td>
</tr>
<tr>
<td>05/16/17</td>
<td>ControlExpert</td>
<td>–</td>
<td>General Atlantic</td>
<td>Germany based automotive industry service provider that develops products &amp; services to digitize manual claims and maintenance processes for insurers, fleet operators, leasing firms, repair shops, car dealers, auto manufacturers and motor vehicle experts.</td>
</tr>
<tr>
<td>05/17/17</td>
<td>Insurancebox</td>
<td>2.0</td>
<td>JadeValue</td>
<td>China based online insurance distribution platform providing travel and tourism coverages.</td>
</tr>
</tbody>
</table>

Note: Blue font denotes current round investors.
## The Data Center
### Q2 2017 InsurTech Transactions - P&C

($ in millions)

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Funding Round</th>
<th>Investor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/18/17</td>
<td>ETop Pass</td>
<td>7.3</td>
<td>Jugou Investment, Legend Star, QF Capital, Xinjun Capital</td>
<td>China based digital auto insurance distribution platform that allows consumers to make payments online and provides immediate quotes through mobile app.</td>
</tr>
<tr>
<td>05/23/17</td>
<td>Acko General Insurance</td>
<td>30.0</td>
<td>Accel Partners, Catamaran Ventures, SAIIF Partners, Individual Investors</td>
<td>India based digital auto insurance company and comparison platform providing consumers with information about specific insurance requirements for auto and two wheel insurance and licensing requirements in various jurisdictions.</td>
</tr>
<tr>
<td>05/23/17</td>
<td>Carpe Data</td>
<td>6.6</td>
<td>Aquiline Capital Partners, Social Intelligence</td>
<td>Data mining, aggregation and analytics company that utilizes social and web data to help insurers improve rating processes and identify and reduce fraudulent claims.</td>
</tr>
<tr>
<td>05/24/17</td>
<td>Compare4me</td>
<td>3.5</td>
<td>Dubai Silicon Oasis, Mulverhill Associates, Saneer Partners, STC Ventures, Wanda Capital</td>
<td>UAE based finance comparison website allowing users to compare finance products and services from leading banks and insurers in the UAE, Saudi Arabia, Qatar, Kuwait, Bahrain, Egypt and Lebanon.</td>
</tr>
<tr>
<td>05/25/17</td>
<td>Neos</td>
<td>6.5</td>
<td>Aiva Ventures, Eco Venture Partners, Munich Re, Individual Investors</td>
<td>UK based technology enabled home security and insurance service that notifies users of fires, burglaries or water leaks. Service is bundled with a Hiscox home insurance policy and 24/7 home monitoring and support service.</td>
</tr>
<tr>
<td>05/26/17</td>
<td>Spruce</td>
<td>4.5</td>
<td>Bessemer Ventures, Omidyar Network, Third Prime Capital, Individual Investors</td>
<td>Real estate focused company providing title and settlement services that empower lenders to efficiently close loans and deliver excellent customer experience.</td>
</tr>
<tr>
<td>05/30/17</td>
<td>Clearcover</td>
<td>6.3</td>
<td>American Family Ventures, Undisclosed Investors</td>
<td>Stealth company focused on insurance technology.</td>
</tr>
<tr>
<td>06/03/17</td>
<td>Coverfox</td>
<td>15.0</td>
<td>Accel Partners India, Catamaran Ventures, ImoVen Capital, SAIIF Partners, Transamerica Ventures</td>
<td>India based online insurance comparison and distribution platform offering personal lines, health and travel insurance coverages that offers 100+ products through relationships with 25 insurers.</td>
</tr>
<tr>
<td>06/09/17</td>
