Unpacking the InsurTech Landscape

October 2, 2018
CB Insights synthesizes, analyzes and visualizes millions of documents to help people see and makes sense of the future so they are inspired and able to drive their business forward.

Buried within these documents are data and insights that offer predictive intelligence into technologies, markets and competition.

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cbinsights.com
“We use CB Insights to find emerging trends and interesting companies that might signal a shift in technology or require us to reallocate resources.”

Beti Cung, Corporate Strategy, Microsoft
About the Analyst

Matthew Wong

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Matthew Wong is managing analyst at CB Insights, where he leads a team of research analysts covering startup, venture capital, and corporate strategy activity and trends in financial services.

He currently manages CB Insights Insurance Tech newsletter, which reaches 33K+ insurance executives, investors, and professionals, and works with leading (re)insurers globally.


Matthew is a magna cum laude graduate of Northwestern University.
INSURTECH BY THE NUMBERS

Investment continues to flood into insurance tech in 2018
Global insurance tech investment: $2.56 billion in the first three quarters of 2018

Source: CB Insights Deal Search. 2018 YTD data through 9/22/2018
P&C-focused startups garnering more investment over time

Source: Willis Towers Watson Quarterly InsurTech Briefing Q2'18
Large investments are accelerating: 19 $30M+ financing rounds in 2018 YTD

Source: CB Insights Deal Search. 2018 YTD data through 9/22/2018
What about the tech giants? Platforms see opportunity in high-growth insurance markets

<table>
<thead>
<tr>
<th>INDIA</th>
<th>INDONESIA</th>
<th>CHINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>(8.7% projected CAGR)</td>
<td>(7.5% projected CAGR)</td>
<td>(7.0% projected CAGR)</td>
</tr>
</tbody>
</table>

**INDIA**
- **Paytm**
  - Approved to sell insurance through Paytm General Insurance and Paytm Life Insurance

**INDONESIA**
- **Grab**
  - Signed long-term partnership with Chubb to provide accident, hospitalization, and critical insurance coverage to 2.6M driver-partners through the Grab driver app

**CHINA**
- **Tencent**
  - Offers insurance products through its portal from more than 80 insurers to 392M annual visitors. More than 100+ users use all five of Ant’s financial services with mobile payments acting as the gateway in.

**Other Platforms**
- **Flipkart**
  - Applied for corporate license to sell life and general insurance

- **Amazon.in**
  - Seeking to sell life, health, and general insurance. Yet to apply for license. Strategic investor in Acko General Insurance

- **Go-Jek**
  - Plans to increase access to insurance products and services for Go-Jek partners and customers with Allianz. Strategic investor in digital insurance startup PasarPolis

- **WeSure**
  - Strikes one-off partnerships for customized insurance solutions through its online insurance agency WeSure. Partnered with Hillhouse Capital and Aviva for newly launched digital life insurance company Blue in Hong Kong

Source: Munich Re Economic Research (P&C insurance projected premium CAGR, 2017E – 2025E)
Insurtech…it’s even coming up on earnings calls

Source: CB Insights Earnings Transcripts Search Engine & Analytics
(Re)insurers continue to pursue strategic investments in complimentary startups

Source: Willis Towers Watson Quarterly InsurTech Briefing Q2’18
Innovation investment vs. consolidation in perspective

$21.6B  $22.5B

Total investment amount of private tech deals **participated in** by (re)insurers since 2012

Amount paid by AXA, AIG, and The Hartford in aggregate for XL Catlin, Validus, and Navigators

Source: CB Insights analysis
Lots of startups today, but not all will survive
Lots of startups today, but not all will survive

**JUNE 11, 2018**

**Everest Insurance partners with drone start-up Airware**

19th June 2018 - Author: Charlie Wood

Everest Insurance has entered into an agreement with San Francisco-headquartered drone analytics providers Airware for this year’s hurricane season.

The partnership will give Everest access to Airware’s aerial data analytics and machine learning (ML) capabilities, with the objective of providing greater precision and efficiency to the claims management process.

**SEPTEMBER 14, 2018**

**Drone startup Airware crashes, shuts down after burning $118M**

Josh Constine @joshconstine / 3 weeks ago

Drone operating system startup Airware is today suddenly informed employees it will cease operations immediately despite having raised $118 million from top investors like Andreessen Horowitz, Google’s GV, and Kleiner Perkins. The startup ran out of money after trying to manufacture its own hardware that couldn’t compete with drone giants like China’s DJI. The company at one point had as many as 140 employees, all of which are now out of a job.

