

Insurtech

GLOBAL OUTLOOK



NTT DATA
Trusted Global Innovator



Insurtechs, keys for understanding how they are challenging and complementing the insurance sector.



Naoyuki Mori

Senior Vice President

Head of First Financial Sector NTT Data

Our fourth edition of the Insurtech Global Outlook represents a significant change in the way we understand the transformation of the insurance industry, in terms of insurtechs, as well as TechGiants and other actors that are breaking into the sector.

This year, we have expanded the approach, including new aspects such as analysis by regions and emerging markets, a greater attention to insurtech but also in investors, a special focus on Outliers, liquid ecosystems (a framework that allows us to explain our vision on how people and organizations are understanding a new way of connecting and interacting with the different actors in their environment, which also includes insurers and where there are risks and opportunities), an in-depth analysis of how the commitment to invest in insurance-related startups is causing the fragmentation of the value chain, and with a special chapter regarding the prediction of successful startups within the insurance field.

To provide this new insight and deep data analysis, we leveraged inttrend, an AI & data-driven market intelligence platform (which has been developed by everis and NTT DATA) that helps corporates to make better growth strategies and business development decisions.

inttrend gathers and processes the most relevant public and private data-sources to offer a comprehensive view of innovation and business ecosystems in (near) real-time. We have harnessed the capabilities of this tool to perform an in-depth analysis of around 1000 insurtechs to draw a series of valuable conclusions to better understand trends and the main changes that occur in the field of the insurance sector and how insurtechs cover a fundamental role in it. Finally, this year we have also evolved the Insurtech Global Outlook website, where will be available new features and content. This updated version will complement our vision and allow users to search, find and analyze information from their own point of view.



Bruno Abril

Partner

Global Head of Insurance everis

Insurtech Global Outlook 2020 provides an in-depth analysis of the innovation within the insurance industry. Considering incumbents, insurtechs and TechGiants as the main actors, but also giving importance to other features such as investors, governments or emerged and developed markets. It provides a clear but detailed framework on trends, challenges and opportunities in the current industry revolution.

The reports provides a detailed investigation on almost 1000 insurtechs entities and more than 2000 deals from 76 insurers investment arms, detailing investments and partnerships, new projects and alliances, as well as the emergence of exponential technologies in the business models. We use this in-depth knowledge to explain our vision on how people and companies are understanding this new way of interaction within the different industry actors. This year's edition goes a step further, not only highlighting key findings but also adding a new key variables to provide a broader understanding on the industry disruption: the impact of the outliers and the non-outliers, predicting successful startups far from total funding amount, or the importance of ecosystems and the fragmentation of the value chain within the insurance field.

As in previous editions, NTT DATA and everis asked leading insurers to participate in the InsurTech survey. In this years edition, 44 leading insurance companies in 12 different countries across Europe, Asia, North and South America. The outcome of these surveys provide in-depth insights on the key domains of the insurance industry disruption, enabling the reader to leverage lessons learned and define actions to adress this risks and take advantage of the opportunities mentioned.

This publication of the **Insurtech Global Outlook** was created based on inttrend, an Artificial Intelligence and data-driven platform developed by everis and NTT DATA. A regularly updated edition as well as an interactive version of the report is available at URL.

We would like to thank all the participants and contributors that made it possible to create this InsurTech global outlook. We are proud to share this valuable industry insights, confirming NTT DATA as a Trusted Global Innovator.

Insurtech Global Outlook 2020 at a glance.

\$6.3B



Insurtech has been attracting significant amounts of investment since 2018, showing the industry's ability to capture investors' interest. In 2019, this funding reached \$6.3B, resulting in a 2017-2019 CAGR of 58%.

56%



In 2019, the investment of insurers in startups related to Insurance, Financial Services and Healthcare was 56%, while in the 2010-2019 period it was 31%.

-15%



Less deals in 2019 compared to 2018, going from 316 to 268, respectively. There is more investment concentration and fewer deals.

55%



Of the investment made in startups in the period 2015-2019, according to the area of the value chain on which they focus, was directed to Marketing and Distribution.

67%



The top 6% (in terms of total amount of funding) of startups in the sample concentrates 67% of the total funding globally, considering the period from 2010 to 2019.

\$3.6B



Insurtechs from Asia raised a total amount of \$3.6B between 2010 and 2019, which represents 20% of all the investment made in this period.

4



Ecosystems. 618 startups in our sample belong to these four ecosystems: Healthy Living, Home Safe Home, Smart Mobility and Business Shield. The other 279 startups belong to the Distribution or Technology enablers.

90%



In 2019, the 90% of total insurtech investments of the year went to startups based on Cloud, Mobile and Applications, AI and Data.



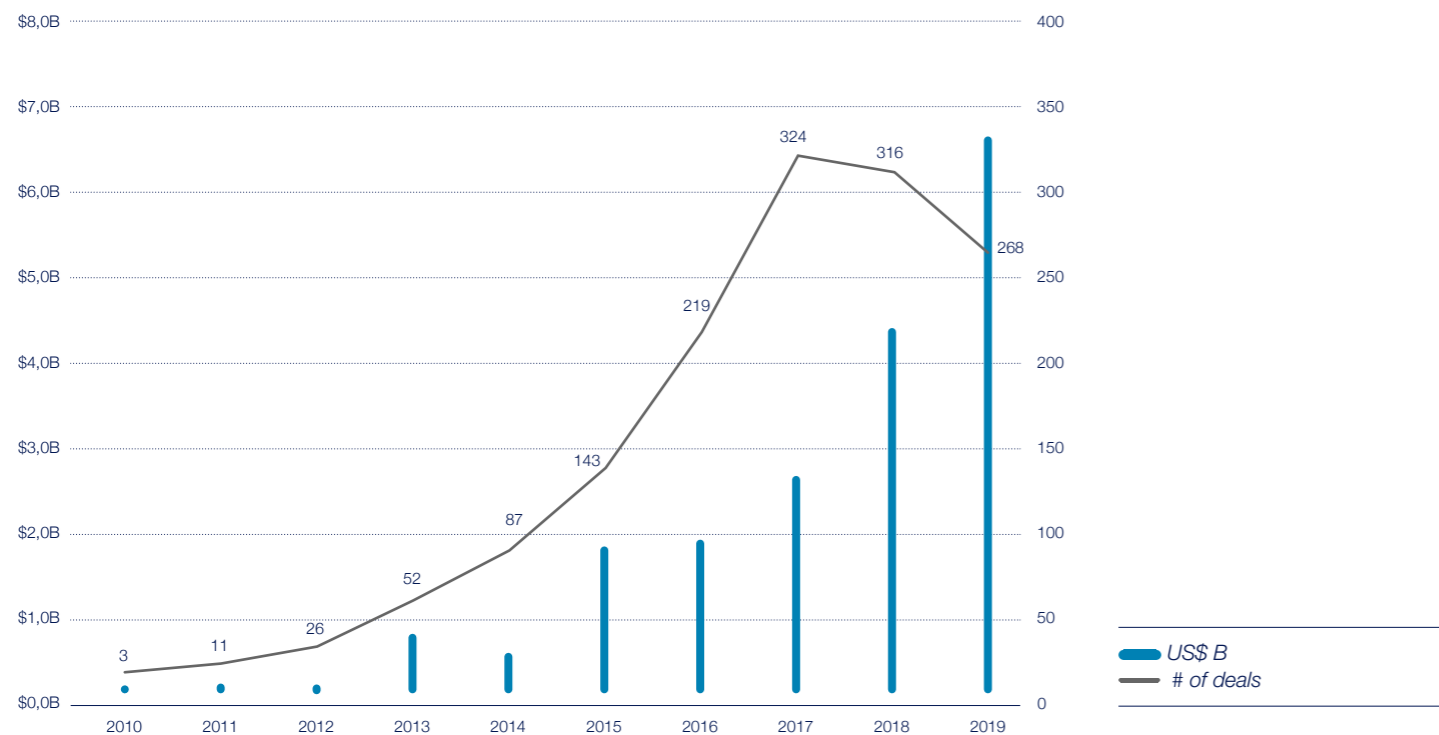
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Global Insurtech Trends.

Insurtech investment evolution.

Insurtech has been attracting significant amounts of investment since 2018, showing the industry's ability to capture investors' interest. In 2019, this funding reached \$6.3B resulting in a 2017-2019 CAGR of 58%.

Insurtech Investments 2010-2019 (*)



Key figures under 2020

everis scope (*):

- 894 startups
- 1,450 deals
- Total funds \$18.2B

2013-2017:

- Top 3 deals 28.8% of total funds
- Av. deal size \$9.2M

2017-2019:

- Top 3 deals 16.6% of total funds
- Av. deal size 2017-2019: \$14.3M

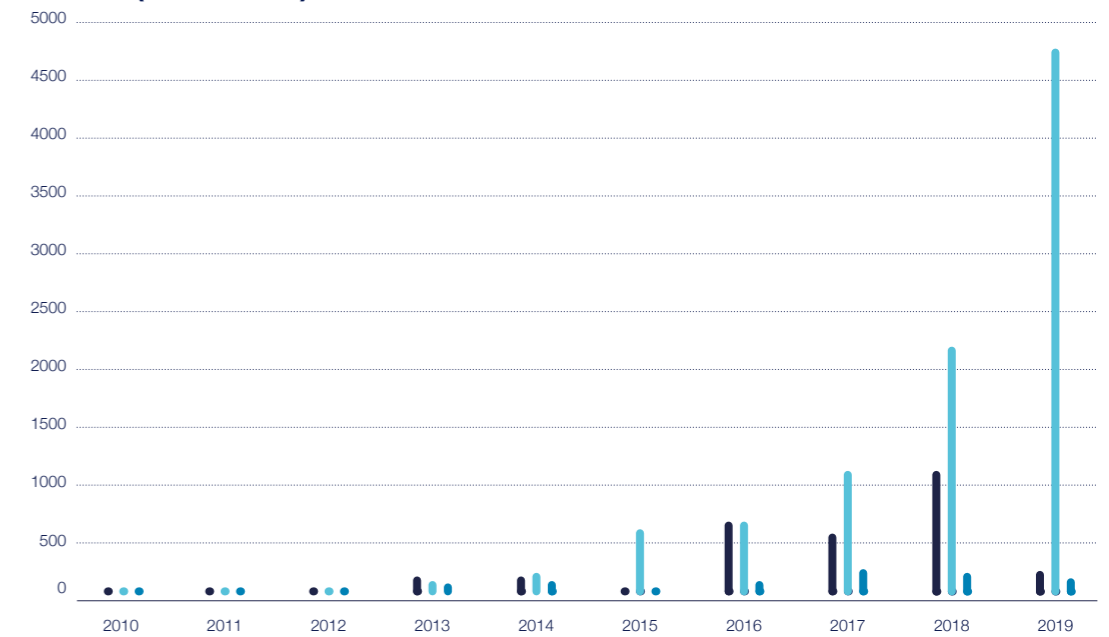
everis scope includes startups categorized as Insurtech/ Insurance having received funds during the period 2010 to 4Q 2019.

*Total Funds information up to 4Q 2019 based on disclosed deals; Not considered Huatai Insurance Group deal in 2019 by \$2.1B.

Funds by Series Evolution.

Late stage funding has been exponentially increasing. Evidences show more mature companies attracting large investments to scale and gain market share.

Insurtech investments detailed composition unding by stage in USD million (2010=2019)*



In 2019, Root Insurance raised \$350M in Series E, led by DST Global and Coatue Management. The company's total funding up to date is \$527.5M.

Late in 2019, Clover Health raised \$500M. Existing investor Greenoaks Capital led the Series E. The company is backed by Alphabet's venture arm GV, Sequoia Capital, Floodgate, Bracket Capital, First Round Capital, among others. The company's total funding is \$925M.

Bright Health raised \$635M in 2019 in an oversubscribed series D funding round led by NEA which included investments from the existing investors. The company's up to date total funding is \$1.075M. The startup has expanded its health plan products including Medicare Advantage to several new markets for 2020.

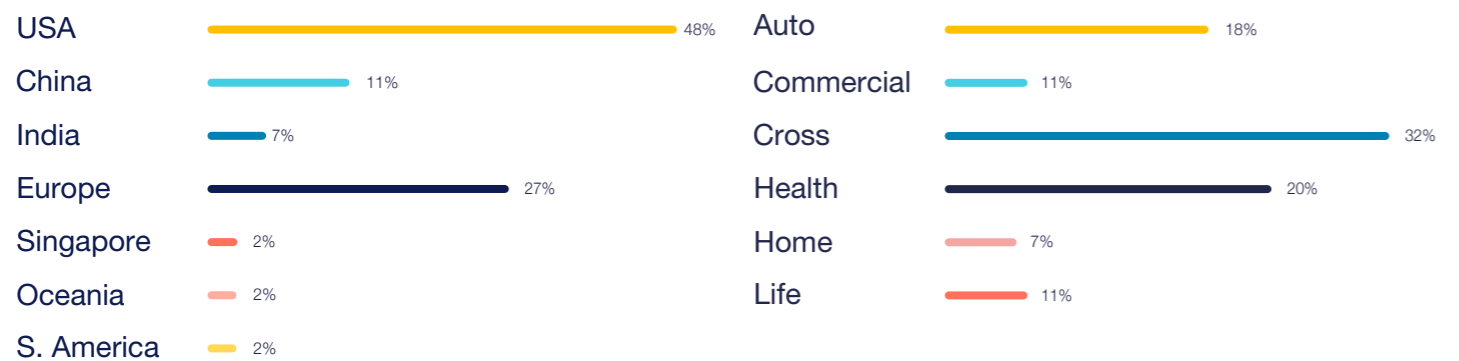
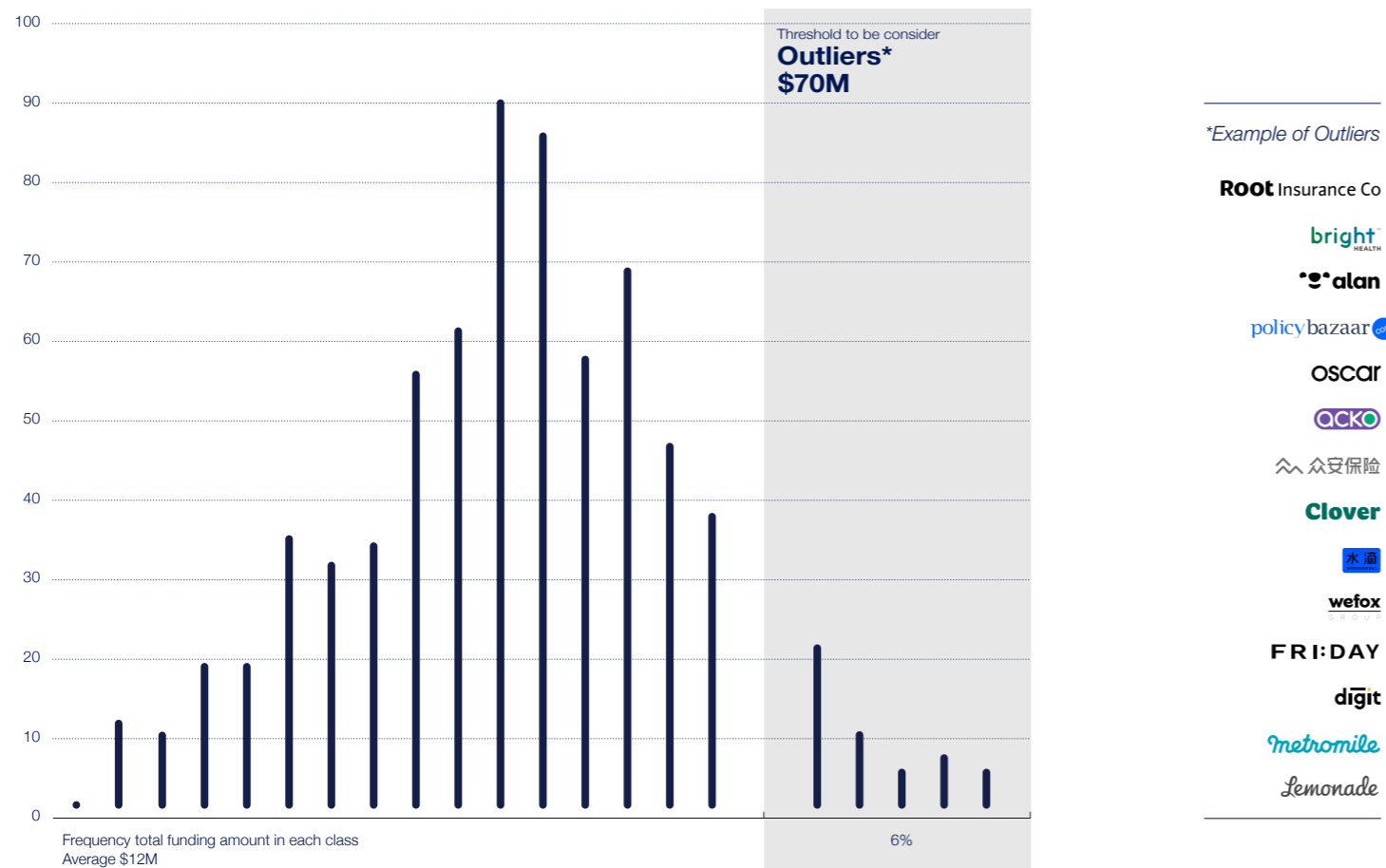
Insurtech investments detailed composition by funding series (2010-2019)*



Outliers.

The top 6% (in terms of total amount of funding) of startups in the sample concentrates 67% of the total funding globally, considering the period from 2010 to 2019. These f are mainly located in the USA, and the majority operates in the Cross line of business.

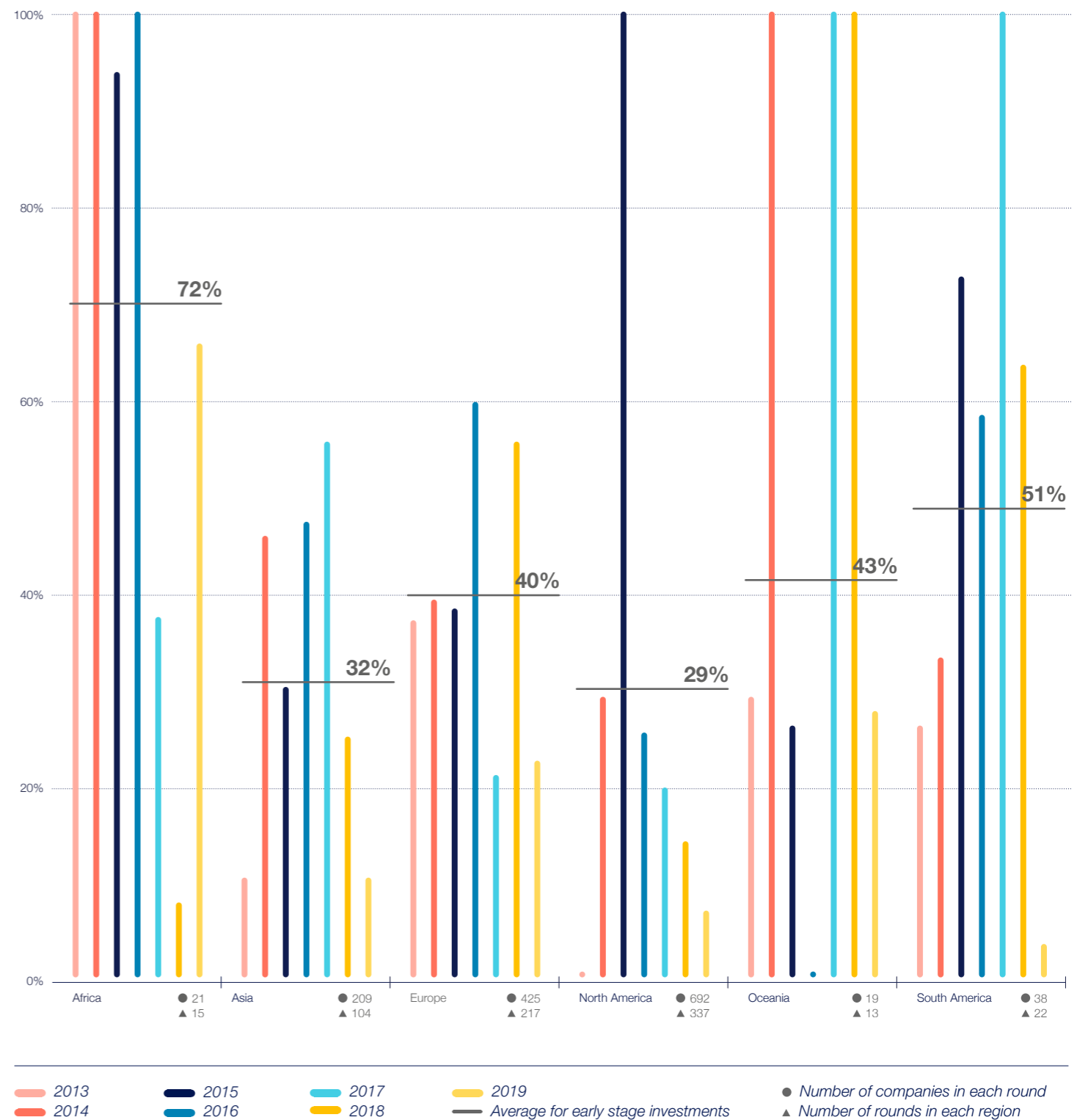
Outliers - Identification



Regional breakdown.

Early Stage rounds (Pre Seed, Seed and Series A) have on average lower levels in mature large economies. For instance, USA and China are relevant influencers of their respective regions.