<td>Kin Insurance</td>
<td>3.5</td>
<td>500 Accelerator, Commerce Ventures, Elmspring Accelerator</td>
<td>Digital homeowners insurance distribution platform offering a streamlined customer experience by aggregating available online customer / underwriting data.</td>
</tr>
<tr>
<td>06/13/17</td>
<td>Digit Insurance</td>
<td>60.0</td>
<td>500 Accelerator, Digital Financial Svcs. Lab</td>
<td>India based technology enabled insurance company founded Fairfax and led by insurance and e-commerce professionals.</td>
</tr>
<tr>
<td>06/13/17</td>
<td>Snapsheet</td>
<td>12.0</td>
<td>Commerce Ventures, F-Prime Capital, Genstar Capital Partners, IA Capital Group, Intact Ventures, Liberty Mutual Ventures, Lightbank, Montage Ventures, OCA Ventures, Pritzker Venture Capital, Tola Capital, USA, Undisclosed Investors</td>
<td>Self-service mobile app for estimating auto claims by photo, offers a full suite of products to help carriers, adjusters and customers analyze claims efficiently, enables insurers to handle approximately 90% of auto claims virtually within approximately 30 days of initiation, Clients receive claims estimates in an average of 2.7 hours after photos are received, hired Andy Cohen as COO in June 2017 (previously CNA VP of Worldwide Field Operations).</td>
</tr>
<tr>
<td>06/15/17</td>
<td>Souqalmal</td>
<td>0.2</td>
<td>500 Accelerator, Hummingbird Ventures, Womera</td>
<td>Largest financial insurance and financial aggregator / comparison website in the UAE and Saudi Arabia allowing users to compare retail banking products and insurance.</td>
</tr>
<tr>
<td>06/21/17</td>
<td>Pula</td>
<td>0.3</td>
<td>Digital Financial Svcs. Lab</td>
<td>Insurance intermediary that implements data driven agriculture insurance solutions enabling farmers to safeguard their crops and invest in their farms through financial tools that take advantage of mobile technology.</td>
</tr>
<tr>
<td>06/21/17</td>
<td>Comparaguru</td>
<td>7.0</td>
<td>Nova Founders Capital, Peter Thiel, QED Investors, SeaYa Ventures, Struck Capital</td>
<td>Mexico based online aggregator enabling consumers to compare and apply for financial products including credit cards, personal loans and personal auto insurance policies.</td>
</tr>
<tr>
<td>06/22/17</td>
<td>Bomapp</td>
<td>1.1</td>
<td>AssetPlus Inv Management, ICBC, Lotte Accelerator, The Square &amp; Company</td>
<td>South Korea based digital aggregator that enables users to compare and sign up for various types of personal insurance coverages. To date, Bomapp has gained 130,000+ members without significant advertising, while over 10,000 agents have joined the app in order to communicate more easily with customers.</td>
</tr>
<tr>
<td>06/27/17</td>
<td>Covered Insurance Solutions</td>
<td>0.7</td>
<td>Ozmen Ventures, Rapid City Economic Development Partnership, Undisclosed Investors</td>
<td>Online / mobile insurance quoting and comparison platform.</td>
</tr>
<tr>
<td>06/28/17</td>
<td>Digital Risks</td>
<td>–</td>
<td>EarlyMarket</td>
<td>UK based digital-first insurance provider offering monthly coverages for technology and media start-ups and small businesses.</td>
</tr>
<tr>
<td>06/29/17</td>
<td>By Miles</td>
<td>0.5</td>
<td>Fintech Fast Forward, InMotion Ventures</td>
<td>UK based auto insurance provider offering per mile coverages for consumers who live in cities and use their car infrequently.</td>
</tr>
</tbody>
</table>