A source sent TechCrunch screenshots from the Airware alumni Slack channel detailing how the staff was told this morning that Airware would shut down.

Airware makes a cloud software system that helps enterprise customers like construction companies, mining operations, and insurance companies reviewing equipment for damages to use drones to collect and analyze aerial data. That allowed companies to avoid using expensive helicopters or dangerous rigs with humans on harnesses to make inspections and gauge work progress.
TODAY’S TOPIC: THE STATE OF US INSURTECH

Market sizes vs. market realities vs. market shifts
Market sizes and opportunities in insurance vary widely

- **$74B**: US homeowners insurance
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- **$100B**: US small commercial insurance

Estimated market sizes based on premiums written
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- $100B: US small commercial insurance

Estimated market sizes based on premiums written
Digitization of small business insurance will take longer than projected…but is coming

In 2016, a widely-cited study estimated that 15-30% of small business insurance would be sold digitally by 2020, translating into a $17-33B premium market opportunity...

“Usage-based”, “flexible”, “pay-as-you-go”… general liability insurance

Carriers such as Markel and Chubb are partnering with startups on contractor-focused products
Will there be a catalyst for digital SMB insurance?

It took Hiscox’s direct and partnerships unit 7 years to achieve $100M in premium in the US. Startup Next Insurance has taken a strategy of focusing on key SMB verticals and expanding product breadth toward its long-term goal of becoming a one-stop shop for SMB insurance.

Berkshire Hathaway’s biBERK online brand has generated just $6.4M of premium in H1 2018. But the rise of direct auto insurers paint a picture of what could change in a self-reinforcing cycle where low-cost structures = more advertising spend = higher premium growth.

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Next Insurance written premium run rate

All values shown in $million

<table>
<thead>
<tr>
<th>Year</th>
<th>Premium Written</th>
</tr>
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<tbody>
<tr>
<td>Jun-16</td>
<td>$0.1</td>
</tr>
<tr>
<td>Dec-16</td>
<td>$0.8</td>
</tr>
<tr>
<td>Jun-17</td>
<td>$2.9</td>
</tr>
<tr>
<td>Dec-17</td>
<td>$8.7</td>
</tr>
<tr>
<td>Jun-18</td>
<td>$22.5</td>
</tr>
</tbody>
</table>

Source: Next Insurance

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Personal Auto Market Share

*Legacy mutuals include American Family, Farmers, Liberty Mutual, Nationwide, and State Farm.

Sources: S&P Global Market Intelligence and William Blair
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Estimated market sizes based on premiums written
Cyber insurance market expected to grow to $9B by 2020

Contributors to market growth: 1/ The addressing of silent cyber risk 2/ rate increases 3/ the continuous evolution of businesses understanding their degree of cyber exposures and perils

In 2016, the top 5 writers accounted for 62% market share of standalone cyber direct premiums written

<table>
<thead>
<tr>
<th>2016 Rank</th>
<th>Standalone</th>
<th>Cybersecurity*</th>
<th>Company Name</th>
<th>DPW</th>
<th>Market Share (%)</th>
<th>% of Total DPW</th>
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<tr>
<td>1</td>
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<td>American International Group</td>
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<td>25.1</td>
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<tr>
<td>2</td>
<td>2</td>
<td>XL CatlinAmerica Group</td>
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<td>11</td>
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<td>Zurich Financial Services NA Group</td>
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<td>2.8</td>
<td>98.8</td>
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<tr>
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<td>Market Corporation Group</td>
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<td>100.0</td>
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<td>1.2</td>
<td>42.9</td>
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<td>1.1</td>
<td>78.7</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>20</td>
<td>Hiscox USA Group</td>
<td>9.4</td>
<td>1.0</td>
<td>85.1</td>
<td></td>
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<tr>
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<td>19</td>
<td>Great American P &amp; C Insurance Group</td>
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<td>0.9</td>
<td>68.8</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>21</td>
<td>Aspen US Insurance Group</td>
<td>7.3</td>
<td>0.8</td>
<td>69.9</td>
<td></td>
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<tr>
<td>20</td>
<td>27</td>
<td>Swiss Reinsurance Group</td>
<td>5.6</td>
<td>0.6</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

| Top 8* | 566.2 | 62.1 | 81.0 |
| Top 10* | 724.1 | 79.5 | 75.3 |
| Top 20* | 862.8 | 94.7 | 73.7 |
| Total P&C Industry | 911.4 | 100.0 | 67.9 |

*Ranked by 2016 total standalone and packaged cybersecurity direct premiums written

Source: Munich Re, A.M. Best
Startups in cyber insurance today: enablers & ‘CISO-as-a-service’ for SMBs

Companies such as CyberCube, RMS, and Cyence are trying to come up with their own models to support the cyber insurance industry.