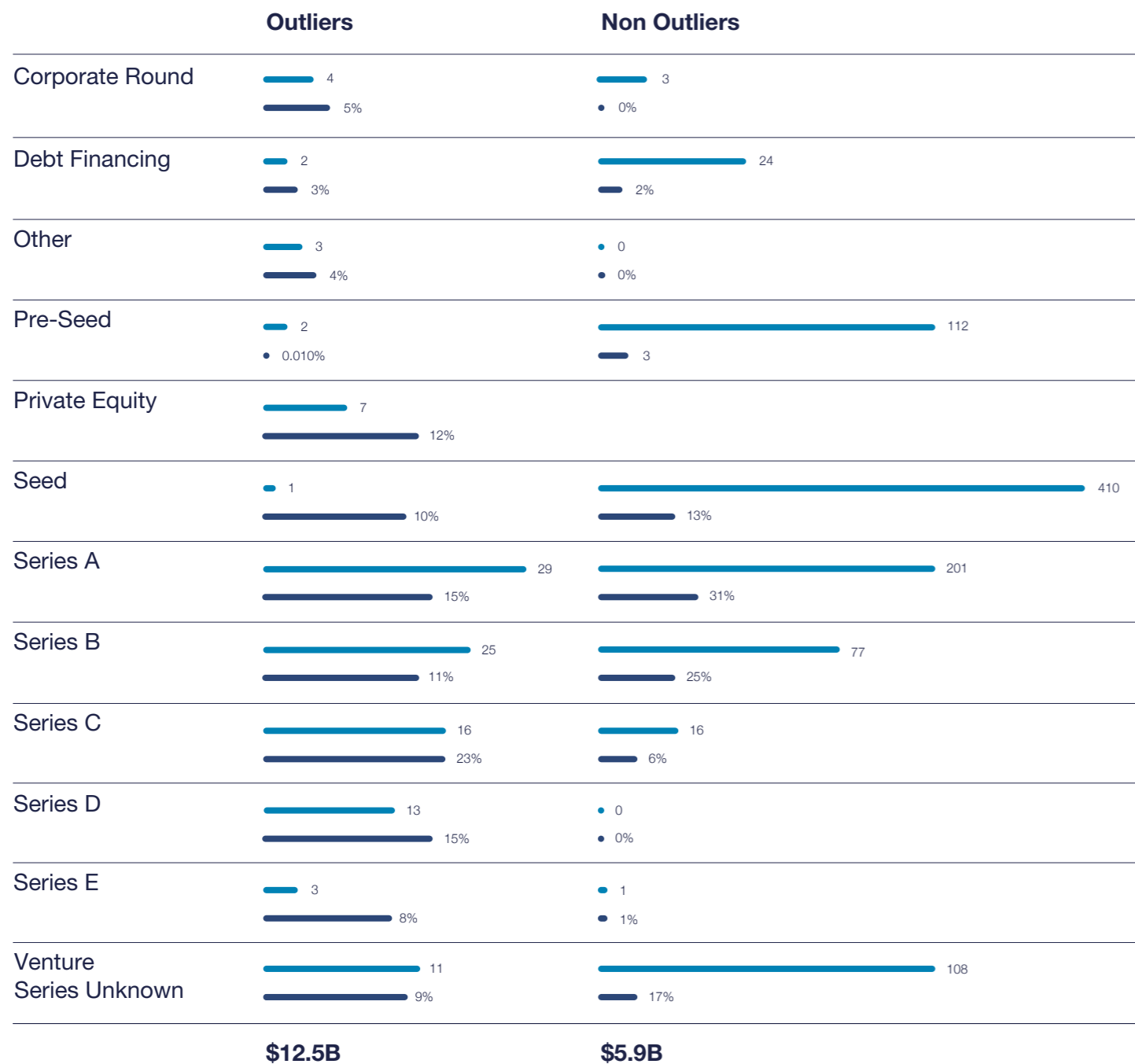
Percentage of funds to early stage ventures



Overview of investment 2010-2019.

From 2010 to 2019, insurtechs have received several different types of rounds. The Non Outliers received mostly Series A and Seed. Outliers are well distributed in Series A, B and C.

Outliers and Non Outliers detailed fund series

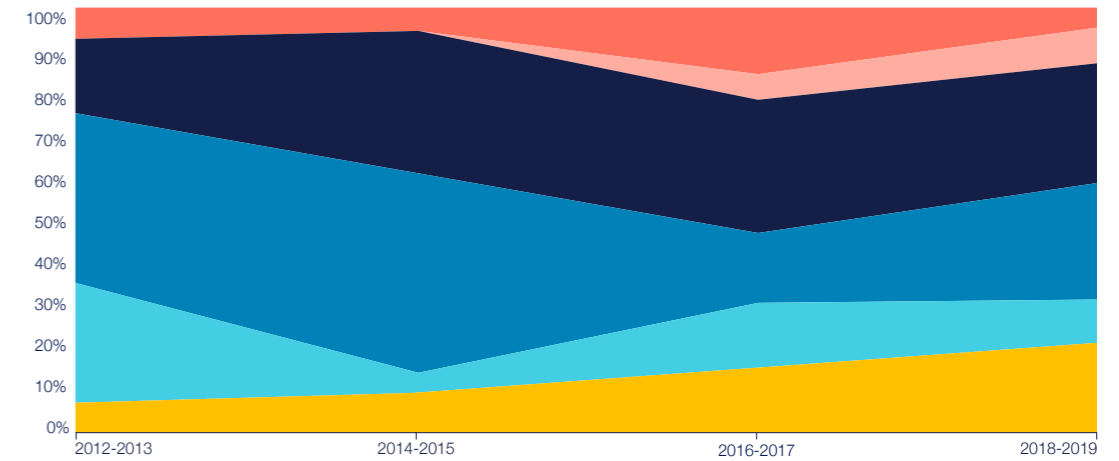


● Number of companies per round type
● Percentage on total funds per round type

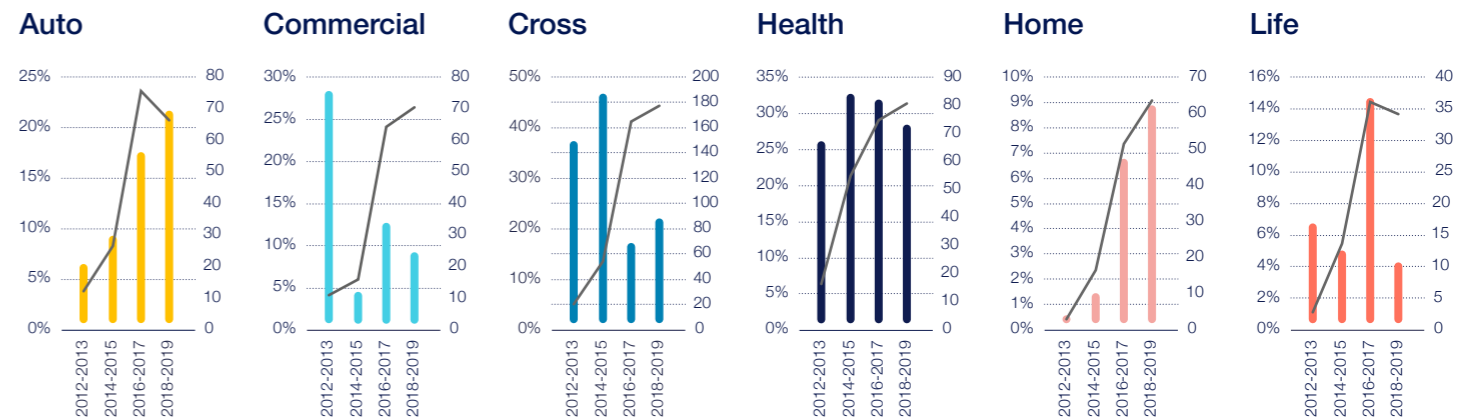
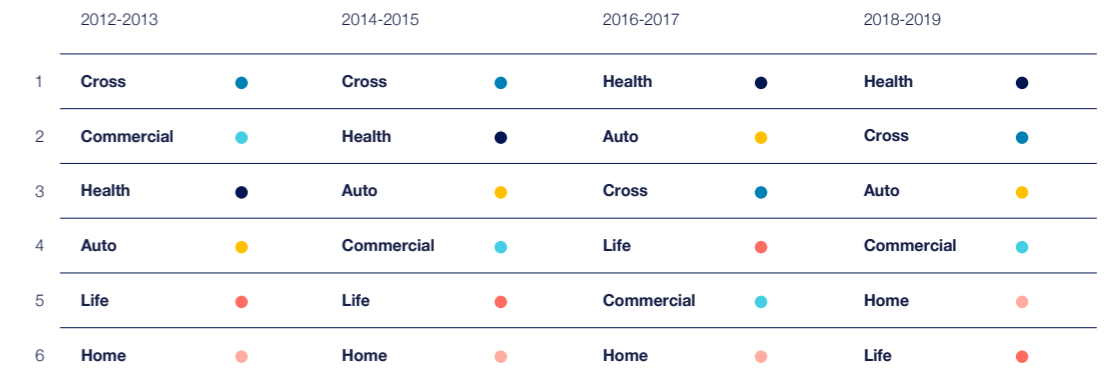
Insurtech investment by line of business.

Auto and Home have a clear trend of increase the proportion direct to Insurtechs, signalling a possible investor preference in this line of business or new investors entering.

Non Outliers



Insurtech proportional investments by line of business 2012-2019



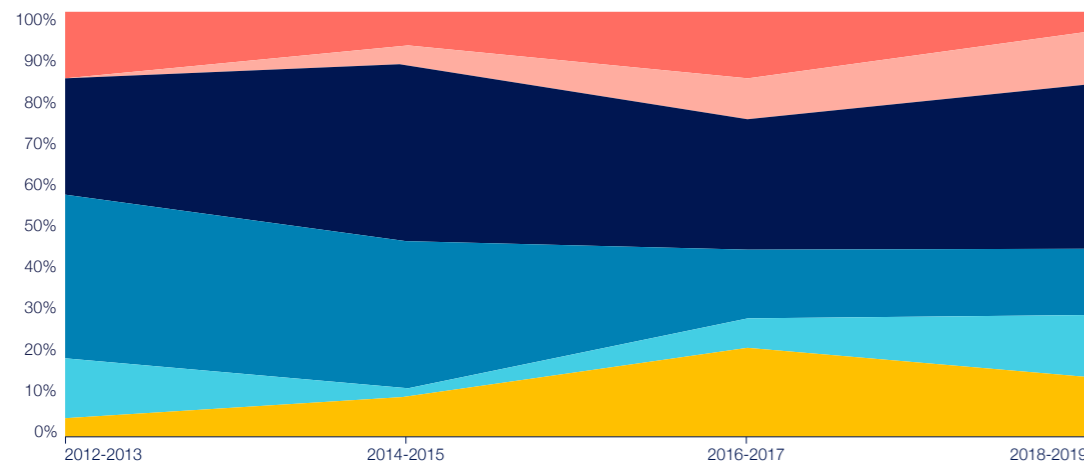
■ Percentage of Money raised in the period per line of business
■ Number of deals

The mapping shows S curves in the number of deals in every line of business for Non Outliers enforcing the maturity of the industry.

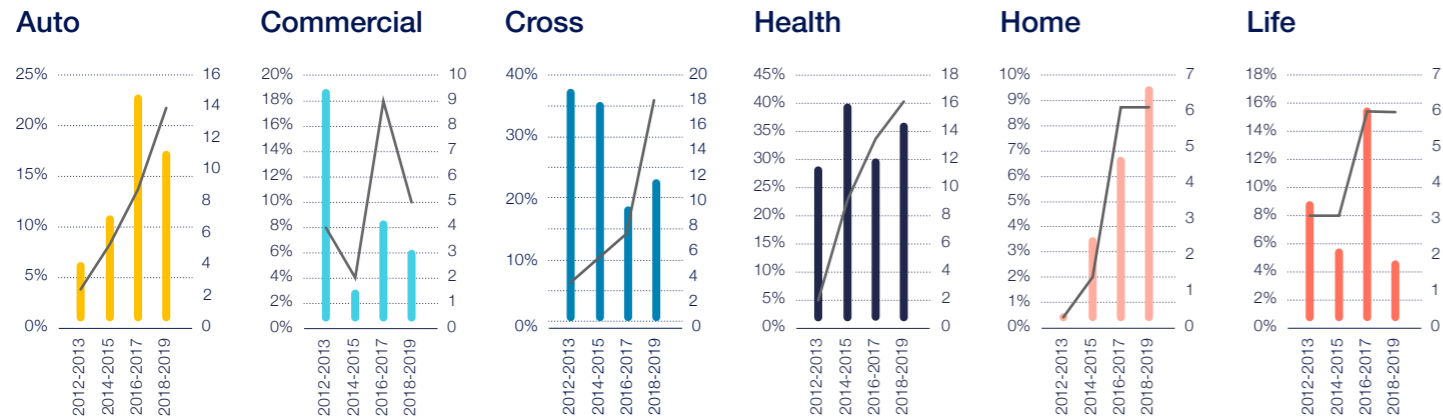
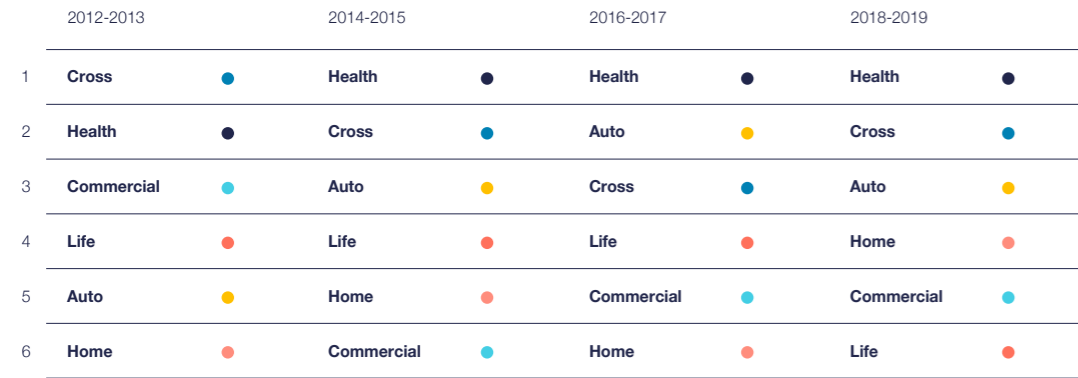
Insurtech investment by line of business.

Outliers have a high volatility in number of deals period by period, especially Commercial line of business. Home tends to increase in the percentage of total amount of funding, while Health is stable. Health and Auto are more consistent on both variables.

Outliers



Insurtech proportional investments by line of business 2012-2019



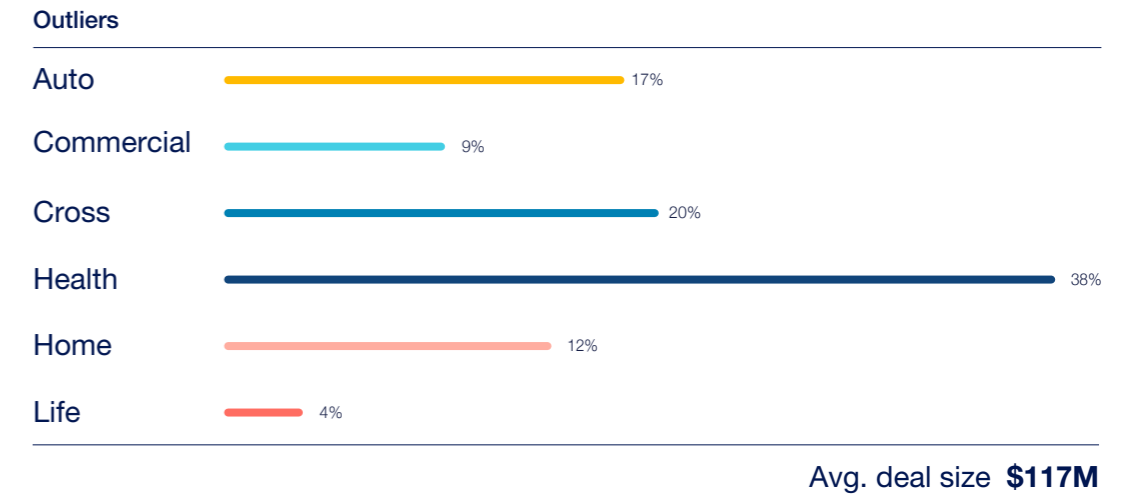
Percentage of Money raised in the period per line of business. Number of deals

The mapping shows S curves in the number of deals in every line of business for Non Outliers enforcing the maturity of the industry.

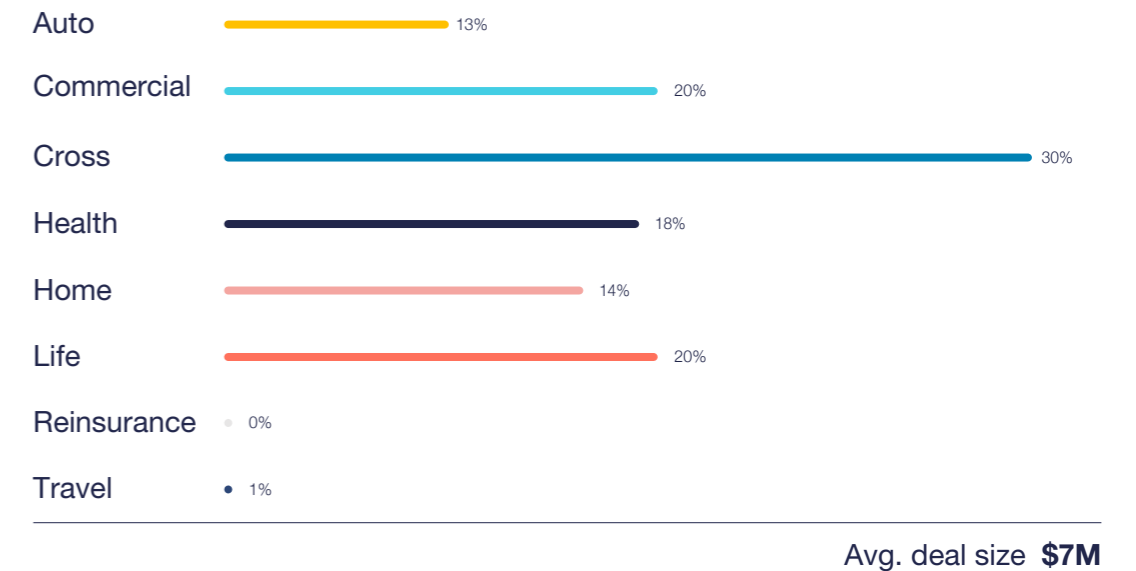
Overview of investment 2019.

In 2019, most investments for Non Outliers focus on the Cross line of business. Large fundings raised by companies such as Clover Health and Bright Health explain why the total amount received by Outliers was so considerably high this year.

Insurtech investment in 2019 by line of business*



Non Outliers



In 2018 and 2019, deals related to Cambridge Mobile by \$500.0M (2018), and Oscar by \$165.0M (2018) have been reclassified from Venture series unknown to Late series. In 2019, Huatai Insurance Group by \$2,090M (2019) is not included in the analysis. In 2013, deals related to Hamilton Insurance Group by \$526.56M and to Global Risk Partners by \$88.5M are not included since are not purely Insurtech deals.

*Total Funds information up to Q42019 based on disclosed deals; Not considered Huatai Insurance Group deal in 2019 by \$2.1B.

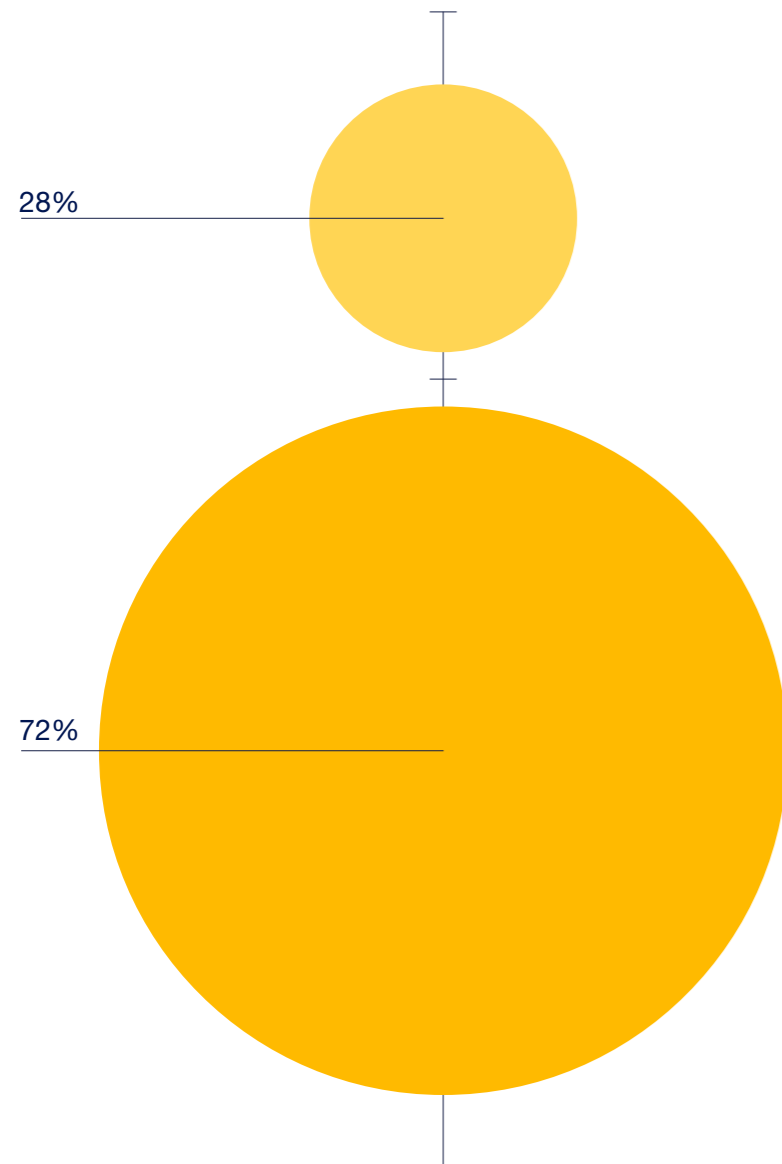
Outliers, representing 14% of the total number of companies, received approximately 70% of the funds in 2019.