Note: Blue font denotes current round investors.
### The Data Center

#### Q2 2017 InsurTech Transactions – L&H

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Funding Round</th>
<th>Investor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/04/17</td>
<td>Kayum</td>
<td>0.1</td>
<td>500 Accelerator, NXTP Labs</td>
<td>Mexico based digital health insurance quoting platform</td>
</tr>
<tr>
<td>04/04/17</td>
<td>Wellthie</td>
<td>5.0</td>
<td>Allianz American, Healthy Ventures, IA Capital Group</td>
<td>Cloud-based Affordable Care Advisor platform that helps consumers and small businesses understand and select health insurance solutions</td>
</tr>
<tr>
<td>04/10/17</td>
<td>BIMA</td>
<td>16.8</td>
<td>Avista Digital Innovation, Kinnevik, LeapFrog Investments, Milcom International</td>
<td>Leading mobile L&amp;H insurance distribution platform in emerging markets, currently reaches 7 million people across eight countries in Africa, Asia, and Latin America, including Ghana, Senegal, Tanzania, Mauritius, Bangladesh, Sri Lanka, Indonesia, and Honduras</td>
</tr>
<tr>
<td>04/13/17 &amp; 05/18/17</td>
<td>BenRevo</td>
<td>0.7</td>
<td>Undisclosed Investors</td>
<td>Digital health insurance platform connecting carriers, brokers, and employers</td>
</tr>
<tr>
<td>04/18/17</td>
<td>Better</td>
<td>11</td>
<td>Designer Fund, Initialized Capital, Individual Investors</td>
<td>Mobile app that helps users manage their health insurance and out-of-pocket medical bills, users enter insurance and personal information and upload photos of medical bills, software can review bills, identify incorrect or missing information and file claims with insurers</td>
</tr>
<tr>
<td>04/24/17</td>
<td>GetInsurance</td>
<td>2.2</td>
<td>IBB, Picus Capital, PostFinance</td>
<td>Germany’s first digital disability insurance platform</td>
</tr>
<tr>
<td>04/25/17</td>
<td>hibob</td>
<td>17.5</td>
<td>Arbor Ventures, Battery Ventures, Bessemer Ventures, Eight Roads Ventures, LocalGlobe, Taavet Hinrikus</td>
<td>Israel based cloud-enabled system that integrates HR, employee benefits, pension and auto insurance enrollment and associated data into a secure online data storage platform for small businesses</td>
</tr>
<tr>
<td>04/27/17</td>
<td>Plussample</td>
<td>0.9</td>
<td>Oliver Duna, One Ragtime</td>
<td>France based digital P&amp;C platform that provides health and auto coverage to small businesses and workers in the gig economy</td>
</tr>
<tr>
<td>04/27/17</td>
<td>Singapore Life</td>
<td>50.0</td>
<td>China Credit, IPQL</td>
<td>Singapore based digital life insurance platform founded by Walter de Oude (former CEO of HSBC Insurance) and industry veterans</td>
</tr>
<tr>
<td>05/03/17</td>
<td>AllLife</td>
<td>–</td>
<td>LeapFrog Investments, Quona Capital</td>
<td>South Africa based insurance platform administering affordable life insurance products for individuals with HIV or diabetes who commit to following an appropriate health monitoring and treatment program</td>
</tr>
<tr>
<td>05/04/17</td>
<td>FraudScope</td>
<td>1.5</td>
<td>Atlanta Startup Battle, GRA Venture Fund, Mosley Ventures, Service Provider Capital, Spider Capital Partners, TechSquare Labs</td>
<td>Data analytics platform designed to reduce medical billing claims fraud, uses novel data analytics techniques to prioritize suspicious medical insurance claims for investigation to save money lost to fraud, waste and abuse</td>
</tr>
<tr>
<td>05/08/17</td>
<td>Bandboo</td>
<td>0.1</td>
<td>Plug and Play Accelerator</td>
<td>Singapore based digital unemployment insurance distribution platform, blockchain-based ledger that tracks all records of premiums, payouts and claims</td>
</tr>
<tr>
<td>05/08/17</td>
<td>Sport Covers</td>
<td>1.4</td>
<td>Bright Venture Capital, Great Wall Fund</td>
<td>China based digital insurance platform providing sports-related insurance coverages for more than 30 different activities</td>
</tr>
<tr>
<td>05/10/17</td>
<td>CBien</td>
<td>8.7</td>
<td>5M Ventures, French Tech Tour Canada MAC, MAIF Avenir, Mundi Lab, Sferen Innovation, Startupbootcamp</td>
<td>France based digital management platform for belongings that can inventory anything purchased or owned already automatically and include important documentation (receipts, warranties, etc.), provides users with real time market value of belongings so they can actively manage (sell, rent, share, etc.) items, users can insure or file claims for single items or full inventory</td>
</tr>
<tr>
<td>05/10/17</td>
<td>Clover Health</td>
<td>130.0</td>
<td>AME Cloud Ventures, Arena Ventures, Athenium Capital Management, Casdin Capital, First Round Capital, Floodgate, Google Ventures, Greenoaks Capital, Nexus Venture Partners, Palm Drive Capital, Refactor Capital, Sequoia Capital, Social Capital, Spark Capital, Western Tech Investment, Wildcat Venture Partners, Undisclosed Investors</td>
<td>Data driven health insurance start-up founded by Vivek Garipalli (founder of CarePoint) that aims to lower costs of health insurance and managed care for elderly / low-income members, uses analytics and custom software to direct clinical staff to proactively fill in gaps in care, acquired Ullico Life Insurance Company from Ullico, Inc. for $8.3 million in April 2016</td>
</tr>
</tbody>
</table>

Note: Blue font denotes current round investors.
The Data Center
Q2 2017 InsurTech Transactions – L&H

($ in millions)