Disclosed partners:
- CyberCube
- Chubb
- Guy Carpenter
- JLT Re

Guidewire 2018 revenue

Cyence revenue contribution

Security services:

- Coalition provides tools including DDoS mitigation, security benchmarking, ransomware protection, and intelligence alerts.
- At-Bay provides active risk management, risk assessment at quote and during policy period, and incident management.
- Zeguro provides a risk management platform to assess cyber gaps and cybersecurity training for employees.
- Paladin provides a risk assessment test as well as protection tools including inbox, XSS, and public WiFi protection as well as employee training.

Coverage limit:
- Up to $10M
- Up to $10M
- Up to $10M
- Up to $1M

Source: Guidewire, CB Insights analysis
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Munich Re investing in the next-generation of industrial risk management technologies
In January 2016, AIG made a strategic investment in Human Condition Safety and conducted a set of pilots to demonstrate how its wearable technology might create measurable improvements to reduce the frequency and severity of work-related injuries. After launching SafeScan, a VR-based job training program, the company replaced its management team and filed for bankruptcy in March 2017.
Startups look to build workers’ comp risk profiles

SafetyCulture provides a mobile inspection reporting app called iAuditor. Companies use the app to create checklists, conduct on-site inspections and analyze data in real time. SafetyCulture’s data could be used to develop risk profiles for workers’ comp insurance based on its datasets about its clients’ quality and safety records. 15,000 organizations use the iAuditor app globally.

In February 2018, Argo Group partnered with Kinetic on a pilot program where employees at retailers, restaurants and supermarkets would wear a Kinetic smart device that would vibrate when they were planning to lift something incorrectly. The device would reportedly help establish risk profiles for employees and let managers know who needs training to help change their risky behavior.

Source: Company websites
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Estimated market sizes based on premiums written
The gig economy and the new small group benefits “broker”

Freelancers Union = **375,000 members**. Freelancers on leading freelance marketplace Upwork = **375,000 members**.

In the fragmented small group benefits brokerage space, the manifestation of the broker has changed.

**Exhibit 2: Total transaction volume in the transportation sector of the Online Platform Economy has grown to the level of all the other sectors combined**

Source: JPMorgan Chase Institute, Gusto
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Estimated market sizes based on premiums written

Annual spend on insurance software & services: $53B

#ITC2018
“The decline of life insurance is a mystery” Is it?

Source: Federal Reserve Bank of Chicago
Life insurance...made “easy” and “simple”

Life insurance startups are taking the route of partnering with reinsurer and carrier partners to provide digital term life insurance products (at different coverage limits). Can they get in front of consumers at the right point in time?
Life insurance…with perks

John Hancock will offer Vitality Go on all new life insurance policies. Vitality Go offers discounts at places like Amazon and REI for reaching health milestones, but does not offer annual premium savings.

Haven Life Plus
Protection beyond life insurance

Haven Life Plus provides policyholders with benefits that help them live healthily, live fully and live protected. (And you thought all you got with your life insurance policy was a monthly bill.)

Already a policyholder?
Access Haven Life Plus

Haven Life Plus is a rider and not available in Florida, New York, North Dakota, South Dakota and Washington.
Life insurance…and wealth tech?

Betterment & SoFi have a combined ~1M users. There are ~70M underinsured households in the US

Betterment

“As far as life insurance is concerned, we’re talking to a lot of financial partners about it because we think it’s interesting.”

- Betterment CEO Jon Stein
Reinsurers helping drive innovation in life insurance

SCOR, Transamerica invest in iBeat
June 8, 2018 | Reinsurance News

Swiss Re and MassMutual launch risk scoring solution
March 22, 2018 | Insurance Business

Cardiogram partners with RGAx, Amica to offer Apple Watch owners no-cost accidental death plans
September 27, 2018 | MacRumors

SCOR partnering with Human Longevity
August 31, 2018 | ITIJ

RGA’s innovation accelerator to acquire LOGiQ3
January 9, 2018 | Reinsurance News
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Near-term shifts: New subscription & usage-based models

BMW, Cadillac, Volvo, Jaguar, Mercedes, and Porsche have all launched car subscription models. Other third-party subscription services include Canvas, Flexdrive, Less, Borrow, Fair.com, Carma, FlexDrive, and Drive Flow & Clutch.