Total funds **\$6.3B**
Total deals **266**

Funds flowing to new startups in 2019.

In 2019, most of the funds were direct to American companies that offer Medicare plans. New startups received 28% of funds, in which 80% operate in the Commercial line of business.

Funds Raised in 2019



● Non Outliers
● Outliers

2019 Top 2 deals in new startups



AI-powered Cyber Insurance for small to medium-sized enterprises. It is a cyber risk and Insurance observability platform for mid-to-large enterprises that aligns insurable threats to risk exposures by using deep learning techniques that proactively mitigate losses in the aftermath of cyberattacks.

Foundation date 2019
Last funding date 2019
Lead investor ManchesterStory Group
Client B2B
Main Technology Big Data & Backend
Business model Platform Ecosystem Marketplace
Total funds raised \$3.3M / Seed



Dynamically priced auto insurance: the better you drive, the less you pay. Instead of rate being set by who their clients are - their age, zip code and marital status -, their rate is set by how they drive. This means that for the first time, there is a real financial incentive for people to make smart driving decisions.

Foundation date 2019
Last funding date 2019
Lead investor Robert Smithson
Client B2B
Main Technology Internet of Things
Business model Phygital and smart things
Total funds raised \$0.5M / Pre Seed

2019 Top 2 deals in Outliers



Clover is an Insurance company in the USA focused on Medicare – the American Federal Insurance Program for seniors. Customers can enhance their public health plan by adding Clover coverage. Clover works with its network of health providers, that includes gyms, board doctors, pharmacies and in-home care nurses.

Foundation date 2013
Last funding date 2019
Lead investor Greenoaks Capital
Client B2B; B2C.
Value Chain Mkt & Distribution
Business model Platform Ecosystem Marketplace
Total funds raised \$925M / Series E



Bright Health operates in the USA by offering both Individual/Family plans and Medicare. It is a consumer-focused health insurance and technology company, with the aim of simplifying and digitizing the health insurance process.

Foundation date 2015
Last funding date 2019
Lead investor New Enterprise Associates
Client B2B; B2C.
Value Chain Mkt & Distribution
Business model Platform Ecosystem Marketplace
Total funds raised \$1.1B / Series D

● Auto
● Commercial

● Cross
● Health



● Home
● Life

New startups in 2019.

The 45% of startups with foundation date 2019 are from the USA, while the other 55% are from Europe, Africa and South America. The 63% are business models based on Platforms and Marketplaces.

Detail of new startups with date of foundation 2019 (*)




  **It provides secure down payment options and verifiable credit score.**

Platform Ecosystem / Marketplace

Client
B2C; \$0.1M / Seed

Lead investor
EIT Digital Accelerator






  **Affordable and inclusive healthcare for everyone.**

Platform Ecosystem / Marketplace

Client
B2B; B2C; \$0.05M / Seed

Lead investor
N/A



  **Automatic pay-per-day travel insurance app.**

On-demand

Client
B2B; Pre-seed; \$ N/A

Lead investor
N/A



  **Automated cyber resilience solution.**

Ainomics

Client
B2B; Pre-seed; \$ N/A

Lead investor
N/A



  **Mobile app offering financial planning, investment management and financial education.**

Platform Ecosystem / Marketplace

Client
B2B; Pre-seed; \$ N/A

Lead investor
UNIQ Ventures (Andorra)



  **A cyber risk and Insurance observability platform for mid-to-large enterprises that aligns insurable threats to risk exposures.**

Platform Ecosystem / Marketplace

Client
B2B

Lead investor
ManchesterStory Group

	<i>Business models</i>
7	<i>Platforms / Marketplace</i>
1	<i>On-demand</i>
1	<i>Ainomics</i>
1	<i>Phygital & smart things</i>
1	<i>Everything as a Service</i>
	<i>Headquarters</i>
5	<i>North America</i>
4	<i>Europe</i>
1	<i>Africa</i>
1	<i>South America</i>



  **It is a cyber risk and insurance observability platform.**

Platform Ecosystem / Marketplace

Client
B2B; \$3.3M / Seed

Lead investor
Manchester Story Group (USA)



  **It provides online weather insurance for businesses.**

Platform Ecosystem / Marketplace

Client
B2B; \$0.2M

Lead investor
IFB Innovationsstarter (Germany)



  **Automate medical billing.**

Everything as a Service

Client
B2B; \$0.2M

Lead investor
Y Combinator (USA)



  **It builds and provides business Insurance for small businesses and independent professionals.**

Ainomics

Client
B2B; \$0.1M

Lead investor
Y Combinator (USA)



  **Nadia is a personalized automated health app that provides medical attention and prescriptions.**

Platform Ecosystem / Marketplace

Client
B2B; B2C; \$0.1M / Seed

Lead investor
Meltwater Entrepreneurial School of Technology (Ghana)

Overview of investment 2019.

In 2019, Outliers attracted more types of funding rounds, including debt financing and corporate rounds, while Non Outliers received funding mostly from early stage rounds.

Outliers and Non Outliers detailed funding series

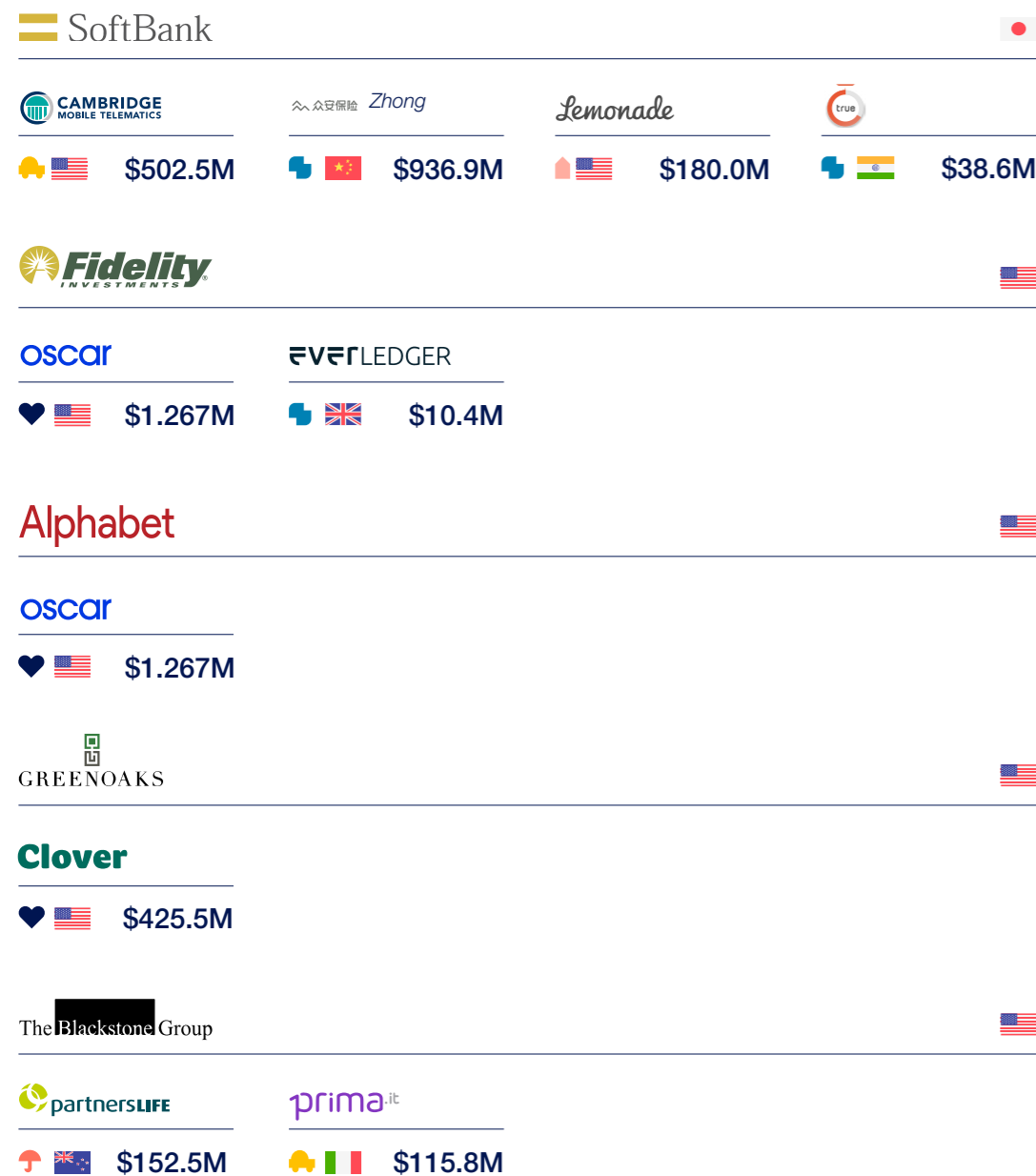


Investors analysis.

In 2019, investors from different geographical regions participated in funding top startups compared to the 2010-2018 period, most of them were mainly from the USA.

Investors analysis (2010-2019)*

2010-2018 Investors in top funded startups



In 2018 and 2019, deals related to Cambridge Mobile by \$500.0M (2018), and Oscar by \$165.0M (2018) have been reclassified from Venture series unknown to Late series. In 2019, Huatai Insurance Group by \$2,090M (2019) is not included in the analysis. In 2013, deals related to Hamilton Insurance Group by \$526.56M and to Global Risk Partners by \$88.5M are not included since are not purely Insurtech deals.
 *Total Funds information up to Q42019 based on disclosed deals; Not considered Huatai Insurance Group deal in 2019 by \$2.1B.

- 🚗 Auto
- 🏠 Home
- 🏢 Commercial
- 🌐 Cross
- ♥️ Health
- 🇺🇸 Life

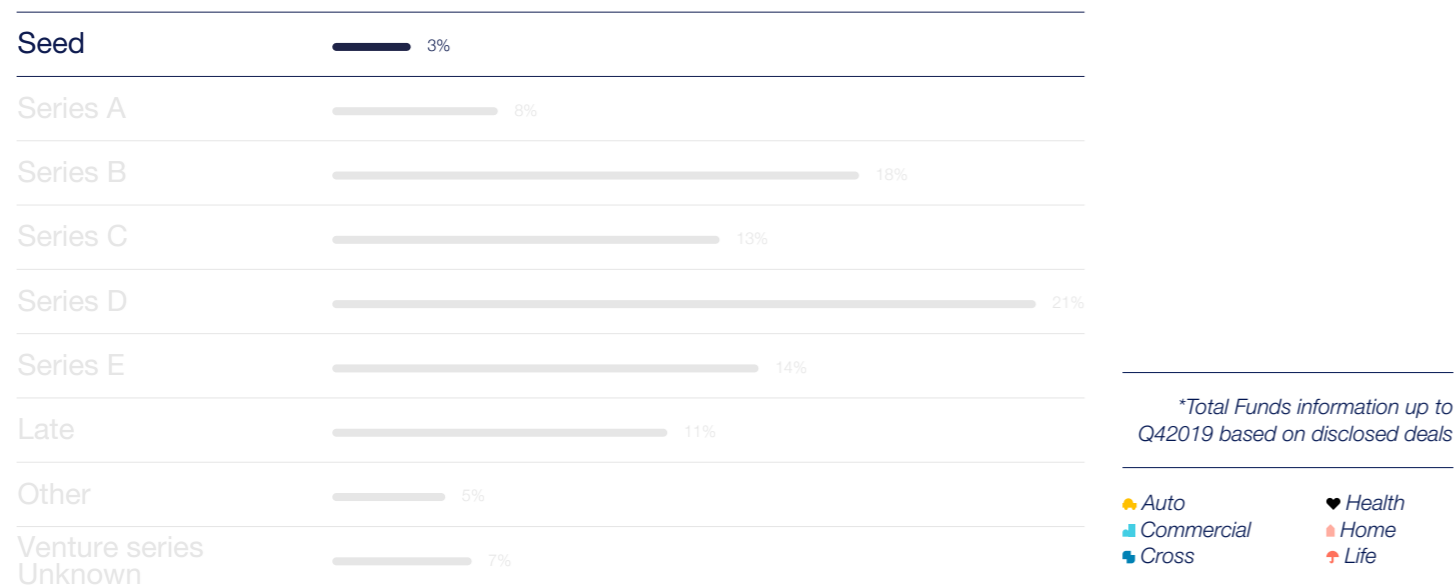
2019 investors in top funded startups



Details of investment by Series 2019.

In 2019, top 3 startups capturing Seed funding were from China, the USA and Israel, operating in Health, Home and Commercial lines of business respectively.

Insurtech investments by funding series 2019 * (1/7) Representative deals for Seed



Seed: \$0.2B; 3% of 2019 total funds (6,3B) >

It is a health insurance technology platform. The company is positioned in the field of health insurance technology, mainly serving insurance companies and Internet platforms, providing products customization services, risk control, claims services, and system services among others.

<i>Foundation Date</i> 2018	<i>Total funds raised</i> \$13.9M; Series Angel	<i>Led by</i> Sequoia Capital (China)
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Pricing and coverage terms for premium insurance market to make it simple. It uses data, sophisticated pricing, cutting edge technology, and insurance expertise to bring something different to the market.

<i>Foundation Date</i> 2017	<i>Total funds raised</i> \$7.5M; Series Angel	<i>Led by</i> Gradient Ventures (USA)
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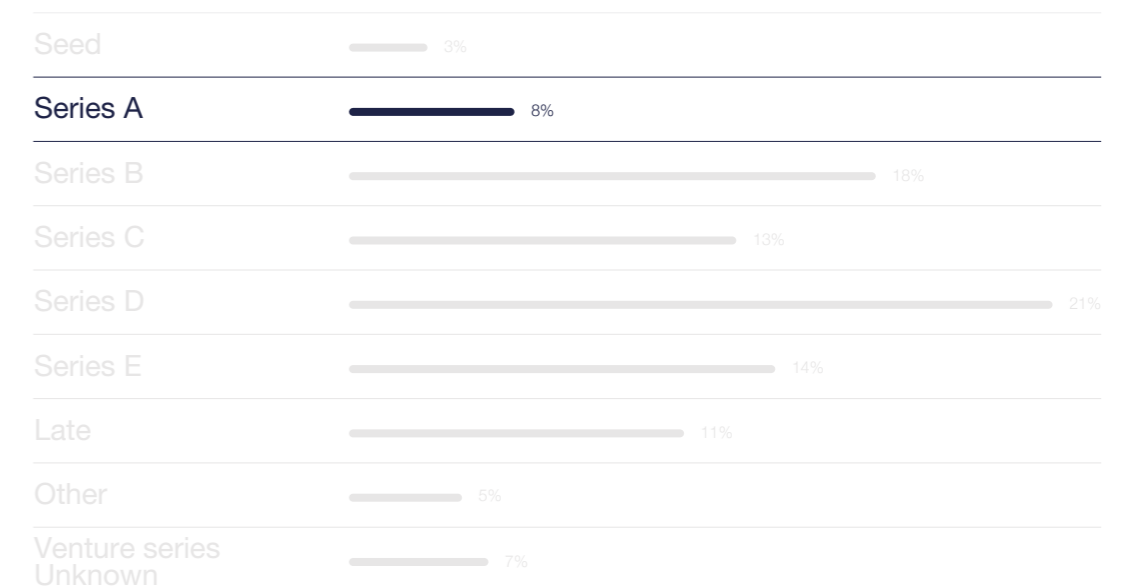
It offers cyber analytics to empower the insurance industry in assessing cyber risk. Its proprietary information provides meaningful, data-driven insights that allow for better risk differentiation and superior aggregation management.

<i>Foundation Date</i> 2016	<i>Total funds raised</i> \$6.5M; Series Angel	<i>Led by</i> Elron Electronic Industries, RDC Rafael Development Corporation (Israel)
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Details of investment by Series 2019.

Top deals of 2019 in Series A involved companies founded between 2015 and 2017, playing in the Health and Cross lines of business in Europe, Hong Kong and the USA.

Insurtech investments by funding series 2019 * (2/7) Representative deals for Series A



Series A: \$0.5M; 8% of 2019 total funds

It is a mobile health data & payment distribution platform, that is linked into several digital payment networks across various countries, permanently connects patients, premium payers, insurers and healthcare providers in a standardized way and can be introduced anywhere in the world.

<i>Foundation Date</i> 2015	<i>Total funds raised</i> \$44.8M; Series A	<i>Led by</i> ELMA Philanthropies (USA)
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It is a technology company that aims to be the next-generation insurance industry leader in Asia. It is the first digital insurer candidate in Hong Kong with a fully digitised insurance process end-to-end.

<i>Foundation Date</i> 2016	<i>Total funds raised</i> \$30.0M; Series A	<i>Led by</i> Bitrock Capital (HK)
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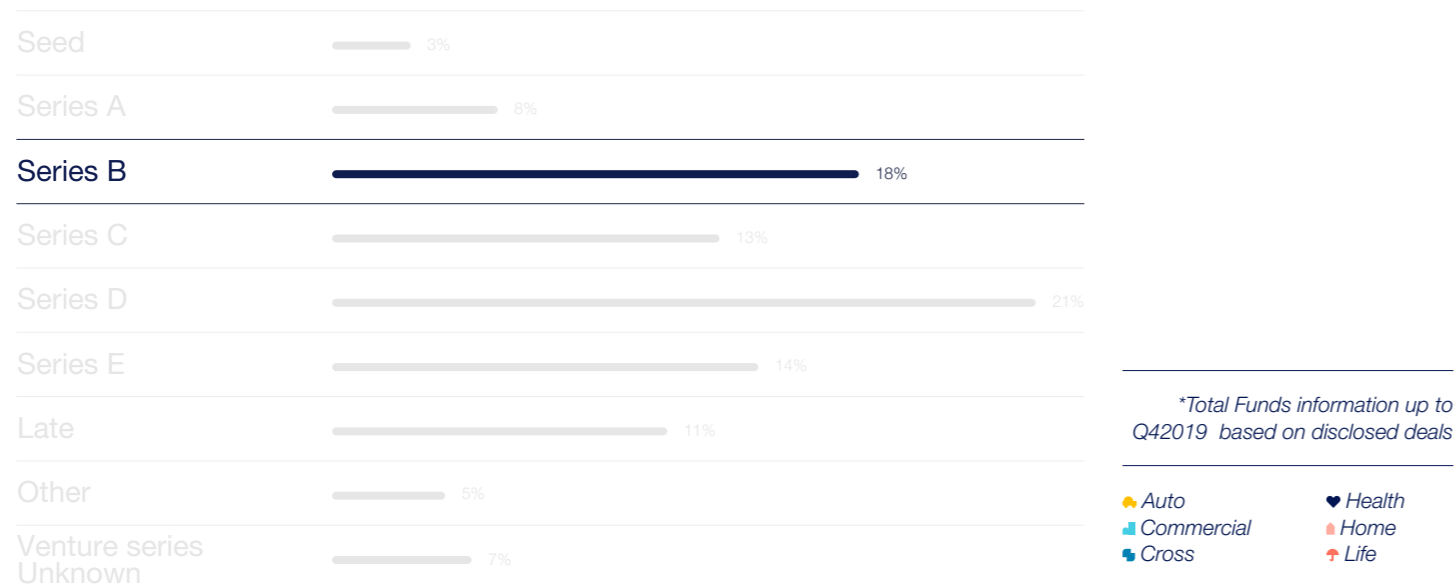
Part of Lockon, it is the largest independent and unbiased insurance broker.

<i>Foundation Date</i> 2015	<i>Total funds raised</i> \$28M; Series Angel	<i>Led by</i> Guggenheim Partners (USA)
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Details of investment by Series 2017-2019.

In 2019, Series B attracted the biggest amount of funds where the top 3 deals involved Wefox Group from Europe and Vouch Insurance and States Title from the USA.

Insurtech investments by funding series 2019 *(3/7) Representative deals for Series B



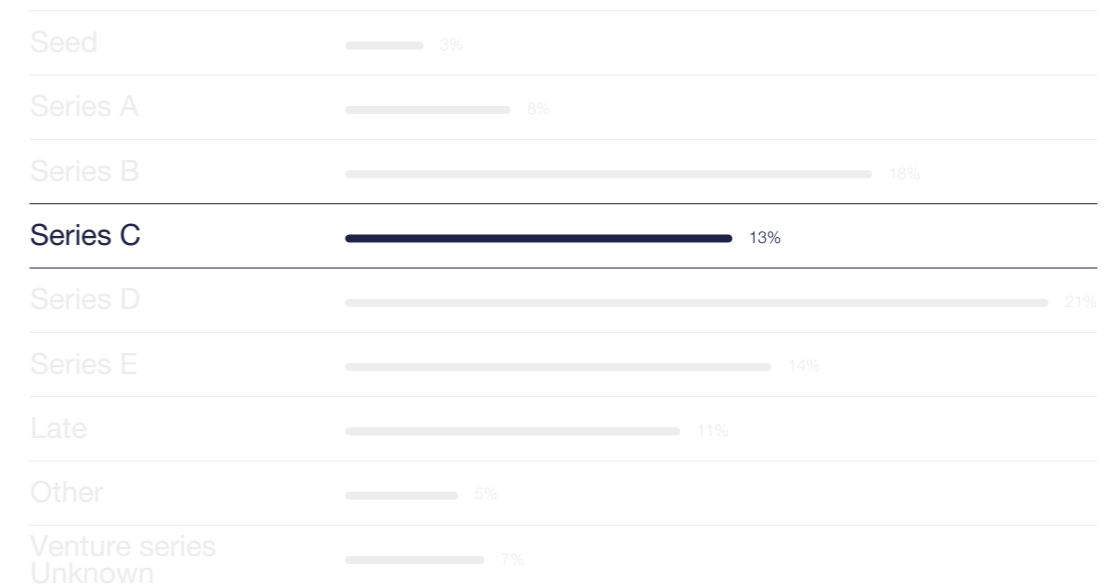
Series B: \$1.1B; 18% of 2019 total funds

	It is an organization that connects insurance providers, distributors, and customers via technology.
Foundation Date	Total funds raised
2016	\$235M; Series B
Led by	Mubadala Ventures (United Arab Emirates) and OMERS Ventures (USA)
	Vouch Insurance is an insurance company designed for startups.
Foundation Date	Total funds raised
2016	\$90M; Series B
Led by	Combinator Continuity Fund (USA)
	Insurtech platform that uses machine intelligence to remove friction from residential real estate transactions.
Foundation Date	Total funds raised
2016	\$83.4M; Series B
Led by	Lennar Corporation (USA)

Details of investment by Series 2017-2019.