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Funding Round</th>
<th>Investor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/12/17</td>
<td>Anyi Tech</td>
<td>–</td>
<td>Beijing LaKala</td>
<td>China based B2B2C platform for online risk management and insurance brokerage services for businesses and individuals</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Promising Capital</td>
<td>Provides free risk assessment, loss records and policy management</td>
</tr>
<tr>
<td>05/22/17</td>
<td>Vericred</td>
<td>5.5</td>
<td>FCA Venture Partners, Undisclosed Investors</td>
<td>Healthcare information services company developing a cloud-based, SaaS ecosystem for compliance and risk management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.7</td>
<td></td>
<td>Data solutions enable functionality, speed deployment, and reduced costs for health and InsurTech companies, while its modern API allows for hassle-free data delivery for insurance carriers</td>
</tr>
<tr>
<td>05/24/17</td>
<td>PolicyGenius</td>
<td>30.0</td>
<td>AXA Strategic Ventures, Fika Ventures, Karlin Ventures, MassMutual Ventures, Northwest Venture Partners, Otter Rock Capital, Revolution, Susa Ventures, Switch VC, Transamerica Ventures, Undisclosed Investors</td>
<td>Online marketplace for unique, customized life insurance coverages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51.1</td>
<td></td>
<td>Offers quoting and comparison services for life, long-term disability, renters’ and pet insurance products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Proprietary software, Insurance Checkup, helps users discover coverage gaps and offers immediate solutions</td>
</tr>
<tr>
<td>05/24/17</td>
<td>Shebaotong</td>
<td>–</td>
<td>Recruit Holdings, Vision Plus Capital, Volcanic Stone Capital, Z Ventures Group, ZhenFund</td>
<td>China based digital insurance platform providing social security and group insurance-related service for enterprises and individuals</td>
</tr>
<tr>
<td>05/25/17</td>
<td>Bayzat</td>
<td>3.0</td>
<td>BECO Capital, Preocnt Partners, Raed Ventures, Womena, Undisclosed Investors</td>
<td>Cloud-based software solution that streamlines human resources processes and provides a health insurance marketplace which connects companies and insurers</td>
</tr>
<tr>
<td>06/01/17</td>
<td>Bright Health</td>
<td>160.0</td>
<td>Bessemmer Ventures, Cross Creek Advisors, Flare Capital Partners, GE Ventures, Greenspring Associates, Greycroft Partners, New Enterprise Associates, Redpoint Ventures</td>
<td>Online health insurance marketplace delivering a smarter, more connected healthcare experience based on its exclusive partnerships with health systems, affordable health insurance plans, and simple technology driven user interface</td>
</tr>
<tr>
<td></td>
<td></td>
<td>240.0</td>
<td></td>
<td>Provides free risk assessment, loss records and policy management</td>
</tr>
<tr>
<td>06/05/17</td>
<td>Insurello</td>
<td>0.3</td>
<td>DHS Venture Partners, Individual Investors</td>
<td>Sweden based digital platform for pursuing personal injury claims</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.3</td>
<td></td>
<td>Fee-based compensation of 25% of successful claims</td>
</tr>
<tr>
<td>06/07/17</td>
<td>Friday Health Plans</td>
<td>3.0</td>
<td>Edwards Capital, Undisclosed Investors</td>
<td>Cloud-based SaaS platform that streamlines insurance compliance reporting processes</td>
</tr>
<tr>
<td>06/12/17</td>
<td>Gain Compliance</td>
<td>0.0</td>
<td>FIN Capital, Undisclosed Investors</td>
<td>Cloud-based SaaS platform that streamlines insurance compliance reporting processes</td>
</tr>
<tr>
<td>06/14/17</td>
<td>Gryphon Insurance</td>
<td>230.0</td>
<td>Leadenhall Capital, Punter Southall Group</td>
<td>UK based start-up life insurer founded by former executives from Prudential, Zurich and Admin Re</td>
</tr>
<tr>
<td></td>
<td></td>
<td>230.0</td>
<td></td>
<td>Markets critical illness and income protection products directly and through financial advisors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Supported by technology enabled digital and cloud-based infrastructure</td>
</tr>
<tr>
<td>06/15/17</td>
<td>Core Financial Technologies</td>
<td>5.0</td>
<td>Commerce Ventures, Connectivity Ventures, Contour Venture Partners, Nyca Partners</td>
<td>Digital marketplace providing consumers with access to life insurance policies from highly rated insurers directly through a digital platform and also through financial institutions and advisors</td>
</tr>
<tr>
<td>06/19/17</td>
<td>ottonova</td>
<td>11.2</td>
<td>b-to-v Partners, Dobeka, Holtzbrinck Ventures, STS Ventures, Tengelmann Ventures, Varvek, Direct Selling Ventures</td>
<td>Germany based digital insurance distribution platform</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27.3</td>
<td></td>
<td>Provides health and supplementary coverages via online platform</td>
</tr>
<tr>
<td>06/20/17</td>
<td>EaseCentral</td>
<td>6.5</td>
<td>Compound Ventures, Deep Fork Capital, Freestyle Capital, Propel Venture Partners, Transmedia Capital, Upside Partnership</td>
<td>Digital platform enabling agents to easily set up and manage HR and benefits administration on behalf of their clients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.6</td>
<td></td>
<td>Team is equipped to train insurance agents and their staff to quickly and effectively manage their book of business using EaseCentral</td>
</tr>
<tr>
<td>06/23/17</td>
<td>Beam Technologies</td>
<td>4.5</td>
<td>Drive Capital, Kentucky Seed Capital, Queen City Angels, Rock Health, Yearing Fund, Undisclosed Investors</td>
<td>Dental benefits company that offers employers, individuals and families a unique approach to dental care by pricing according to how often members brush their teeth</td>
</tr>
</tbody>
</table>