Root Insurance has captured 1 billion miles of mobile telematics data vs. Progressive Snapshot’s 300 million miles. Zendrive, which works with auto insurance companies, has recorded 150B miles of mobile driving data.

Onboarding:

**ROOT**

1. Download Root’s app
2. Test drive for 2-3 weeks using the Root mobile app
3. Receive (or be denied) a quote after the testing period

**Snapshot**

1. Obtain quote and choose the Snapshot mobile app or plug-in device
2. Drive with Snapshot for first policy period
3. Check progress and potentially earn discounts

**App Store rank (Finance):**

- **ROOT:** #36
- **Snapshot:** #99

**Mobile telematics data (miles driven):**

- **ROOT:** 1 billion
- **Snapshot:** 300 million
Long-term shift: What happens to $210B in personal auto premiums?

“I think the most under-hyped area of new technology right now is autonomous vehicles, particularly self-driving cars.” – Marc Andreessen

Autonomous vehicle launch timelines based on public announcements

Estimated valuation of Alphabet’s Waymo (in $ billion)
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Estimated market sizes based on premiums written
Startups are blending into and integrating with the home buying process

Lenders using Blend Labs represent more than **25% of the total US mortgage market** with **$60B in mortgage applications** flowing through its software in 2017. Blend recently launched a home insurance agency in August 2018.

*By adding a home insurance option early in the home buying process, Blend hopes to save borrowers and lenders time*

Source: Andreessen Horowitz, “Making Sense of Mortgages”, Blend Labs, CB Insights analysis
Renters insurance blending into the rental discovery process

**TODAY**

“Lemonade’s customer base is first time insurance buyers, and the majority of Lemonade’s users are under 35 years old”

- Partnering with apartments, platforms
- Partnering with large property developers

**TOMORROW?**

“According to Zillow, 35 million renters visit its rental sites and mobile apps each month to make the rental process easier and smoother.”

According to Zillow, 35 million renters visit its rental sites and mobile apps each month to make the rental process easier and smoother.”

Partnering with large property developers

- Lemonade
- Jetty
- STUYTOWN
- LeFrak
- Roomi
Unbundling vs. bundling

US-based startups (not exhaustive), for illustrative purposes only
Unbundling vs. bundling

The homeowners market is seeing strong pent-up demand due to demographic trends. Progressive’s TAM is expected to triple to $386B by 2022 partly due to the expansion of bundled home and auto.
Smart home: tech progress vs. insurer progress

Amazon's Alexa is coming for your microwave, wall clock and more

By Geoffrey A. Fowler The Washington Post  Sep 29, 2018  (0)

"So far, after a rush of trials in 2014 and 2015, that hasn't happened. Insurers haven't really moved beyond testing connected devices in exchange for a discount on premiums."

Smart locks raise property insurer concerns over hacking

Technology delivers convenience but prompts security doubts

Why insurance firms are stalling on IoT

JUNE 11, 2018 BY STACEY HIGGINBOTHAM

“So far, after a rush of trials in 2014 and 2015, that hasn't happened. Insurers haven't really moved beyond testing connected devices in exchange for a discount on premiums.”

roost = 16+ insurance customers
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Estimated market sizes based on premiums written
Guidewire: 10 years to $100M+ in revenue, 18 years to $650M+

Guidewire took 10 years to reach $100M in revenues. In FY 2018, Guidewire expects to do $661M in revenues as it undergoes a shift to the cloud.

Source: Guidewire, CB Insights analysis
If InsurTech follows prior FinTech trends, look out for challengers to become partners.
Startups see vertical software opportunities in insurance

Geospatial AI

Cape Analytics raises $17M to grow AI and aerial imagery platform for insurers
June 21, 2018 | VentureBeat

Virtual claims processing

Snapsheet ranks third on Crain’s Chicago Fast 50 list
June 25, 2018 | Crain’s

Commercial data automation

Groundspeed Analytics raises $30M Series B
July 26, 2018 | Finmes

Commercial data augmentation

Allstate partners with Carpe Data to tackle insurance fraud
November 29, 2017 | Chicagoinno

Workers’ comp analytics

Aon partners with Clara Analytics on workers’ comp claims
October 26, 2017 | Digital Insurance
“We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten.”

Bill Gates
The Road Ahead, 1995
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