In 2019, top funded startups in Series C operated in the Commercial line of business. In this ranking, there are 2 companies from China.

Insurtech investments by funding series 2019 *(4/7) Representative deals for Series C



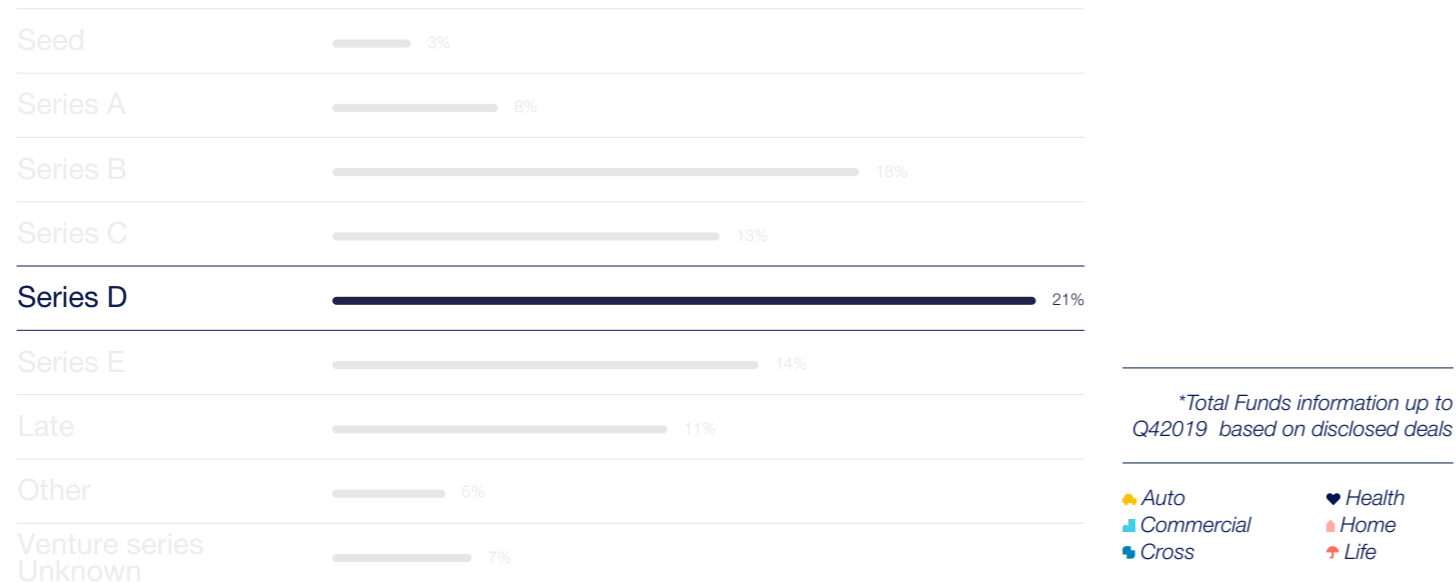
Series C: \$0.8B; 13% of 2019 total funds

	Next Insurance is an online insurance company for entrepreneurs small businesses.	
Foundation Date	Total funds raised	Led by
2016	\$250M; Series C	Munich Re Ventures (Germany)
	An insurance platform that plans to solve the problem of high medical fees faced by most patients, especially those with a critical illness.	
Foundation Date	Total funds raised	Main investors
2016	\$144.5M; Series C	Boyu Capital, China Capital Investment Group, Gaorong Capital, Tencent Holdings (China)
	It is an online portal that offers logistics trading and services on a global scale.	
Foundation Date	Total funds raised	Led by
2015	\$70M; Series C	Coatue Management, Sequoia Capital China (China)

Details of investment by Series 2017-2019.

Nearly 77% of 2019 Series D total funding was concentrated in the top 3 most funded companies of this Series.

Insurtech investments by funding series 2019 *(5/7) Representative deals for Series D



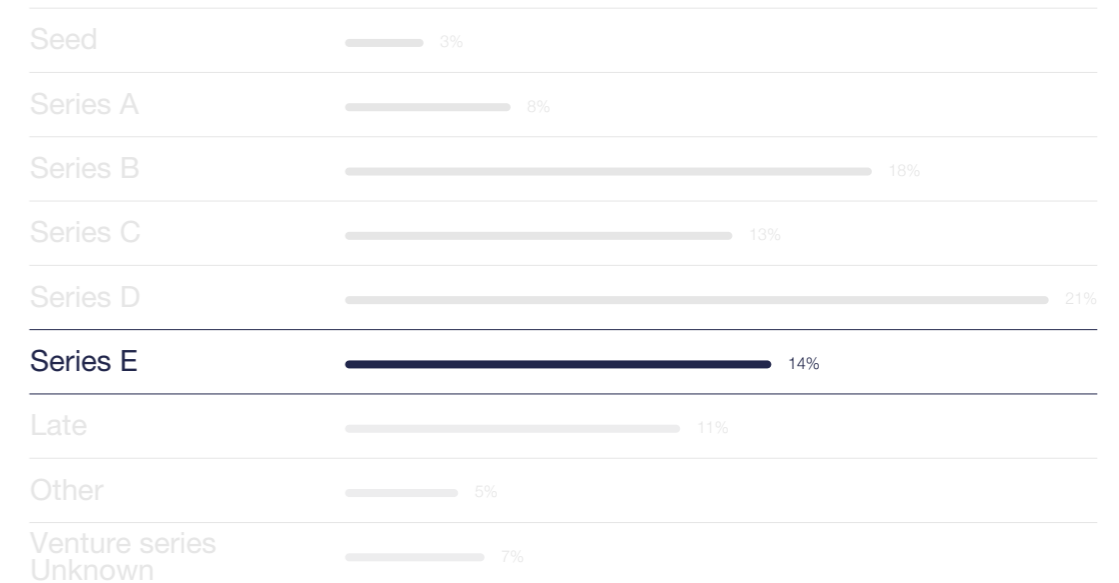
Series D: \$1.3B; 21% of 2019 total funds

	It offers health insurance that connects users to various physicians and healthcare services. Provides its health insurance plans directly to consumers via broker partners, and through public and private health insurance exchanges.
<i>Foundation Date</i> 2015	<i>Total funds raised</i> \$635M; Series D
<i>Led by</i> NEA (USA)	
	It is a full stack insurance company powered by AI and behavioural economics, and driven by social good.
<i>Foundation Date</i> 2015	<i>Total funds raised</i> \$300M; Series D
<i>Led by</i> SoftBank Group (Japan)	
	It offers home insurance by taking a tech-driven approach.
<i>Foundation Date</i> 2015	<i>Total funds raised</i> \$100M; Series D
<i>Led by</i> Bond (USA)	

Details of investment by Series 2017-2019.

Almost 95% of 2019 total funding in Series E was concentrated in Clover and Root Insurance. These American startups operate in Health and Auto verticals and have an interesting market traction.

Insurtech investments by funding series 2019 *(6/7) Representative deals for Series E



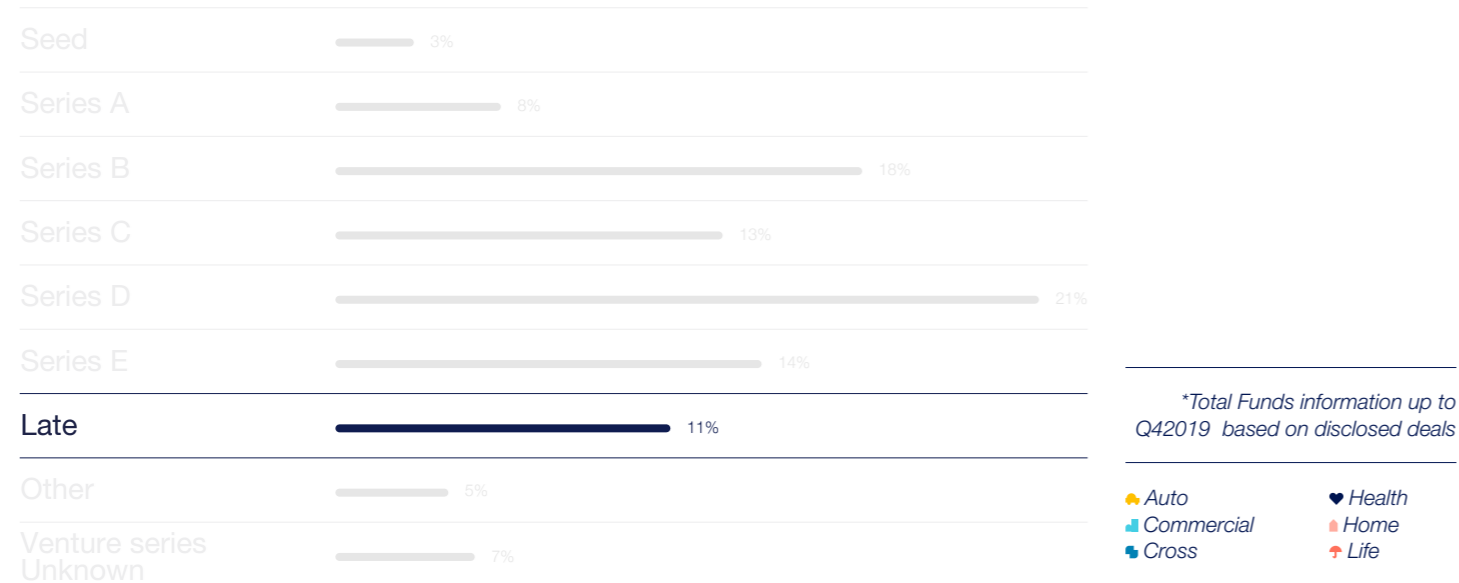
Series E: \$0.9B; 14% of 2019 total funds

	It is a Medicare Advantage plan giving members more coverage for less cost, including dental, vision, hearing & more
<i>Foundation Date</i> 2013	<i>Total funds raised</i> \$500M; Series E
<i>Led by</i> Greenoaks Capital (USA)	
	It is an insurance carrier that uses an app to rate drivers based on how they drive.
<i>Foundation Date</i> 2015	<i>Total funds raised</i> \$350M; Series E
<i>Led by</i> Coatue Management, DST Global (USA)	
	Snapshot is an auto insurance marketplace for both motorists/drivers and auto insurance carriers.
<i>Foundation Date</i> 2010	<i>Total funds raised</i> \$29M; Series E
<i>Led by</i> Tola Capital (USA)	

Details of investment by Series 2017-2019.

In 2019, the main deals made in “Late Series” were the acquisitions of the Israeli company Phoenix by Centerbridge Partner (USA) and Gallatin Point Capital (UK); and the deal led by the Chinese Tencent Holdings with the Indian company Policy Bazaar.

Insurtech investments by funding series 2019 *(7/7) Representative deals for Late Series



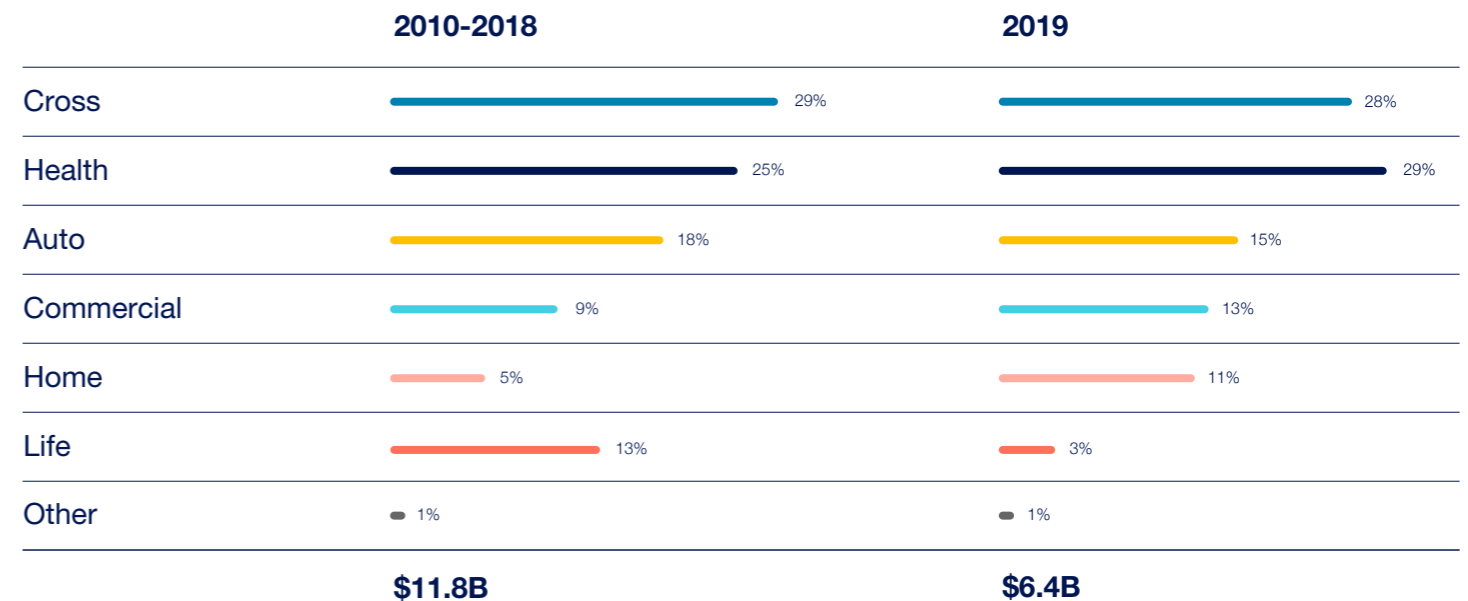
Late: \$0.7B; 11% of 2019 total funds (6,3B) >

		One of Israel's leading Insurance companies. <i>Foundation Date</i> 1949 <i>Total funds raised</i> \$ 446M; IPO <i>Acquisition of 32.5% by</i> Centerbridge Partners and Gallatin Point Capital (USA & UK)
		It designs an online life insurance and general insurance comparison portal that analyzes financial products. <i>Foundation Date</i> 2008 <i>Total funds raised</i> \$150.0M; Series G <i>Led by</i> Tencent Holdings (China)
		It develops industry-specific software that helps insurance carriers to deploy and manage their products and services. <i>Foundation Date</i> 2000 <i>Total funds raised</i> \$120.0M; Private equity round <i>Led by</i> Dragoneer Investment Group, Insight Partners, Neuberger Berman Group, Temasek Holdings (USA)

Insurtech investment by Line of Business 2010-2018 compared to 2019.

Startups in the Health, Commercial and Home lines of business have increased their participation as percentage of the total funds invested in 2019 compared to the 2010-2018 period.

Insurtech investments by line of business 2010-2018 compared to 2019



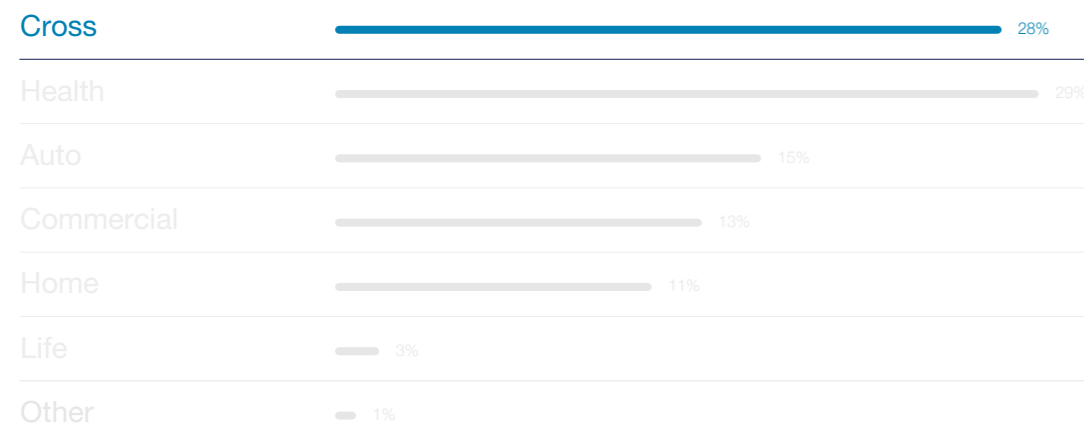
In 2018 and 2019, deals related to Cambridge Mobile by \$500.0M (2018), and Oscar by \$165.0M (2018) have been reclassified from Venture series unknown to Late series. In 2019, Huatai Insurance Group by \$2,090M (2019) is not included in the analysis. In 2013, deals related to Hamilton Insurance Group by \$526.56M and to Global Risk Partners by \$88.5M are not included since are not purely Insurtech deals.

*Total Funds information up to Q42019 based on disclosed deals; Not considered Huatai Insurance Group deal in 2019 by \$2.1B.

Details of insurtech investment by line of business 2019.

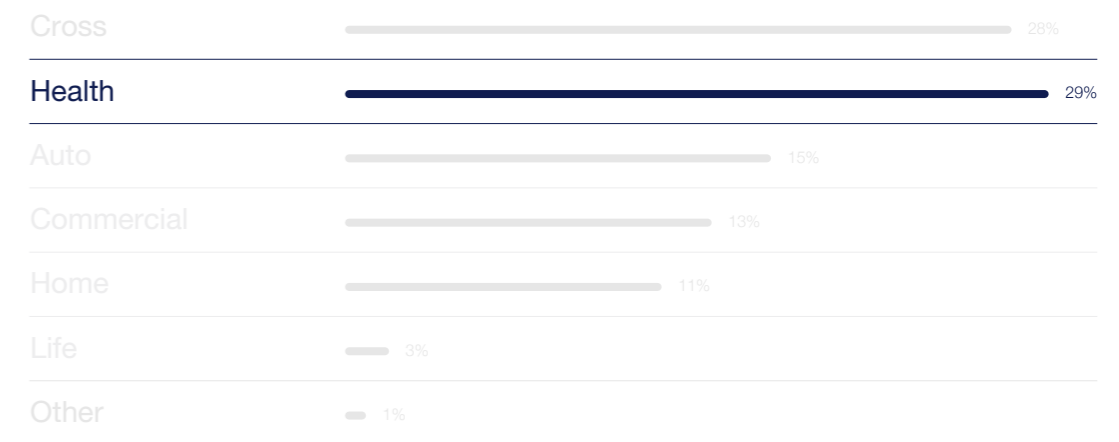
In 2019, investments in startups belonging to Health line of business grew due to the Bright Health deal at the end of the year. The main business model in this line of business was the one related to Platforms & Marketplaces offering insurance products.

Insurtech investments by line of business 2019 (1/3) * Representative startups



*Total Funds information up to Q42019 based on disclosed deals

- 🚗 Auto
- 🏠 Home
- 👤 Health
- 🏢 Commercial
- 👤 Life
- 🔄 Cross



🔄 Cross 2019 Total funds: \$1.7B; 28% of total (6.3B)

	Total funds raised \$150.0M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by Tencent Holdings (China)
	Total funds raised \$235.0M	Business Model Platform Ecosystem / Marketplace
	Main Technology Artificial Intelligence	Led by Mubadala Ventures (United Arab Emirates) and OMERS Ventures (USA)
	Total funds raised \$102M	Business Model Platform Ecosystem/Marketplace
	Main Technology Cloud, Mobile & Applications	Led by CapitalG (USA) and Goldman Sachs Principal Strategic Investments (USA)

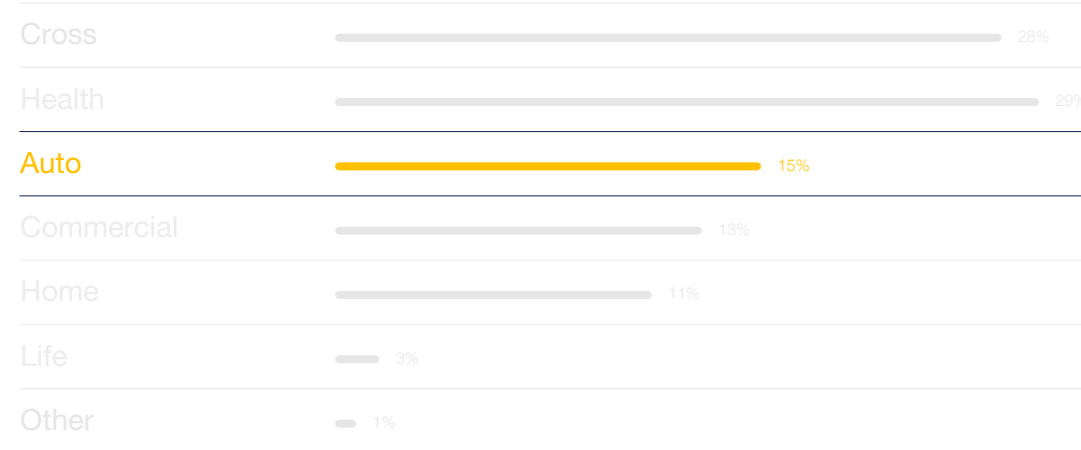
♥️ Health 2019 Total funds: \$1.8B; 29% of total funds

	Total funds raised \$635.0M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by NEA (USA)
	Total funds raised \$500.0M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by Greenoaks Capital (USA)
	Total funds raised \$218M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by Boyu Capital and Tencent Holdings (China)

Details of insurtech investment by line of business 2019.