Note: Blue font denotes current round investors.

Quarterly InsurTech Briefing Q2 2017 43
The Data Center
InsurTech by the Numbers

Private Technology Investments by (Re)insurers

Private Technology Investments by (Re)insurers by Target Country

2012 – Q2 2017 Transactions: 262
Q2 2017 Transactions: 31

Private Technology Investments by (Re)insurers by Investment Stage

2012 – Q2 2017 Transactions: 262
Q2 2017 Transactions: 31
### The Data Center

**Q2 2017 Private Technology Investments by (Re)Insurers**

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Funding Round</th>
<th>(Re)insurer Investor(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/04/17</td>
<td>Amino</td>
<td>25.0</td>
<td>Northwestern Mutual</td>
<td>Online healthcare platform that provides free consumer products that allow consumers to estimate costs and book appointments. Enables employers to sponsor enhanced experiences for their employees by connecting them with in-network care and providers. Providers can leverage Amino's user experience to power search and book appointments within their networks.</td>
</tr>
<tr>
<td>04/04/17</td>
<td>Wellthe</td>
<td>5.0</td>
<td>Aflac Corporate Ventures</td>
<td>Cloud-based Affordable Care Advisor platform that helps consumers and small businesses understand and select health insurance.</td>
</tr>
<tr>
<td>04/05/17</td>
<td>Casalova</td>
<td>1.9</td>
<td>Aviva Ventures</td>
<td>Largest online database for buying or renting real estate in Canada. Streamlines rental process by allowing users to search for rentals, schedule viewings, make offers and pay rent online.</td>
</tr>
<tr>
<td>04/06/17</td>
<td>Trov</td>
<td>45.0</td>
<td>Munich Re/HSHB Ventures, Sompo Group</td>
<td>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. Launched product in UK in partnership with AXA in June 2017.</td>
</tr>
<tr>
<td>04/10/17</td>
<td>Next Insurance</td>
<td>35.0</td>
<td>Markel Ventures, Munich Re/HSHB Ventures, Nationwide Ventures</td>
<td>Digital insurance distribution platform focused on specialized coverages tailored to specific industries including personal trainers, photographers and contractors.</td>
</tr>
<tr>
<td>04/18/17</td>
<td>Cette Famille</td>
<td>0.5</td>
<td>MAIF Avenir</td>
<td>France based online platform for connecting elderly and disabled individuals with city council approved host families, who receive payment for their services.</td>
</tr>
<tr>
<td>04/18/17</td>
<td>CyberGRX</td>
<td>20.0</td>
<td>Aetna Ventures, MassMutual Ventures</td>
<td>Comprehensive third-party risk management platform which helps businesses cost-effectively identify, assess, mitigate and monitor an enterprise's risk exposure across its entire partner ecosystem.</td>
</tr>
<tr>
<td>04/18/17</td>
<td>MortgageHippo</td>
<td>2.3</td>
<td>CMFG Ventures</td>
<td>End-to-end, consumer-facing portal where borrowers can manage mortgage transactions with loan officers from several partner lenders.</td>
</tr>
<tr>
<td>04/19/17</td>
<td>Alert Labs</td>
<td>–</td>
<td>Intact Ventures</td>
<td>Canada based cellular-connected home protection platform protecting customers' basements by gathering and analyzing real-time data with attractive, easy-to-install hardware and software.</td>
</tr>
<tr>
<td>04/20/17</td>
<td>Lemonade</td>
<td>–</td>
<td>Allianz Ventures, XL Innovate</td>
<td>Licensed insurance carrier offering homeowners' and renters' insurance powered by artificial intelligence and behavioral economics through a direct-to-consumer online platform. Targets urban dwellers and promises zero paperwork and instant everything (policy issuance, claims, communication, etc.).</td>
</tr>
<tr>
<td>05/02/17</td>
<td>One</td>
<td>15.5</td>
<td>American Family Ventures, AXA Strategic Ventures, MassMutual Ventures</td>
<td>Integrated cloud-based platform designed to transform the way insurers interact with customers. Comprehensive solution includes policy administration, rating, billing data analytics, CRM, payment processing and agency management and enables insurers to modernize operations and offer superior solutions to customers.</td>
</tr>
<tr>
<td>05/10/17</td>
<td>Cilen</td>
<td>8.7</td>
<td>MACIF, MAIF Avenir</td>
<td>France based digital management platform for belongings that can inventory anything purchased or owned already automatically and include important documentation (receipts, warranties, etc.). Provides users with real time market value of belongings so they can actively manage (sell, rent, share, etc.) items. Users can insure or file claims for single items or full inventory.</td>
</tr>
<tr>
<td>05/12/17</td>
<td>SeaBubbles</td>
<td>10.9</td>
<td>MAIF Avenir</td>
<td>Manufacturer of battery-powered bubble-shaped ships that hover a few inches above water and transport as many as five people at a time. Users can insure or file claims for single items or full inventory.</td>
</tr>
<tr>
<td>05/16/17</td>
<td>Karamba</td>
<td>12.0</td>
<td>Liberty Mutual Ventures</td>
<td>Technology powered solution that protects cars from threats resulting from externally connected components. Enables car companies to protect their automobiles by identifying attack attempts and blocking exploits from infiltrating a car's network.</td>
</tr>
<tr>
<td>05/17/17</td>
<td>Huya</td>
<td>75.0</td>
<td>Ping An Insurance</td>
<td>Live game broadcasting platform that provides users with high definition, smooth and rich interactive live streaming services based on its advanced video technology.</td>
</tr>
<tr>
<td>05/23/17</td>
<td>R3</td>
<td>107.0</td>
<td>Ping An Insurance</td>
<td>Consortium of global financial institutions collaborating to develop a platform and commercial applications for financial grade distributed ledger technology.</td>
</tr>
<tr>
<td>05/24/17</td>
<td>PolicyGenius</td>
<td>30.0</td>
<td>AXA Strategic Ventures, MassMutual Ventures, Transamerica Ventures</td>
<td>Online marketplace for unique, customized life insurance coverages. Offers quoting and comparison services for life, long-term disability, renters' and pet insurance products. Proprietary software, Insurance Checkup, helps users discover coverage gaps and offers immediate solutions.</td>
</tr>
<tr>
<td>05/25/17</td>
<td>Neos</td>
<td>6.5</td>
<td>Aviva Ventures, Munich Re</td>
<td>UK based technology enabled home security and insurance service that notifies users of fires, burglaries or water leaks. Service is bundled with a Hiscox home insurance policy and 24/7 home monitoring and support service.</td>
</tr>
<tr>
<td>05/30/17</td>
<td>Clearcover</td>
<td>6.3</td>
<td>American Family Ventures</td>
<td>Stealth company focused on insurance technology.</td>
</tr>
<tr>
<td>06/03/17</td>
<td>Coverfox</td>
<td>15.0</td>
<td>Transamerica Ventures</td>
<td>India based online insurance comparison and distribution platform offering personal lines, health and travel insurance coverages. Offers 100+ products through relationship with 25 insurers.</td>
</tr>
<tr>
<td>06/08/17</td>
<td>Stratumn</td>
<td>7.8</td>
<td>CNP Ventures</td>
<td>Helps developers build trustworthy applications enabled by Blockchain features with goal of automating the auditing process, eliminating errors and fraud and enabling smart workflows and processes that are cryptographically written, executed and verified.</td>
</tr>
</tbody>
</table>