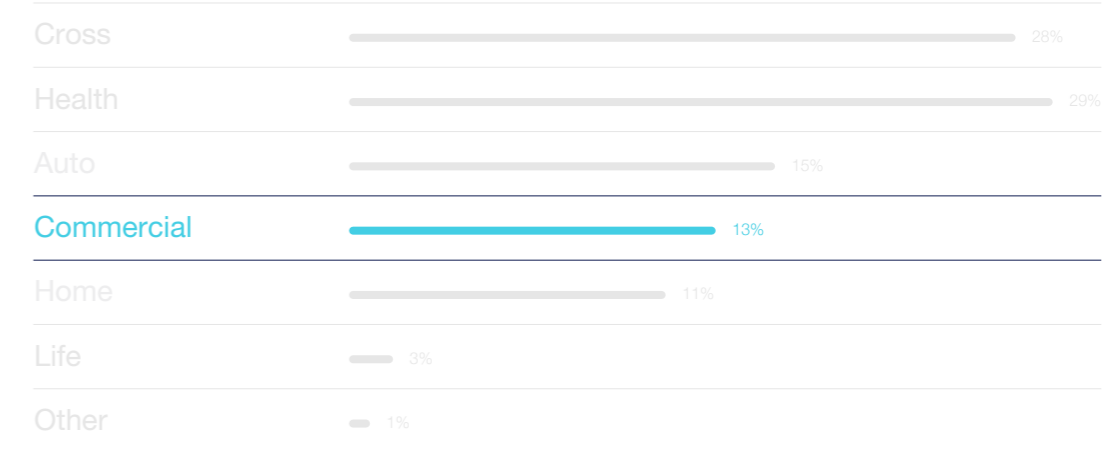
In 2019, investments in startups operating in the Commercial line of business grew with respect to the total funds raised. This niche of the Insurance market could be rapidly scalable and, therefore, attract great interest from investors.

Insurtech investments by line of business 2019 (2/3) * Representative startups



*Total Funds information up to Q42019 based on disclosed deals

- 🚗 Auto
- 🏠 Home
- 🏢 Commercial
- 👤 Life
- 🔄 Cross



🚗 Auto 2019 Total funds: \$0.9B; 15% of total funds

Root Insurance Co	🇺🇸	Total funds raised \$501.0M	Business Model On-demand
		Main Technology Internet of Things	Led by Coatue Management (USA) and DST Global (HK)
Octane Lending	🇺🇸	Total funds raised \$145.2M	Business Model Platform Ecosystem / Marketplace
		Main Technology Cloud, Mobile & Applications	Led by Valar Ventures (USA)
FRI:DAY	🇩🇪	Total funds raised \$127.6M	Business Model Platform Ecosystem/Marketplace
		Main Technology Cloud, Mobile & Applications	Led by Media-for-equity deal, SevenVentures and the media investor German Media Pool; Baloise Group (Germany and Switzerland)

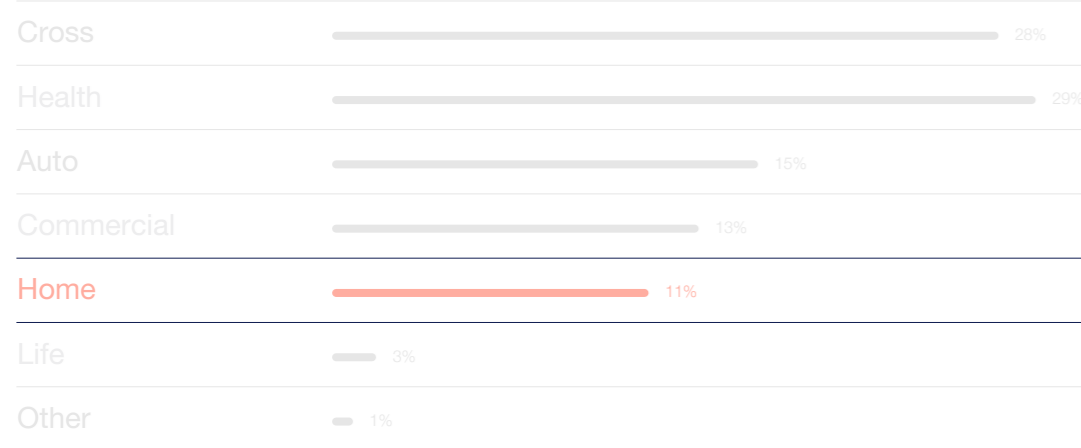
🏢 Commercial 2019 Total funds: \$0.8B; 13% of total funds

NEXT INSURANCE	🇺🇸	Total funds raised \$250.0M	Business Model Platform Ecosystem / Marketplace
		Main Technology Cloud, Mobile & Applications	Led by Munich Re Ventures (Germany)
运去哪 YunQuNa	🇨🇳	Total funds raised \$70.0M	Business Model Platform Ecosystem / Marketplace
		Main Technology Cloud, Mobile & Applications	Main investors Coatue Management, Sequoia Capital China (China)
Shift	🇪🇺	Total funds raised \$60.0M	Business Model Ainomics
		Main Technology Artificial Intelligence	Led by Bessemer Venture Partners (India)

Details of insurtech investment by line of business 2019.

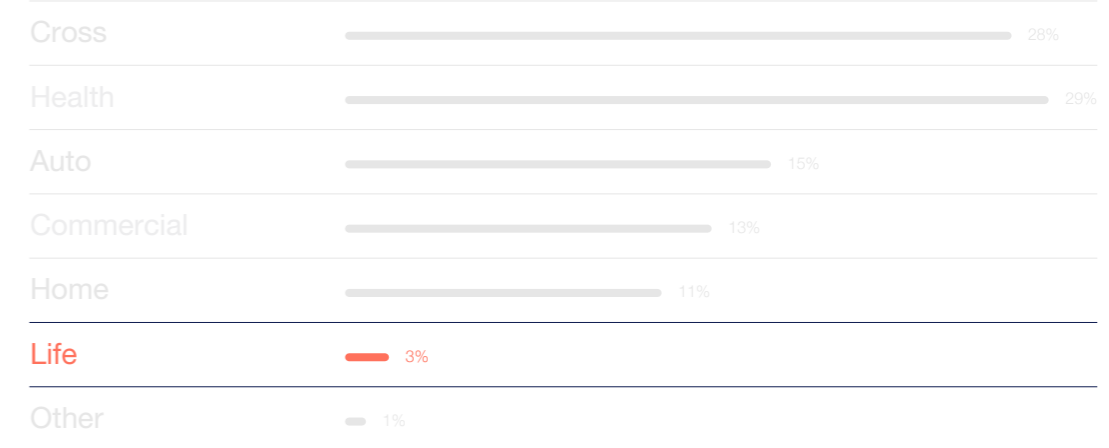
In 2019, the Home line of business grew. One of the most relevant deals of the year in this vertical, was the funding raised by Lemonade in a round led by SoftBank, looking to expand the startup operations beyond the American market.

Insurtech investments by line of business 2019 (3/3) * Representative startups



*Total Funds information up to Q42019 based on disclosed deals

- 🚗 Auto
- 🏠 Home
- 🏢 Commercial
- 👤 Life
- 🌐 Cross



🏠 Home 2019 Total funds: \$0.7B; 11% of total funds

	🇺🇸 Total funds raised \$300M	Business Model Ainomics
	Main Technology Artificial Intelligence	Led by SoftBank Group (Japan)
	🇺🇸 Total funds raised \$100.0M	Business Model On-Demand
	Main Technology Artificial Intelligence	Led by by Bond (USA)
	🇺🇸 Total funds raised \$83.4M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by Lennar Corporation (USA)

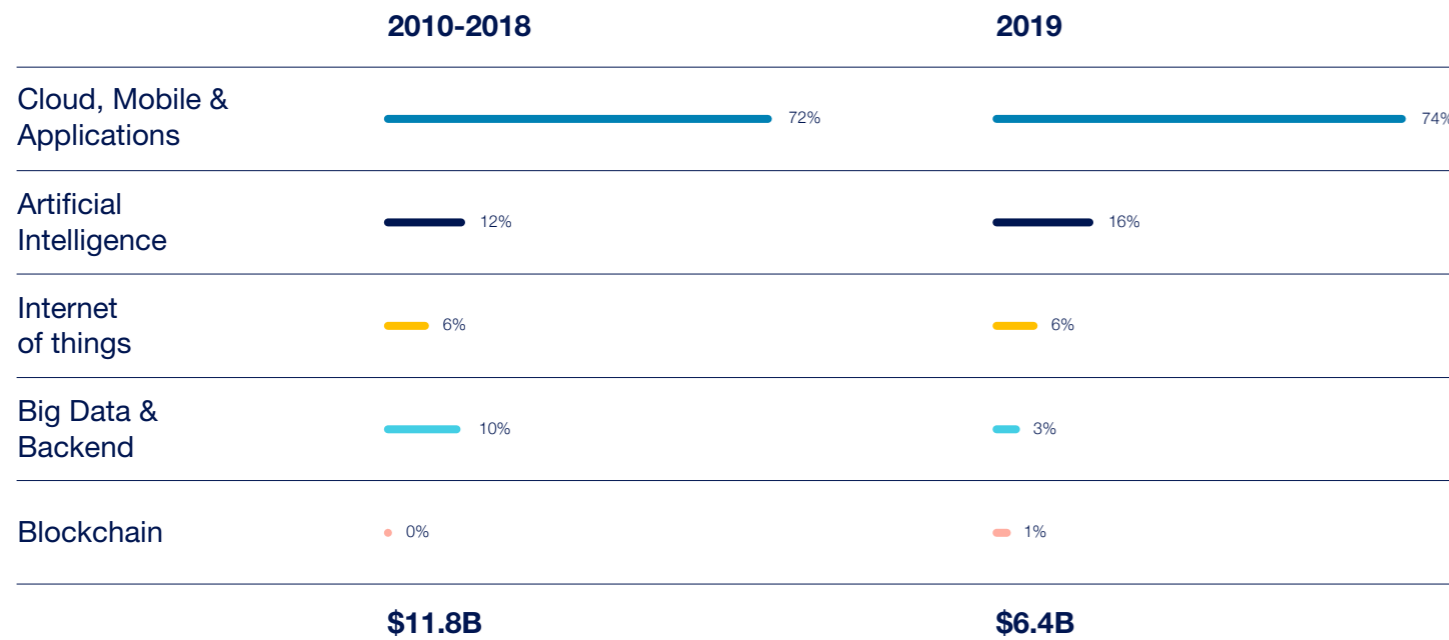
🏢 Commercial 2019 Total funds: \$0.8B; 13% of total (6.3B)

	🇸🇬 Total funds raised \$103.0M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by Sumitomo Life Insurance Company (Japan); Aberdeen Standard Investments (UK) and ION Pacific (Israel)
	🇺🇸 Total funds raised \$60.0M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by GV Alphabet's Venture capital arm (USA)
	🇸🇪 Total funds raised \$12.6M	Business Model Platform Ecosystem / Marketplace
	Main Technology Cloud, Mobile & Applications	Led by Creandum (Sweden)

Insurtech investment by technology in 2010-2018 compared to 2019.

In 2019, the startups based on the use of technologies such as Artificial Intelligence and Cloud, Mobile & Applications had a modest growth regarding to the investment received, while the ones that used Big Data & Backend obtained a slightly lower investment compared to the 2010-2018 period.

Insurtech investments by technology in 2010-2018 compared to 2019



- Cloud, Mobile & applications
- Artificial Intelligence
- Internet of Things
- Big Data & Backend
- Blockchain

In 2018 and 2019, deals related to Cambridge Mobile by \$500.0M (2018), and Oscar by \$165.0M (2018) have been reclassified from Venture series unknown to Late series. In 2013, deals related to Hamilton Insurance Group by \$526.56M and to Global Risk Partners by \$88.5M are not included since are not purely Insurtech deals.

*Total Funds information up to Q42019 based on disclosed deals

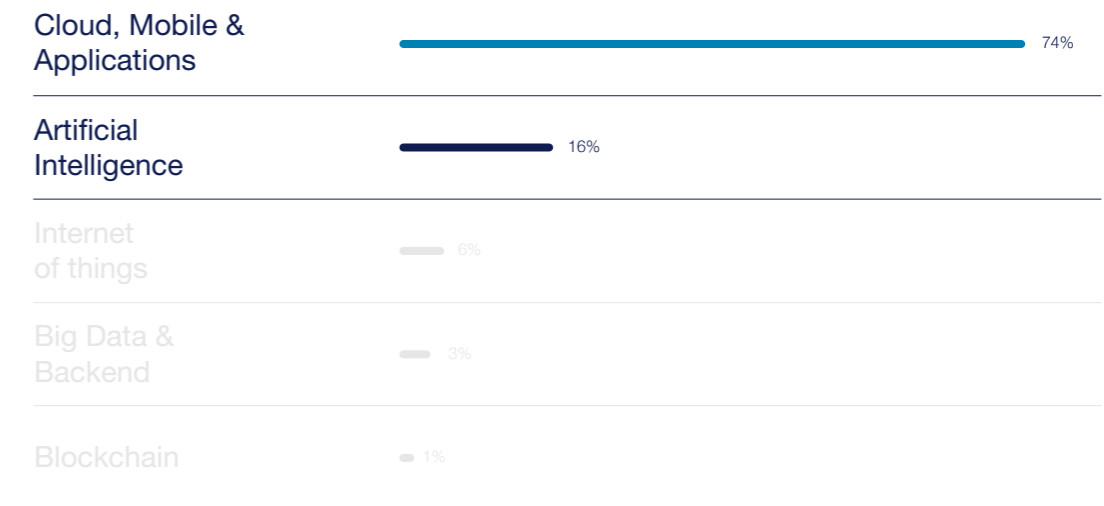
Investments by technology 2019.

In 2019, 90% of Insurtech's total investments went to new companies based on Cloud, Mobile & Applications and Artificial Intelligence, operating in the Health, Home, Life and Cross lines of business.

Insurtech investments by technology in 2010-2018 compared to 2019

*Total Funds information up to Q42019 based on disclosed deals

- Auto
- Commercial
- Cross
- Health
- Home
- Life
- Cloud, Mobile & applications
- Artificial Intelligence
- Internet of Things
- Big Data & Backend
- Blockchain



● Cloud, Mobile and Applications: 2019 Total funds \$4.7B / 74%

bright HEALTH	🇺🇸	Total funds raised \$635M	Business Model Platform Ecosystem / Marketplace	Led by NEA (USA)
Clover	🇺🇸	Total funds raised \$500M	Business Model Platform Ecosystem / Marketplace	Led by Greenoaks Capital (USA)
Phoenix	🇲🇽	Total funds raised \$446M	Business Model Platform Ecosystem / Marketplace	Main partner Acquisition of the 32.5% by Centerbridge Partners and Gallatin Point Capital

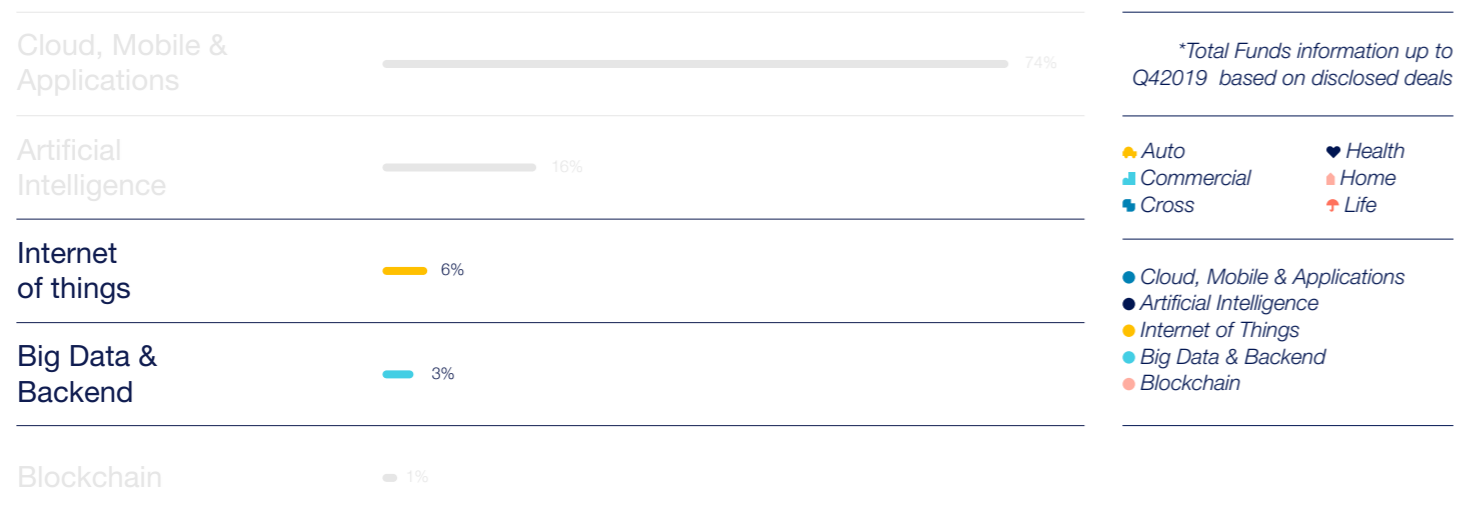
● Artificial Intelligence: 2019 Total funds \$1.02B / 16%

Lemonade	🇺🇸	Total funds raised \$300M	Business Model Ainomics	Led by SoftBank Group (Japan)
wefox GROUP	🇺🇸	Total funds raised \$100M	Business Model On-Demand	Led by Bond (USA)
wefox GROUP	🇩🇪	Total funds raised \$235M	Business Model Platform Ecosystem / Marketplace	Led by Mubadala Ventures (United Arab Emirates) and OMERS Ventures (USA)

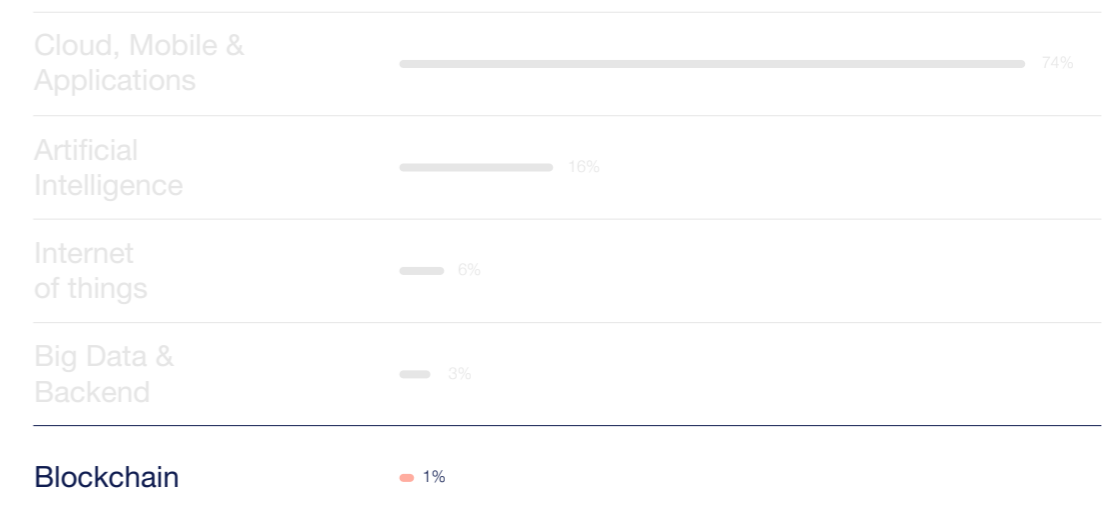
Investments by technology 2019.

In 2019, top funded companies, using Internet of Things as the main technology, operated in the Auto line of business. At the same time, most funded startups based on Big Data & Backend technology played in Cross and Commercial insurance verticals.

Insurtech investments by technology in 2010-2018 compared to 2019



Insurtech investments by technology in 2010-2018 compared to 2019



• Internet of Things: 2019 Total funds \$0.39B / 6%

Root Insurance Co		Total funds raised \$501.0M	Business Model On-demand	Led by Coatue Management (USA) and DST Global (HK)
Cuvva		Total funds raised \$15.0M	Business Model Phygital and smart things	Led by Breega, Chris Adelsbach, Digital Horizon, Dominic Burke, Faisal Galaria, LocalGlobe, RTP Global, Seedcamp, Techstars Ventures, Tekton Ventures
运去哪		Total funds raised \$70M	Business Model Platform Ecosystem / Marketplace	Main partner Coatue Management (USA) and Sequoia Capital China (China)

• Big Data & Backend: 2019 Total funds \$0.21B / 3%

Coalition		Total funds raised \$40.0M	Business Model Data Monetization	Led by Rabbit Capital (USA)
LimelightHealth		Total funds raised \$33.5M	Business Model Platform Ecosystem / Marketplace	Led by Principal Financial Group (USA)
ShipSheet		Total funds raised \$ 33.5 M	Business Model Ainomics	Led by Tola Capital (USA)

• Blockchain: 2019 Total funds \$0.04B/ 1%

EVERLEDGER		Total funds raised \$20.0M	Business Model Tokenomics	Led by Tencent Technology
B3i		Total funds raised \$16.0M	Business Model Tokenomics	
Kover.ai		Total funds raised \$1.60M	Business Model Tokenomics	Led by Techstars (USA)

Geographic analysis Overview.