(a) Denotes previous round investor that did not invest in current round.
<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Funding Total</th>
<th>(Re)insurer(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/08/17</td>
<td>Automat.ai</td>
<td>8.3</td>
<td>USAA</td>
<td>Platform that allows businesses to build conversational software powered by AI across a range of modern mobile messaging applications (Messenger, Kik, Slack)</td>
</tr>
<tr>
<td>06/15/17(a)</td>
<td>Sure</td>
<td>8.0</td>
<td>AmTrust Financial, Assurant Growth Investing, Nationwide Ventures</td>
<td>Mobile application to purchase on-demand insurance focuses on personal lines products (renters and baggage)</td>
</tr>
<tr>
<td>06/13/17</td>
<td>Figure 1</td>
<td>10.0</td>
<td>Manulife Financial, Samsung NEXT</td>
<td>Mobile forum that allows healthcare professionals and students to share medical content and images</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20.9</td>
<td></td>
<td>Used by 125,000+ healthcare professionals at thousands of hospitals with medical/nursing student ambassadors at approximately 200 schools</td>
</tr>
<tr>
<td>06/13/17</td>
<td>CognitiveScale</td>
<td>15.0</td>
<td>USAA</td>
<td>Builds machine intelligence software for healthcare, commerce and financial services markets</td>
</tr>
<tr>
<td>06/13/17</td>
<td>Notion</td>
<td>10.0</td>
<td>Liberty Mutual Ventures, XL Innovate</td>
<td>Provides complete home awareness through a multi-function sensor that can be accessed on Apple and Android mobile platforms</td>
</tr>
<tr>
<td>06/14/17</td>
<td>Dispatch Technologies</td>
<td>12.0</td>
<td>Assurant Growth Investing, Liberty Mutual Ventures</td>
<td>Provides enterprises with a mobile extension for their existing systems and offers a self-serve set of products and APIs for marketplaces and developers</td>
</tr>
<tr>
<td>06/14/17</td>
<td>GeoQuant</td>
<td>4.0</td>
<td>XL Innovate</td>
<td>Proprietary analytics platform designed to measure political risk in real time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.0</td>
<td></td>
<td>Patent-pending software is designed to scrape the web for reputable data, news, and social media content, which is enhanced by an in-house team of political scientists and regional experts that generate daily country scores and indicators that allow for benchmarking and pricing of political risks around the world</td>
</tr>
<tr>
<td>06/14/17</td>
<td>Snips</td>
<td>13.0</td>
<td>MAIF Avenir</td>
<td>NYC and Paris based AI company that offers a private-by-design voice platform and context-aware interface for connected devices, which analyzes habits to enable more ubiquitous access to services</td>
</tr>
<tr>
<td>06/15/17</td>
<td>Rythm</td>
<td>9.0</td>
<td>MAIF Avenir</td>
<td>Builds consumer technology that stimulates brain function to enhance performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22.5</td>
<td></td>
<td>Initial product, Dreem, is the first active wearable device that increases sleep quality</td>
</tr>
<tr>
<td>06/19/17</td>
<td>Augury Systems</td>
<td>17.0</td>
<td>Munich Re/HSB Ventures</td>
<td>Mobile-based predictive maintenance solution that diagnoses machines, provides treatment and recommendations and predicts future failures for use in factories, commercial buildings and homes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26.0</td>
<td></td>
<td>Cost-effective, scalable solution to reduce environmental impact, energy usage and operational costs</td>
</tr>
<tr>
<td>06/24/17</td>
<td>Modern Message</td>
<td>2.0</td>
<td>AXA Strategic Ventures</td>
<td>Developer of Community Rewards, a resident advocacy platform designed to turn residents into marketers for apartment communities through gamification and personalization marketing</td>
</tr>
</tbody>
</table>

(a) Round initially announced on February 10, 2017; (re)insurer investors disclosed in June 2017.