In terms of Insurtech investments, the USA and China led the ranking. However, Europe ranked second, just behind the USA, when comes to number of startups.

Insurtech geographical overview (2010-2019) Global Insurtech landscape

• \$18.2B • 894 startups



North America	Other regions	Europe	Asia
<ul style="list-style-type: none"> • \$11.4B / 62% • 425 startups / 48% 	<ul style="list-style-type: none"> • \$0,3B / 2% • 68 startups / 8% 	<ul style="list-style-type: none"> • \$2.9B / 16% • 269 startups / 30% 	<ul style="list-style-type: none"> • \$3.6B / 20% • 132 startups / 15%
<i>Includes USA, Canada, Puerto Rico, Bermuda, Guatemala and Mexico</i>	<i>Includes Africa, Oceania and South America</i>		<i>Includes China, Hong Kong, India, Singapore, UAE, Indonesia, Israel, Japan, Malaysia, South Korea and Philippines</i>

Geographic analysis by region.

In Europe, about 85 lead investors funded the 40 more significant startups in 2010-2019 period. These investors were basically from Europe, the USA and Hong Kong. Institutional funds and insurers were also present as lead investors in highest funding rounds in Europe.

Insurtech geographical overview (2010-2019) Most representative Insurtech startups and lead investors: North America

- Canada**
 - \$0.03B
 - 26 Startups
- Minnesota**
 - \$0.06B
 - 6 Startups

bright bind GRUB
- Massachusetts**
 - \$0.08B
 - 19 Startups

Duck Creek Technologies marley CORVUS
GRADIENT EVERQUOTE clearurance
- All Other Cities**
 - \$2.8B
 - 170 Startups

PER INSURANCE sriapsheet kin. beam ROOT Insurance Co
- New York**
 - \$3.8B
 - 74 Startups

Slice coverwallet Octane Lending Policygenius OSCAR
Clover Thimble Jetty unqork Lemonade
- California**
 - \$2.7B
 - 130 Startups

mehome NEXT Ladder
vouch COVERHOUND trov ETHOS Health IQ
- Mexico and Guatemala**
 - \$0.03B
 - 8 Startups



\$11.4B; 425 startups
108 lead investors in 40 significant startups

Lead investors in the region

Most active by times of appearance in rounds



Significant by rounds amount



Geographic analysis by region.

In Europe, about 85 lead investors funded the 40 more significant startups in 2010-2019 period. These investors were basically from Europe, the USA and Hong Kong. Institutional funds and insurers were also present as lead investors in highest funding rounds in Europe.

Insurtech geographical overview (2010-2019)

Most representative Insurtech startups and lead investors: North America



\$2.9B; 269 startups;
85 lead investors in 40 significant startups

Lead investors in the region

Most active by times of appearance in rounds



Global Insurers



Significant by rounds amount



Geographic analysis by region.

In Asia, about 60 lead investors funded the 32 more significant startups in the 2010-2019 period. Insurers present in these deals were mostly from the region.

Insurtech geographical overview (2010-2019)

Most representative Insurtech startups and lead investors: Asia



\$3.6B; 132 startups;
60 lead investors in 32 significant startups

Lead investors in the region

Most active by times of appearance in rounds



Global Insurers



Significant by rounds amount



Geographic analysis by region.

In other regions like Africa, Oceania and South America, the 19 Insurtech significant startups have about 20 lead investors, most of them from the own startup geographic area of influence.

Insurtech geographical overview (2010-2019)*

Most representative Insurtech startups and lead investors: Other Regions



<p>Oceania</p> <p>● \$174B ● 16 Startups</p> <p>daisee cove COVER SENIOR partnersure</p>	<p>Africa</p> <p>● \$15B ● 25 Startups</p> <p>HEPSTAR™ Jernani Naked</p>	<p>South America</p> <p>● \$131B ● 27 Startups</p>
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**\$321M; 68 startups;
20 lead investors in 19 significant startups**

Lead investors in the region

Most active by times of appearance in rounds



Global Insurers

Holland



Significative by rounds amount

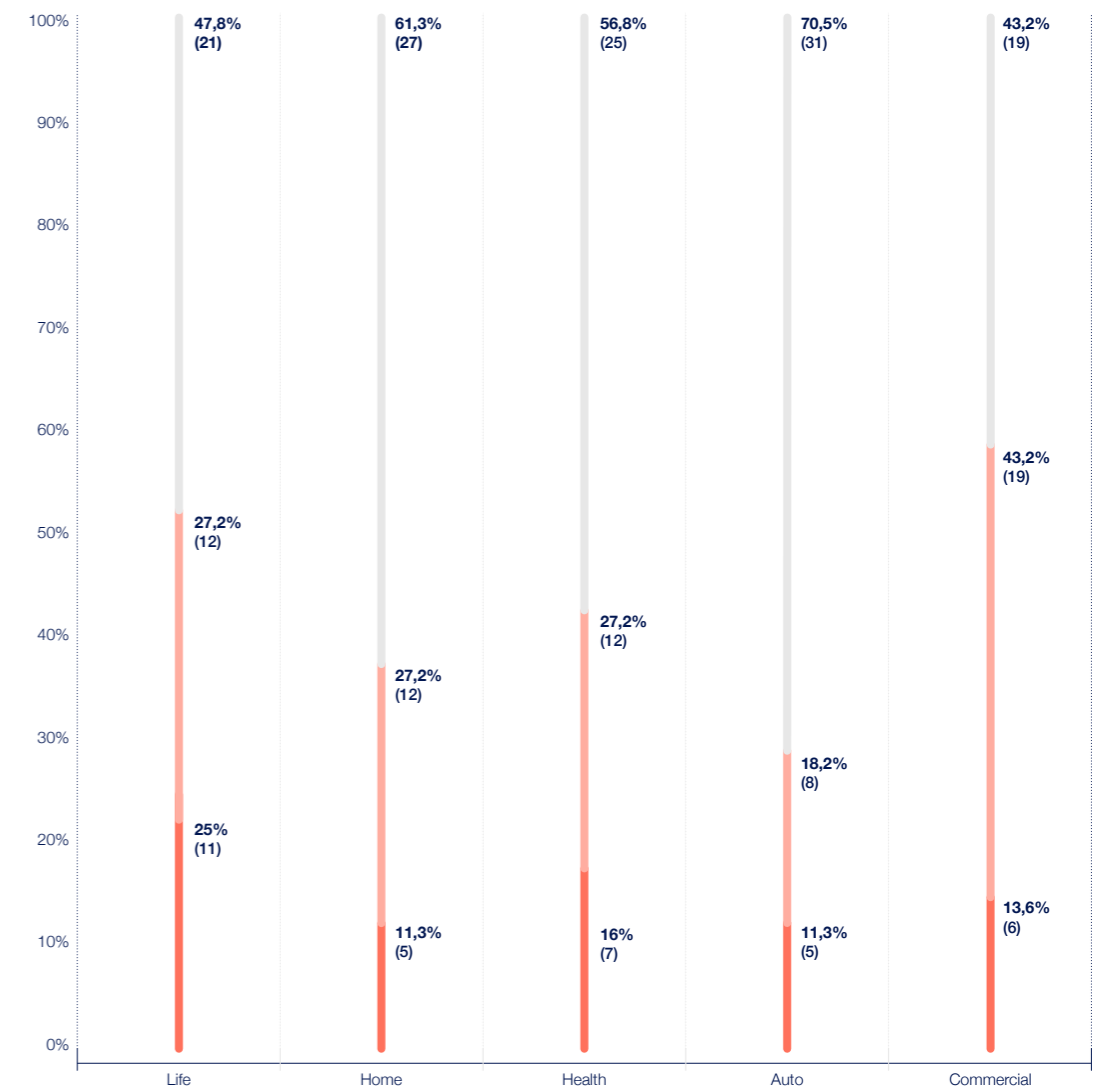


Survey results.

Survey results.

Disruption in insurance business lines.

How do you think disruption is going to evolve in each business line?



- Level 1-2
- Level 3
- Level 4-5

Survey answered by 44 CEOs and executives of insurance companies worldwide

Insights:

CEOs perceive **Auto** as the line of business to be most intensively disrupted in the near future.

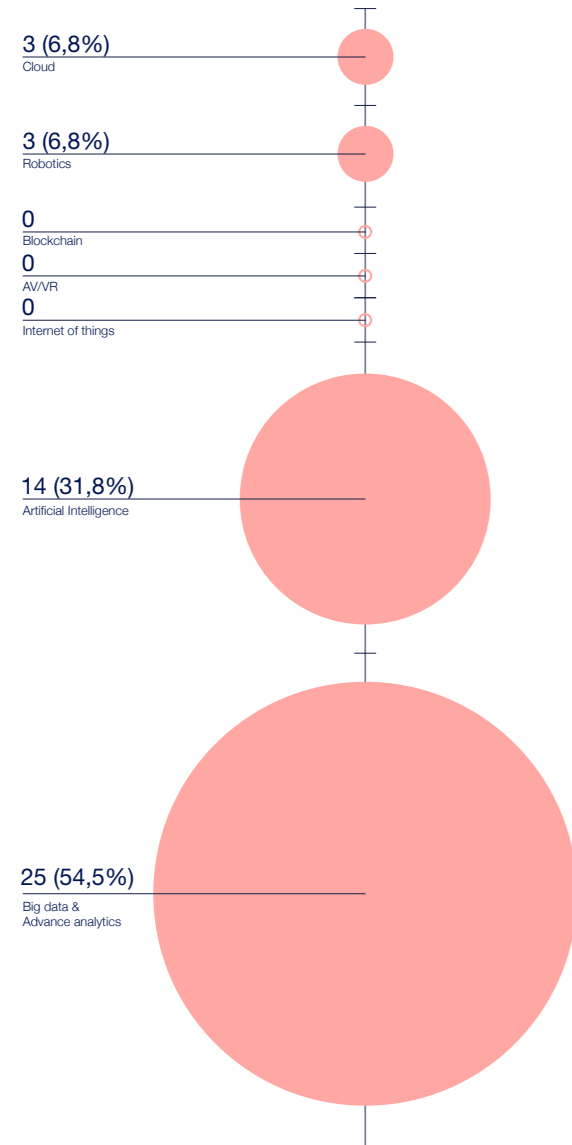
Life and Commercial look less exposed to disruption. Maybe there are challenges to operate in these industries.

Health is the most balanced sector. Probably some fragments of Health's value chain are easily disrupted, but underwriting and carrier are more challenging.

Survey results.

Impact/relevance of exponential technologies.

Taking into account the following exponential technologies, please evaluate the impact/ relevance for your company.



Insights:

Personalization, automation and digital data footprint of the insurance industry is being reflected in the CEOs' answers.

The vast majority believe in Artificial intelligence and Big Data & Analytics as the main technologies to impact their companies in the next 3 years.

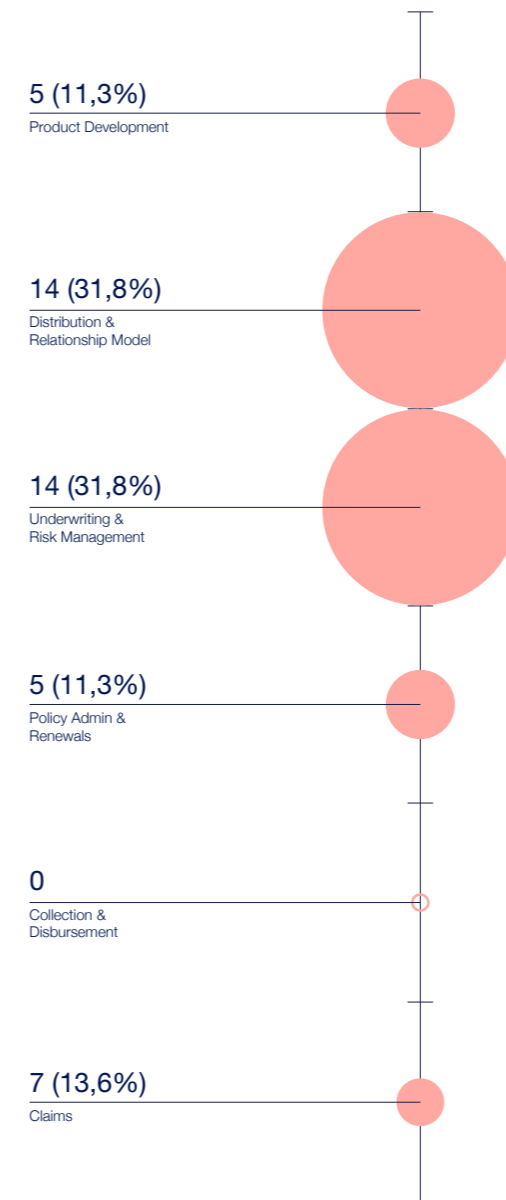
Blockchain is still not relevant for the respondents in the short term.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Exponential technologies in the value chain.

In what specific areas of the value chain do you think your company will use those technologies in the next 3 years?



Insights:

Product development is still discreet to use exponential technologies, giving the impression that it is not so trivial to translate customers data into products.

Distribution & Relationship will be highly affected by technologies in respondents' companies.

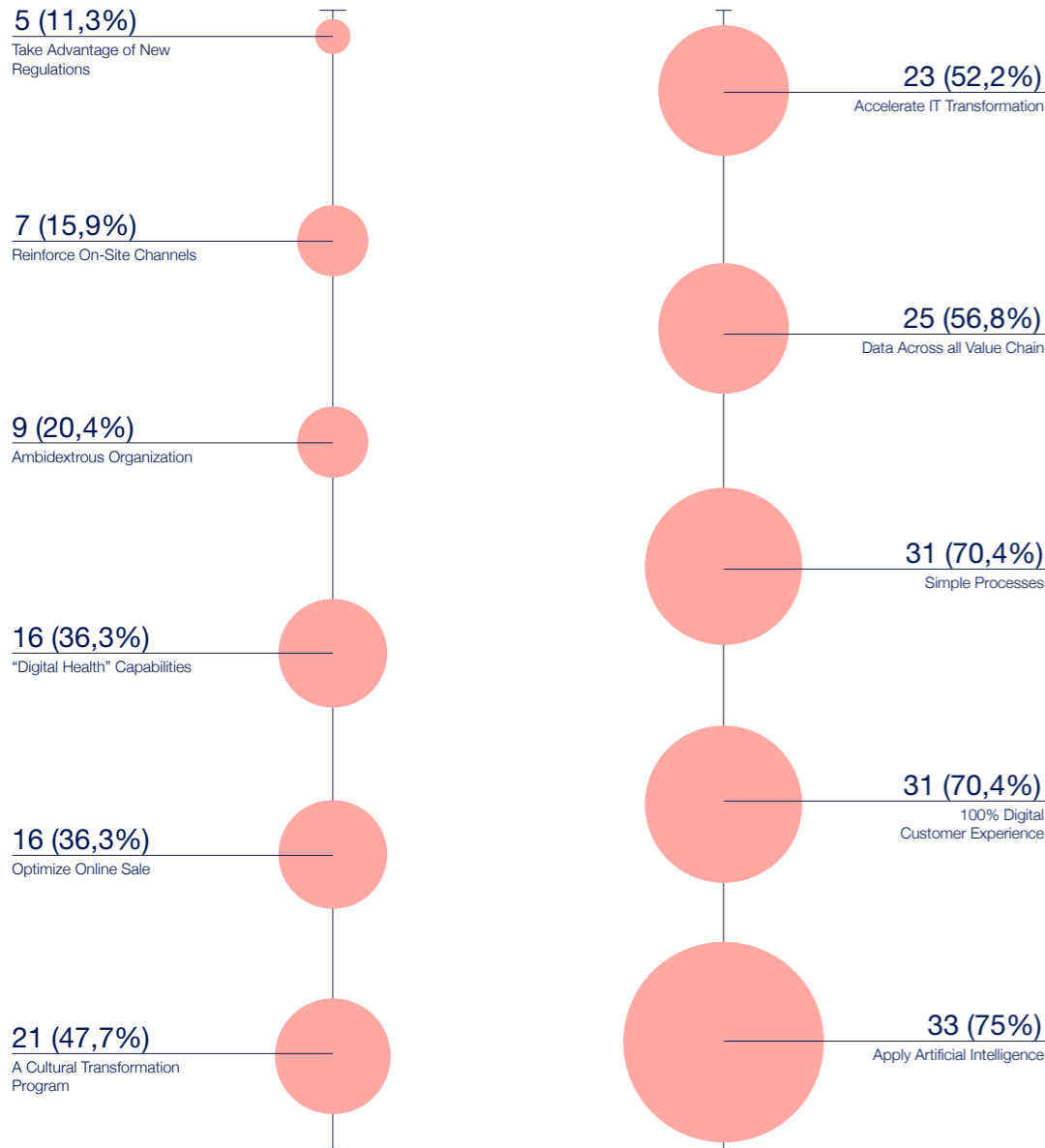
Respondents intend to improve Underwriting & Risk Management by the usage of technology.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Goal achievement.

In your opinion, which one of the following challenges should your company address to achieve its goals?



Insights:

Digitalization and AI Applications are relevant pain points of this industry, consequently is the main issue insurtechs address. Respondents are aware that both points are essential to remain competitive.

Main Internal Challenges are simple processes and culture transformation, that are efforts to have more flexibility in all liquid ecosystems.

Data Integration and IT Transformation are also relevant and several startups are being created to attack this problem (Duck Creek and Unqork).

Survey answered by 44 CEOs and executives of insurance companies worldwide

Conclusions

Biggest amount of funds

● **2019, the year when Insurtech companies captured the biggest amount of funds**

In 2019, insurtech funding reached \$6.4B which is a 53% higher compared to 2018 totals and the hugest amount of the 2010-2019 period. Insurtech has been able to capture investors' interest, managing to attract significant amounts of investment since 2018.

Despite the above, in 2019, the creation of new startups and the investments captured by these new companies showed the lower point of the period since 2016. The investors funds were channelled mainly to companies with market traction receiving in some cases, in 2019, the highest amount of funds of their history in financing rounds where money raised has no precedent. In mature financing Series, operations were highly concentrated in top 2 to 5 deals.

New business models

▶ **New business models based on new technologies are becoming more relevant in the market**

Insurtech Platforms & Marketplaces have been backed by investors during all the 2010-2019 period, showing that this business model has well capitalised the possibility to put in the same place offer and demand, giving more transparency to the Insurance market.

Both mature and newer technologies of insurtech facilitate the creation of value in an exponential way, through new experiences focused on a digital client, which demands the elimination of pain points throughout the traditional insurance process.

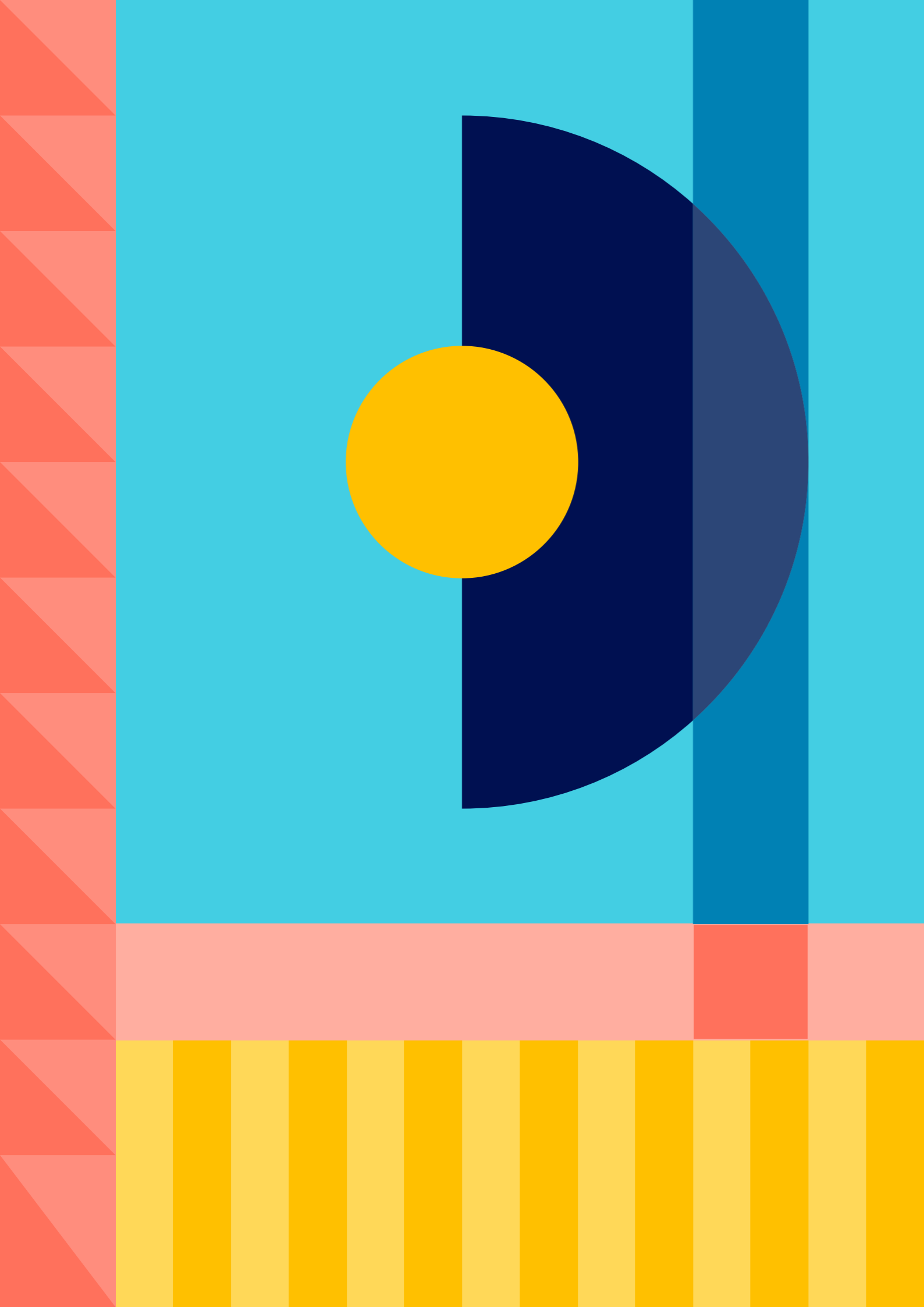
In 2019, On-demand and Aionomics business models based on IoT or Artificial Intelligence gained in importance compared to others, showing that, fulfilling customer demands through the immediate provisioning of goods and services or creating experiences and hyper-personalized products are relevant in the market.

The USA remains leader

▲ **The USA continued to lead the Insurtech arena; however, other regions began to increase their activity.**

North America represented 62% of total 2010-2019 funds and 48% of total startups and had many local and active investors looking to finance disruptive and scalable companies.

Asia accounted for the 20% of total funds and the 15% of total startups and its lead investors were mainly local big ones, investing much more money per startup than in Europe, which represented 16% of total funds and 30% of total startups and where it seems to be more diversity when it comes to investors' geographical headquarters.



02

Insurance Companies in the Digital World.

Key figures under everis scope.*

In which sectors do insurance companies invest?

Between 2010 and 2019, Insurance companies have been active in the startup ecosystem, participating in 2059 startups of different industrial sectors where insurance, healthcare and financial services are the most-invested ones in 2018-2019.

In which sectors do insurance companies invest?

		Total	Insurance, Financial Services and Healthcare	Market Share
2059 Startups	2010/19	\$38.6B	\$17.4B	45%
296 Startups	2018/19	\$1,267M	\$836.5M	66% ^

Between 2018 and 2019, the set of Insurance, Financial Services and Healthcare industries almost doubled its market share in terms of number of startup invested by insurers compared to the period 2010-2019. This increase is explained almost entirely by the decrease in other industries not related with the core insurance sector. The set market share of the Insurance, Financial Services and Healthcare industries, in terms of money raised in funding rounds, also grows from the 45% obtained in the period 2010-2019 to the 66% of the last two years. However, this rise was softer compared to that of by number of companies.

Recently, insurers are spending more money in disruptive insurance related companies, but in earlier funding round types. On average, they have invested less money per company probably to avoid the implicit risks of companies in early stages. All these facts show that in the last two years, insurers are seeking opportunity in the financial and healthcare sectors, both related with the insurance core business, to develop new value propositions, acquire new technological advances and their increase share.

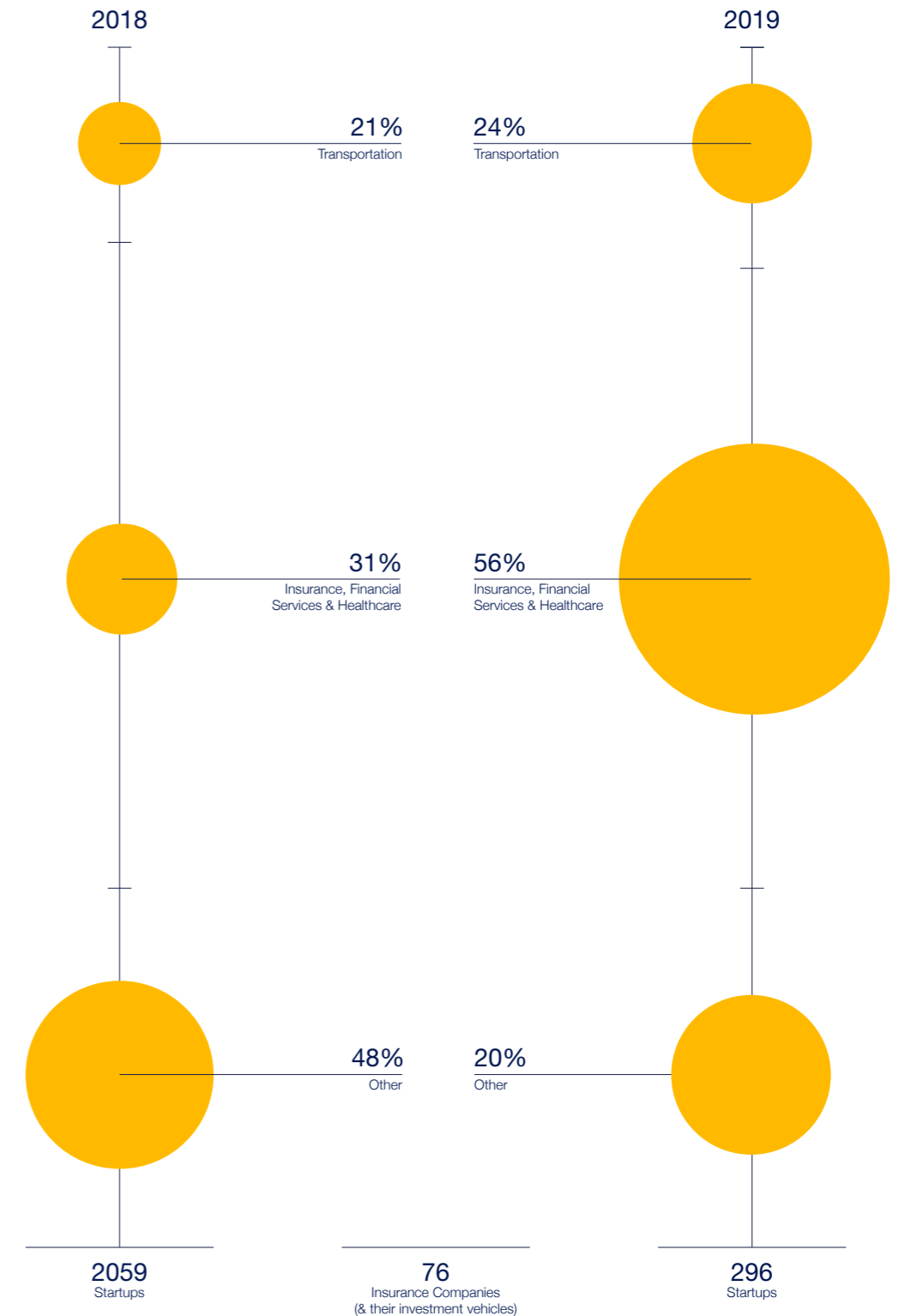
*Considered under our research scope: includes companies which got funds from the main insurance groups in the period Jan. 2018 - Dec. 2019.

Other includes manufacturing, retail, consumer goods and media, among others.

Key figures under everis scope.*

Number of startups

Between 2018 and 2019, Insurance companies have changed their behavior regarding to industrial sectors investments in the startup ecosystem.



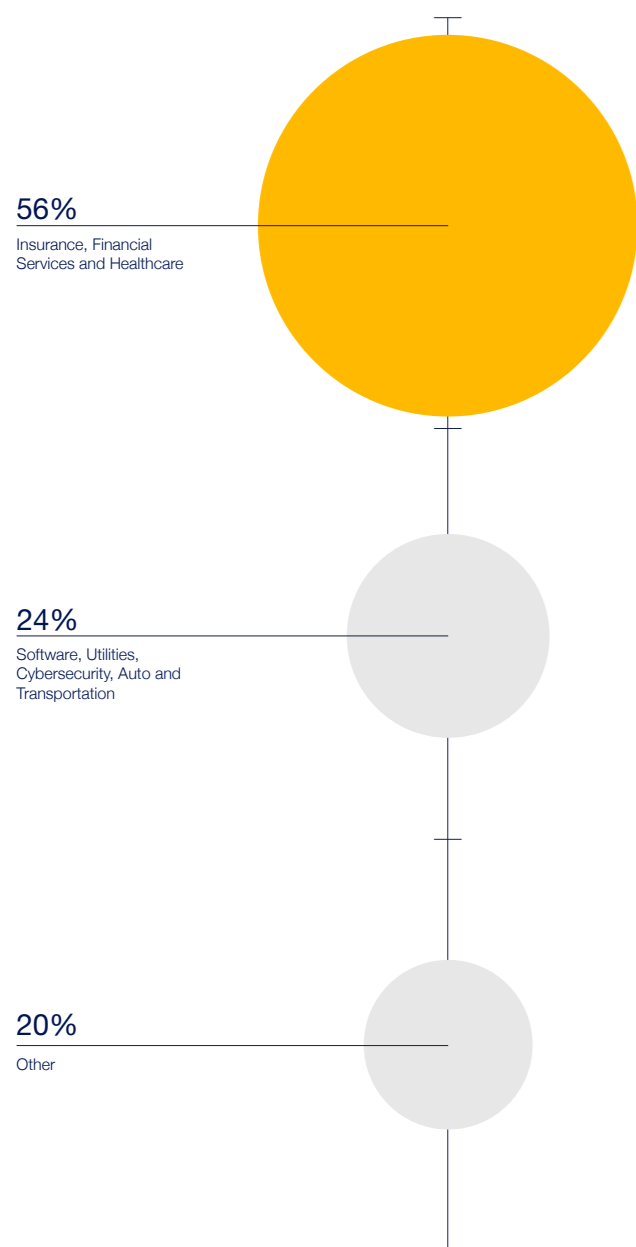
*Considered under our research scope: includes companies which got funds from the main insurance groups in the period Jan. 2018 - Dec. 2019.

Other includes manufacturing, retail, consumer goods and media, among others.

Representative* startups recently funded, where insurers have invested, by set of industrial sector.

Insurance companies emerge as investors in some of the most funded startups, approaching innovation, backing up new business models and strengthening distribution customer and relationships, particularly in P&C insurance. This kind of investment will enable insurers to offer value-added services to their clients.

Funding rounds 2018-2019 Insurance, Financial Services and Healthcare



*Ranked by total funding amount

Insurance



Online insurance provider for small businesses and entrepreneurs, with policies from general contractors to personal trainers.

Total funding amount \$381M



Metromile is the leading pay-per-mile car insurance company using data science and machine learning to make better and less complicated products.

Total funding amount \$293M



The New York-based business uses AI, chatbots and other innovative technologies to disrupt the home and rental insurance sectors.

Total funding amount \$480M

Healthcare



Accolade is a personalized health and benefits solution. Connecting the widest array of personal health data and programs, the company improves the experience, outcomes and cost of healthcare to its clients.

Total funding amount \$237M

Financial Services



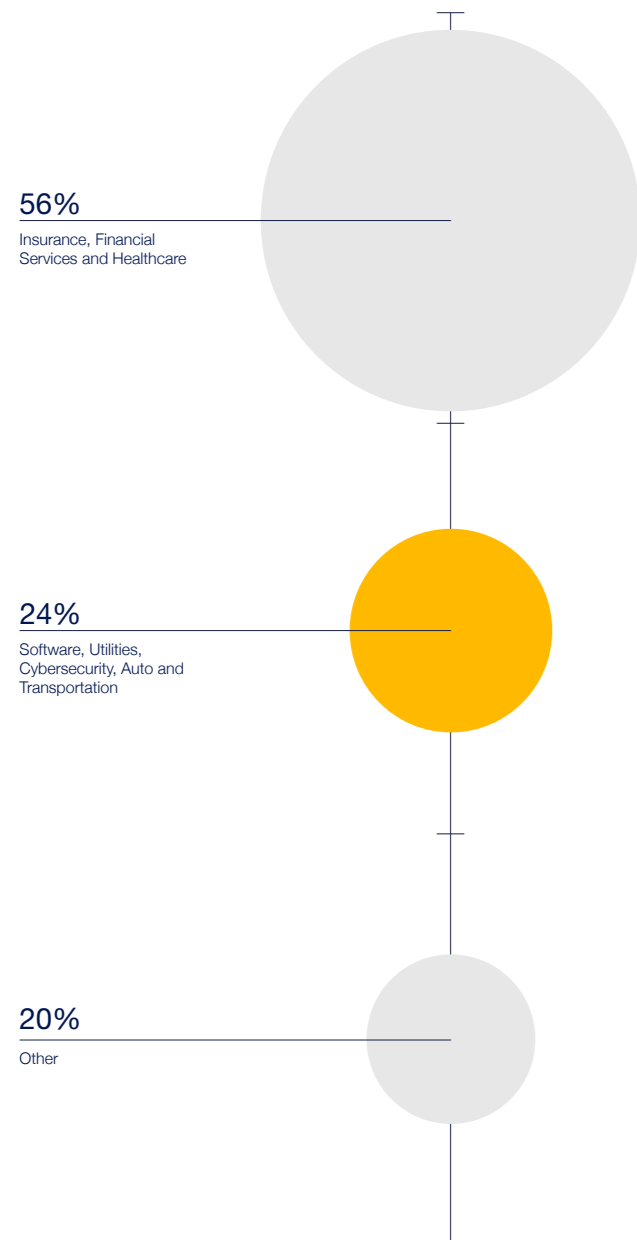
BlueVine offers a modern approach to small businesses financing. Its advanced online platform provides its clients with a flexible solution to everyday financial needs.

Total funding amount \$692M

Representative* startups recently funded, where insurers have invested, are industries close to the Insurance activity.

Despite the insurance industry is the most relevant funding destination, as digital transformation of the sector evolves, insurers are approaching other innovative firms as a way to grasp the digitalisation of the insurance value chain.

Funding rounds 2018-2019
Software, Utilities, Cybersecurity, Auto and Transportation



*Ranked by total funding amount

Transportation & Logistics



Jusda provides whole-process intelligent supply chain solutions from production forecasting, raw material procurement to factory manufacturing, distribution and dispatching, and then to the terminal consumption link (C2M2C).

Total funding amount
\$356.5M



Cybersecurity



SecurityScorecard is a proprietary SaaS platform which helps enterprises gain operational command of the security posture for themselves and across all of their partners and vendors.

Total funding amount
\$112.2M



Software, Big Data & Analytics



Mojio is an open platform that offers a solution for the rapid deployment of secure and scalable aftermarket connected car services to enterprise customers, including auto insurers.

Total funding amount
\$80.7M

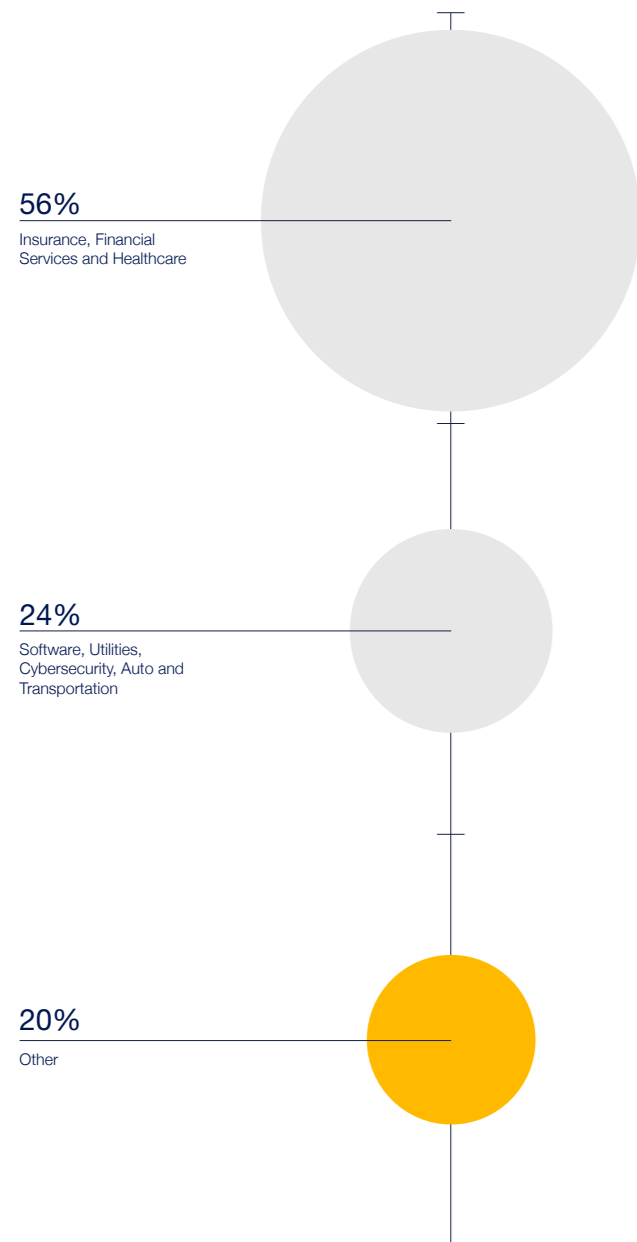


Representative* startups recently funded, where insurers have invested, are industries close to the Insurance activity.

Innovative business models leveraged on new technologies, also capture the interest of Insurance companies in non-core sectors.

Funding rounds 2018-2019

Other



*Ranked by total funding amount

Consulting



Andela is solving the global technical talent shortage by building distributed engineering teams with Africa's top software developers.

Total funding amount \$181M



Construction & Real Estate



Ojo Labs is a technology company that has operationalized a patented conversational AI assistant, with its first application in real estate. Its products allow for consumers to deeply engage in a purchase process prior to interacting with a salesperson.

Total funding amount \$71.5M



Industry



Atonarp is pioneering the field of chemical composition analysis by combining state-of-the-art electronics and data processing algorithms. Atonarp's Smart Spectrometer enables novel use cases and applications for manufacturers of medical equipment and devices.

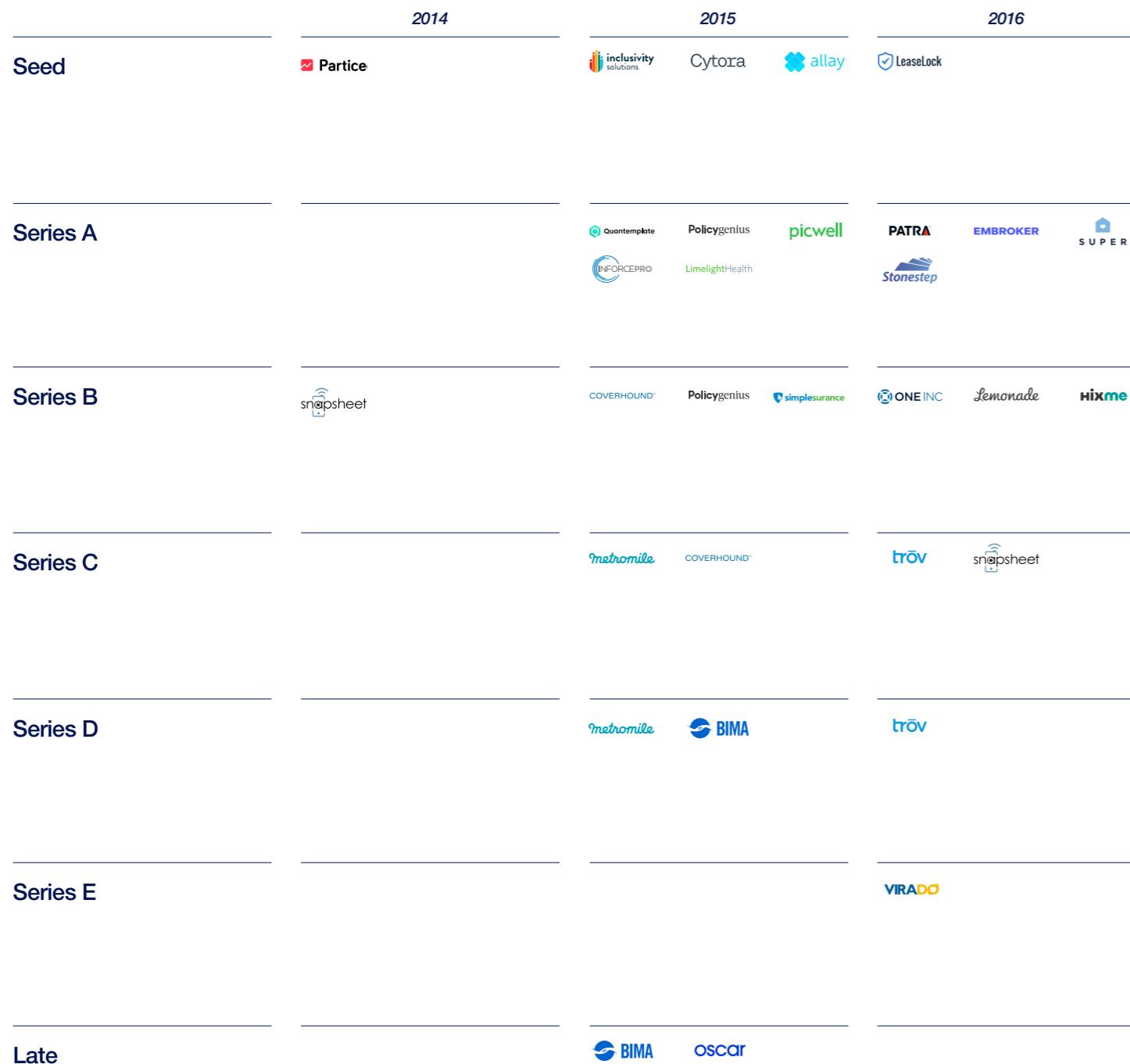
Total funding amount \$57M



Funding rounds of Insurtech invested by insurance companies (2010-2019).*

While historically insurers preferred to invest in early stages, they seem to be more interested in more mature series with those startups related to its core business.