(b) Denotes previous round investor that did not invest in current round.
<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>(Re)insurer Partner(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/06/17 &amp;</td>
<td>Trov</td>
<td>Munich Re, Sompo</td>
<td>Munich Re led $45 million Series D funding and expanded its partnership to include underwriting throughout Europe, Asia and South Africa. Sompo's partnership will offer Trov's on-demand insurance product on an exclusive basis throughout Japan.</td>
</tr>
<tr>
<td>06/01/17</td>
<td></td>
<td>Holdings, AXA</td>
<td>Launched product in UK in partnership with AXA in June 2017.</td>
</tr>
<tr>
<td>05/03/17</td>
<td>Tictrac</td>
<td>Munich Re</td>
<td>Collaborated with Munich Re to launch Wellgage, a data analytics tool that combines data from apps and wearables with contextual information about people's surroundings to help users lead healthier lifestyles. Munich Re will offer Wellgage to its insurance partners around the world as a tool to engage with customers and use its analytics to support core business in product development, pricing and underwriting.</td>
</tr>
<tr>
<td>05/11/17</td>
<td>Praedicat</td>
<td>Allianz</td>
<td>Allianz Global Corporate &amp; Specialty (AGCS) will use Praedicat’s analytics offerings to better predict key catastrophe liability risks, including asbestos, and gain insights on emerging risks and new business opportunities.</td>
</tr>
<tr>
<td>05/17/17</td>
<td>Lyft</td>
<td>Blue Cross Blue Shield</td>
<td>Alipay partnered with Taikang Health to offer users under the age of 60 the opportunity to receive a certain amount of insurance coverage for free each time they make an offline payment with their Alipay e-Wallet. Critical illness coverage will come into effect immediately and continue accumulating (with each payment) to until it reaches cap of RMB 2,000.</td>
</tr>
<tr>
<td>05/17/17</td>
<td>Alipay</td>
<td>Taikang Health</td>
<td>Alipay partnered with Taikang Health to offer users under the age of 60 the opportunity to receive a certain amount of insurance coverage for free each time they make an offline payment with their Alipay e-Wallet. Critical illness coverage will come into effect immediately and continue accumulating (with each payment) to until it reaches cap of RMB 2,000.</td>
</tr>
<tr>
<td>05/17/17</td>
<td>Understory</td>
<td>Pacific Specialty</td>
<td>Pacific Specialty is the latest major carrier to become a client of Understory’s rapidly growing weather analytics platform and network. Partnership will allow Pacific Specialty to better manage hail events by improving accuracy, efficiency and customer experience.</td>
</tr>
<tr>
<td>05/19/17</td>
<td>Tractable</td>
<td>Ageas</td>
<td>Ageas has begun using Tractable’s artificial intelligence (AI) technology to help manage the performance of its motor claims by verifying the performance of its UK-wide managed repair network companies.</td>
</tr>
<tr>
<td>05/21/17</td>
<td>Uber</td>
<td>OneBeacon (Intact)</td>
<td>OneBeacon A&amp;H rolled out a new policy initially targeting Uber drivers in eight states which offers up to $1 million of usage-based driver injury protection coverage with premium payments on a per-mile basis. Product developed in partnership with Uber and Aon.</td>
</tr>
<tr>
<td>05/24/17</td>
<td>Getsurance</td>
<td>RGA</td>
<td>Germany-based life insurance focused start-up Getsurance and RGA intend to jointly develop and launch digital life insurance product.</td>
</tr>
<tr>
<td>05/26/17</td>
<td>Quilt</td>
<td>Generation Life (Swiss Re)</td>
<td>In a partnership with Generation Life (recently acquired by Swiss Re), Quilt will begin offering life insurance products through its digital enrollment platform in 37 states.</td>
</tr>
<tr>
<td>05/26/17</td>
<td>Neos</td>
<td>Munich Re</td>
<td>Munich Re invested in Neos and will provide underwriting capacity through an MGA for Neos’ innovative home insurance product that uses smart home technology to proactively protect homes from fire, water damage and theft.</td>
</tr>
<tr>
<td>06/06/17</td>
<td>HONK</td>
<td>Farmers</td>
<td>HONK, the largest US trackable, traceable roadside assistance company with a fleet of 55,000 trucks, has entered into an agreement to white label its roadside assistance service to Farmers. Partnership could be worth as much as $150 million to HONK.</td>
</tr>
<tr>
<td>06/06/17</td>
<td>FinLeap Element</td>
<td>Signal Iduna</td>
<td>Signal Iduna is working with digital insurance platform, Element, to digitize business processes and develop and improve its insurance products and services.</td>
</tr>
<tr>
<td>06/13/17</td>
<td>Bold Penguin</td>
<td>Hiscox</td>
<td>Hiscox’s US specialty business will offer commercial lines P&amp;C products through Bold Penguin’s online insurance marketplace.</td>
</tr>
<tr>
<td>06/14/17</td>
<td>Sure</td>
<td>AmTrust</td>
<td>WarranTech, a subsidiary of AmTrust, is working with Sure to launch an innovative smartphone protection product based on virtual diagnostics that indicate the health (battery, memory, CPU, etc.) of mobile phones.</td>
</tr>
<tr>
<td>06/30/17</td>
<td>bitFlyer</td>
<td>Mitsui Sumitomo</td>
<td>Japan based bitcoin exchange bitFlyer will partner with Mitsui Sumitomo to offer merchants a way to receive compensation for failed transactions invoking the virtual currency.</td>
</tr>
</tbody>
</table>

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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 contents of this report, please direct inquiries to InsurTech@willistowerswatson.com.

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