*There are not funding rounds from insurance companies in Insurtech between 2010-2013.



**Considered under our research scope: startups founded from Jan. 2010 to Sept. 2018, excluding those startups founded in 2013 with less than \$3M and startups founded between 2014-2016 with less than \$1.5M.



Funding rounds of Insurtechs invested by insurers (2010-2019).*

Most common investments

Seed
Series A
Series B
Series C

According to their investments, insurers have changed their strategy in the last 3 years. Now, seed and early series funds concentrate around 75% of the funding rounds of the Insurtechs invested by them.

Although most insurers remain passive spectators regarding Insurtech activity and digital transformation compared to other industries, the fact that they have invested more in early rounds seems to show that they are waking up and understanding the needs of the market in order to maintain and potentially increase their share in it. They are willing to take more risks. However, there is something that haven't changed: the later the funding round or series, the more the amount of money raised by the Insurtechs.

Outliers

Series E
Series D



Most of outlier startups invested by insurers focus their activity in the P&C line of business, especially in the smart mobility level of the Insurtech ecosystem.

Car-sharing and the potential development of autonomous cars will change the whole automotive industry, affecting auto and also travel insurance business segments. Insurers need to advance in defensive strategies and innovative methods to develop products, services and partnerships to support the emerging business needs**.

Key facts

Foundation Year Between 2010-2014	Rank Top 15 of the Insurtechs ranking by total funding amount
Total funding amount 8% of the market	Investment Investment in late stages moved from US Insurtechs to European ones such as BIMA or Getsurance.

Late



The Insurtechs which have got the later funding rounds both belong to the healthy living ecosystem.

Partnership



Oscar Health, considered at the top of the Insurtech ranking and famous because of its telemedicine service, recently teamed up with big insurer Cigna to offer plans branded as "Cigna + Oscar" for small businesses.

*Considered under our research scope: startups founded from Jan. 2010 to Sept. 2018, excluding those startups founded in 2013. with less than \$3M and startups founded between 2014-2016 with less than \$1.5M.

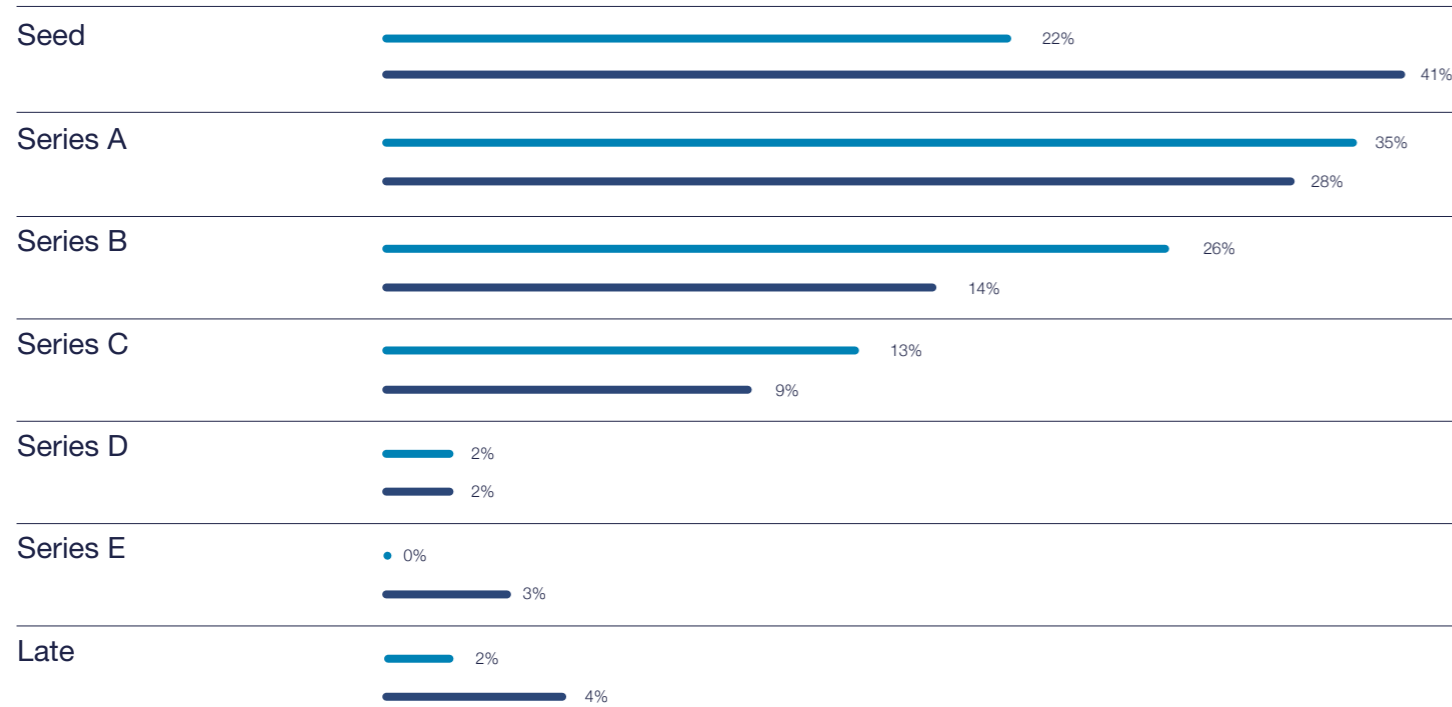
**There are not funding rounds from insurance companies in Insurtech between 2010-2013.

Funding rounds of non-core business* startups invested by insurers (2010-2019).

Comparing the insurance companies' investments in the startup ecosystem from 2010-2019 to the most recent years, we have found that in the last period they have preferred to invest in their core business firms. While in the period 2010-2019 half of the startups invested by insurers were from other sectors like industry or consulting, now the investments are focused on insurance companies or related businesses.

** Non-core business – or Other sectors - includes manufacturing, retail, consumer goods and media, among others.*

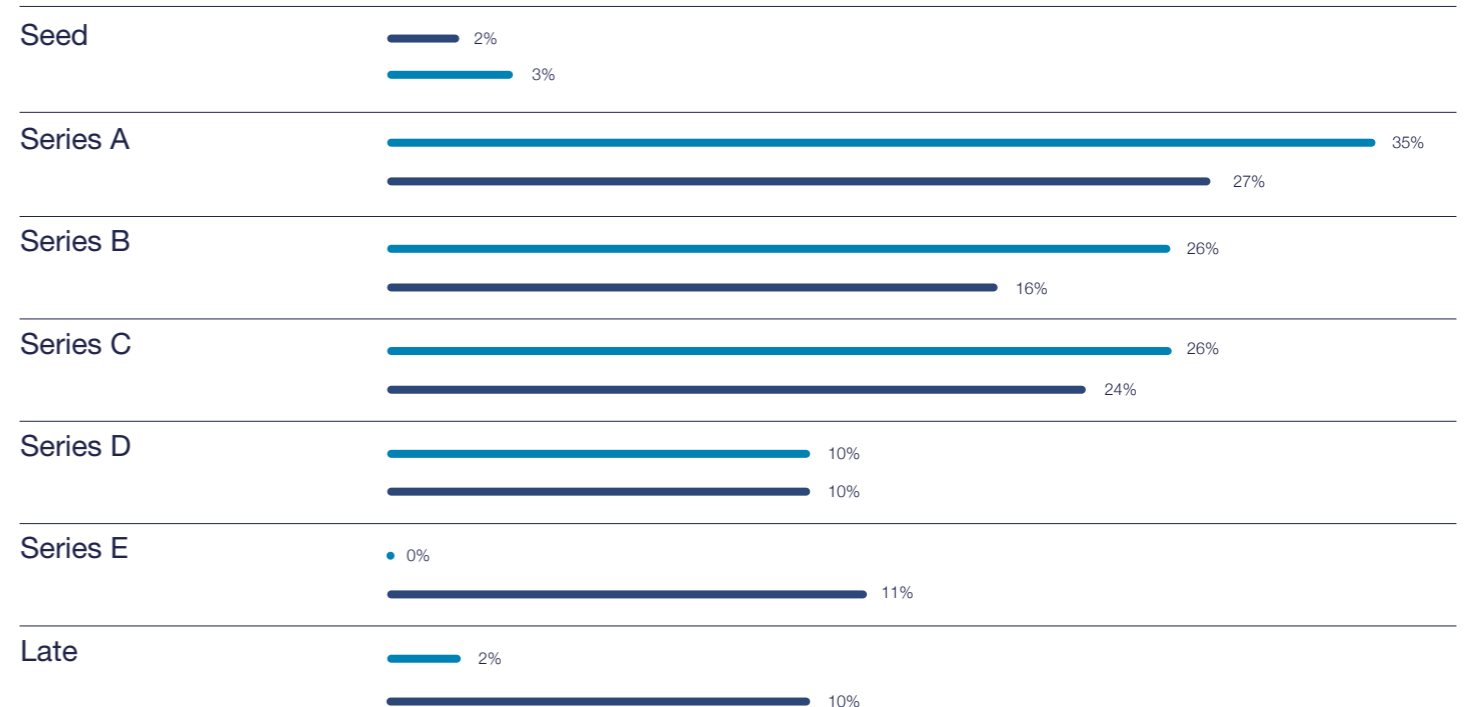
Funding rounds



● 2010-2019
● 2018-2019

Despite the distance, non-core startups' investments made by the insurers share the same trend than the Insurtechs: most of them are concentrated in early rounds, especially in series A and B. On the other hand, proportionately, these early rounds investments in non-insurance startups have raised more money than the later rounds.

Money raised



● 2010-2019
● 2018-2019

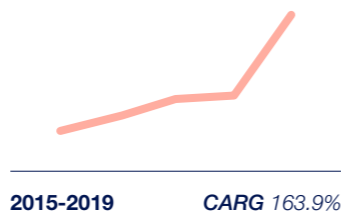
Representative Insurtechs invested by insurance companies, by business line (2018-2019).

Insurers need to reinvent their sales and distribution models, specially in high competitive environments such as the Auto or Home insurance. In this context, alliances with Insurtechs and their developments are very attractive to gain traction.

Home Safe Home*

Insurtech platform that uses machine intelligence to remove friction from residential real estate transactions.

Insurers could update the risk assessment and pricing models with this type of processes and technologies.



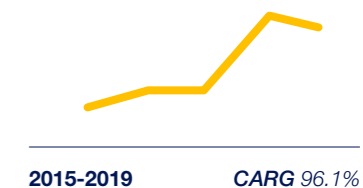
<p>Lemonade </p> <p>Lemonade is a licensed insurance carrier that offers homeowners and renters insurance powered by artificial intelligence and behavioral economics.</p> <p><i>Total funds raised</i> \$480M</p> <p><i>Latest investment</i> \$300M</p> <p></p>	<p>Hippo </p> <p>Hippo offers intuitive and proactive home insurance by taking a smarter, tech-driven approach.</p> <p><i>Total funds raised</i> \$290M</p> <p><i>Latest investment</i> \$100M</p> <p>Munich RE </p>	<p>Insurtech platform </p> <p>Insurtech platform that uses machine intelligence to remove friction from residential real estate transactions.</p> <p><i>Total funds raised</i> \$106.6M</p> <p><i>Latest investment</i> \$25M</p> <p></p>
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These sections belong to the ecosystem chart showcased in chapter 3

Smart Mobility*

Insurtechs meet the need of low pricing insurance, transparent and fair policies in Auto insurance, but with a personalized offering.

Insurers should explore these kind of models to open new revenue opportunities in the Auto insurance.

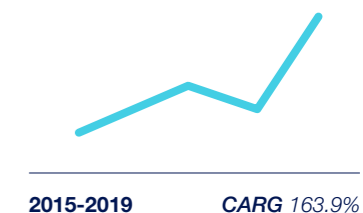


<p>metromile </p> <p>Pay-per-mile car insurance company that saves low-mileage drivers a ton of money.</p> <p><i>Total funds raised</i> \$293M</p> <p><i>Latest investment</i> \$93M</p> <p> </p>	<p>Clearcover </p> <p>A technology company that offers a platform for consumers to shop for car insurance.</p> <p><i>Total funds raised</i> \$111.8M</p> <p><i>Latest investment</i> \$58M</p> <p> </p>	<p>COVERHOUND* </p> <p>Clearcover is the smarter car insurance choice. Its API-first approach enables customers to get insurance affordable rates.</p> <p><i>Total funds raised</i> \$54.5M</p> <p><i>Latest investment</i> \$43M</p> <p></p>
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Commercial*

Next Insurance allows customers to acquire personalized insurance with affordable prices and the support of artificial intelligence to facilitate the process.

These Insurtechs are good examples of digital sales on commercial segment with application of technologies to increase the efficiency of the product.



<p>NEXT INSURANCE </p> <p>Online insurance company for entrepreneurs and SMEs.</p> <p><i>Total funds raised</i> \$381M</p> <p><i>Latest investment</i> \$250M</p> <p> </p>	<p>snapsheet </p> <p>Snapshot is an auto insurance marketplace for both motorists/drivers and auto insurance carriers.</p> <p><i>Total funds raised</i> \$66.9M</p> <p><i>Latest investment</i> \$29M</p> <p> </p>
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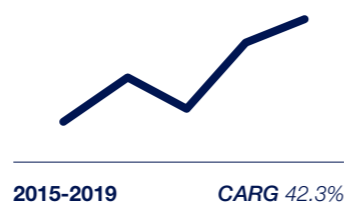
Representative Insurtechs invested by insurance companies, by business line (2018-2019).







The insurtechs' value proposition could complement the digital strategy of insurance companies. Insurtechs offer opportunities to improve existing products, services and business models. Insurers look outside their companies in insurtechs as a rich source of ideas and innovation.

Healthy Living*

These insurtechs use technology to offer a superior customer experience with lower cost in Health insurance.

Insurers can deploy these types of technologies to increase the customer experience or to free employees from routinary tasks and repetitive work to revenue-generating tasks or added-value works.



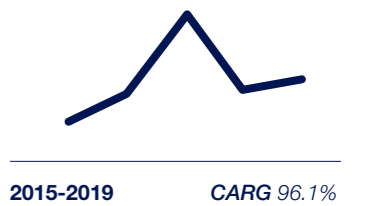
 <p>Alan is a digital health insurance platform with a focus on user experience with an excellent price-quality ratio health plan.</p> <p><i>Total funds raised</i> \$26.8M</p> <p><i>Latest investment</i> \$40M</p> 	 <p>Bind uses proprietary algorithms, powered by machine learning, to lower healthcare costs, allowing to pay for what the client needs.</p> <p><i>Total funds raised</i> \$72.5M</p> <p><i>Latest investment</i> \$10M</p> 	 <p>Sensely's avatar and chatbot-based platforms assist insurance plan members and patients with what they need, when they need it.</p> <p><i>Total funds raised</i> \$26.8M</p> <p><i>Latest investment</i> \$15M</p> 
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*Read more detailed information about ecosystems in Chapter 3 "Liquid Ecosystems"

Healthy Living*

These Insurtechs are revitalizing a business line as traditional as Life insurance, with a new customer experience.

Insurers could add this kind of models to increase the digital customer experience in Life segment with innovative initiatives.

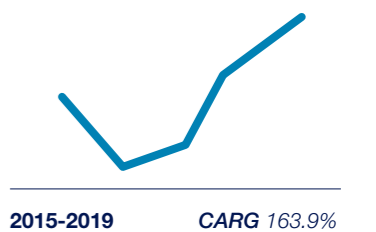









 <p>Singapore Life provides digital life insurance services.</p> <p><i>Total funds raised</i> \$173M</p> <p><i>Latest investment</i> \$90M</p> 	 <p>Offers life insurance in an easy way based on innovative technology.</p> <p><i>Total funds raised</i> \$54M</p> <p><i>Latest investment</i> \$10M</p> 	 <p>Yulife is a lifestyle insurance company that brings together life insurance, wellbeing, and rewards in one simple app.</p> <p><i>Total funds raised</i> \$16.6M</p> <p><i>Latest investment</i> \$12.7M</p>
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Business Shield*

AI and data analytics allow these insurtechs to offer better opportunities, prices and coverage.

As analytic, robotics and AI continue to advance, insurtechs will increase their capabilities in underwriting, pricing, and actuarial areas.



 <p>Finleap is an international Fintech company builder which provides access to seed capital.</p> <p><i>Total funds raised</i> \$116M</p> <p><i>Latest investment</i> \$47.5M</p> 	 <p>Acko is a new-age online insurance policy provider with its entire operations offered through the digital platform.</p> <p><i>Total funds raised</i> \$143M</p> <p><i>Latest investment</i> \$36M</p> 	 <p>Riskgenius Platform applies AI to insurance policies. Its customers leverage its custom algorithms and workflow modules.</p> <p><i>Total funds raised</i> \$60.5M</p> <p><i>Latest investment</i> \$0.5M</p>  
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Insurtechs invested by insurance companies, by technology and ecosystem* (2018-2019).

Cloud & Mobile Applications

41 (63%)
Total Startups (2018-2019)

\$3.8B
Total Fundings

Most insurers are migrating their applications to the cloud with the main objective of offering cost reduction through the flexibility, reliability and security that this technology implies**. This trend is affecting the insurers investments in startups where cloud and mobile applications technology is the most relevant technology in terms of funding and number of companies invested.

Cloud and Mobile Applications and artificial intelligence leverage Insurtech business models where data is analyzed and used to customize products, micro-segment markets and distribute products in a more efficient and transparent way.

*Go to chapter 3: Liquid Ecosystem

**Hype Cycle for Digital Life and P&C Insurance, 2019 (Gartner, 2019)

Cross



Smart Mobility



Healthy Leaving



Business Shield



Home Safe Home



Artificial Intelligence

🔥 41 (63%) Total Startups (2018-2019) 💡 \$3.8B Total Fundings

Cross



Smart Mobility



Business Shield



Big Data & Backend

🔥 6 (9%) Total Startups (2018-2019) 💡 \$0.2B Total Fundings

Cross



Home Safe Home



Virtual Reality & Augmented Reality

🔥 0 (0%) Total Startups (2018-2019) 💡 \$0B Total Fundings

Although virtual and augmented reality applications have a great potential regarding home and health insurance, in the last two years there has been a lack of emerging use cases outside of pricing and marketing of the value chain*. This fact also seems to be exposed in the insurers' investments because they did not invest in Insurtechs that develop this type of technology.

* Hype Cycle for Digital Life and P&C Insurance, 2019 (Gartner, 2019).

**Insurwave: the complete story with EY (Insureblocks, 2018) Ecosystem.

***AXA XL partners with Parsyl to offer enhanced Marine risk prevention services, (AXA XL, 2018).

Blockchain

🔥 0 (0%) Total Startups (2018-2019) 💡 \$0B Total Fundings

Blockchain is a technology with huge opportunities in the insurance sector, especially regarding smart contracts, but it is in an embryonic state yet.

Partnership



AXA XL is actively collaborating with marine blockchain insurance platforms launched such as Insurwave by EY, Guardtime, Microsoft, Willis Tower Watson and ACORD and piloted by Maersk**.

Internet of Things

🔥 2 (3%) Total Startups (2018-2019) 💡 \$0.2B Total Fundings

The value proposition of Insurtechs based on IoT technology is data enabling personalised insurance pricing: sensor data enables lower premiums for less risky behavior as well as faster access to verified risk management information. However, its use is limited by the low interest of the end user in regularly sharing IoT data, which reduces the incentives of insurers to invest in new companies or IoT implementations without proven results.

Partnership



AXA XL has partnered with Parsyl, which is a venture-backed supply chain data platform that helps shippers and insurers understand the quality conditions of their products through IoT technologies***.

Home Safe Home



Most active insurers in the Insurtech landscape.

While in the period 2010-2019 most of the insurers investments in the Insurtech ecosystem were made by American companies, from 2018 to 2019 both European and APAC companies increased significantly their market shares. European companies were the most active ones.

TOP 10 - Which are the insurers who have invested in more Insurtechs between 2010-2019?



TOP 5 - Which are the insurers who have invested in more Insurtechs recently (2018/19)?

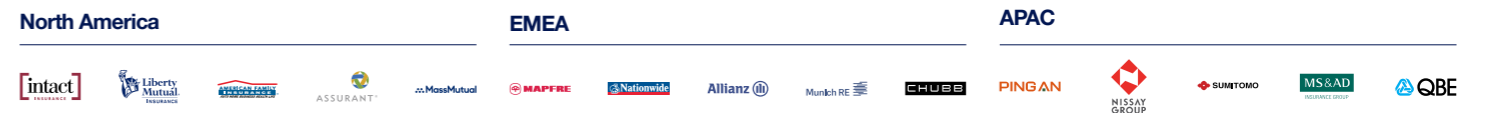


Considered under our research scope: includes companies which got funds from the main insurance groups in the period Jan. 2018 - Dec. 2019.

Other includes manufacturing, retail, consumer goods and media, among others.

Most active insurers in the Insurtech landscape.

From 2018 to 2019, 60% of the Insurtechs invested in by insurers have their headquarters in North America; 23% are European-based Insurtechs and 18% are APAC* and Israeli Insurtechs.



Nearly the 70% of the American elections to invest are the ones of their own region. They have invested more in B2B2C companies than in other kind of models.

Technologies: Cloud, Mobile & Applications and AI.

European insurers have invested more than 50% of the total in number in American Insurtechs. They also prefer to invest in cross industry companies.

Technologies: Cloud, Mobile & Applications and AI.

Recently, Asian insurers have invested mostly in non-life insurance business lines and in Marketing & Distribution regarding the value chain.

Technology: Cloud, Mobile & Applications.

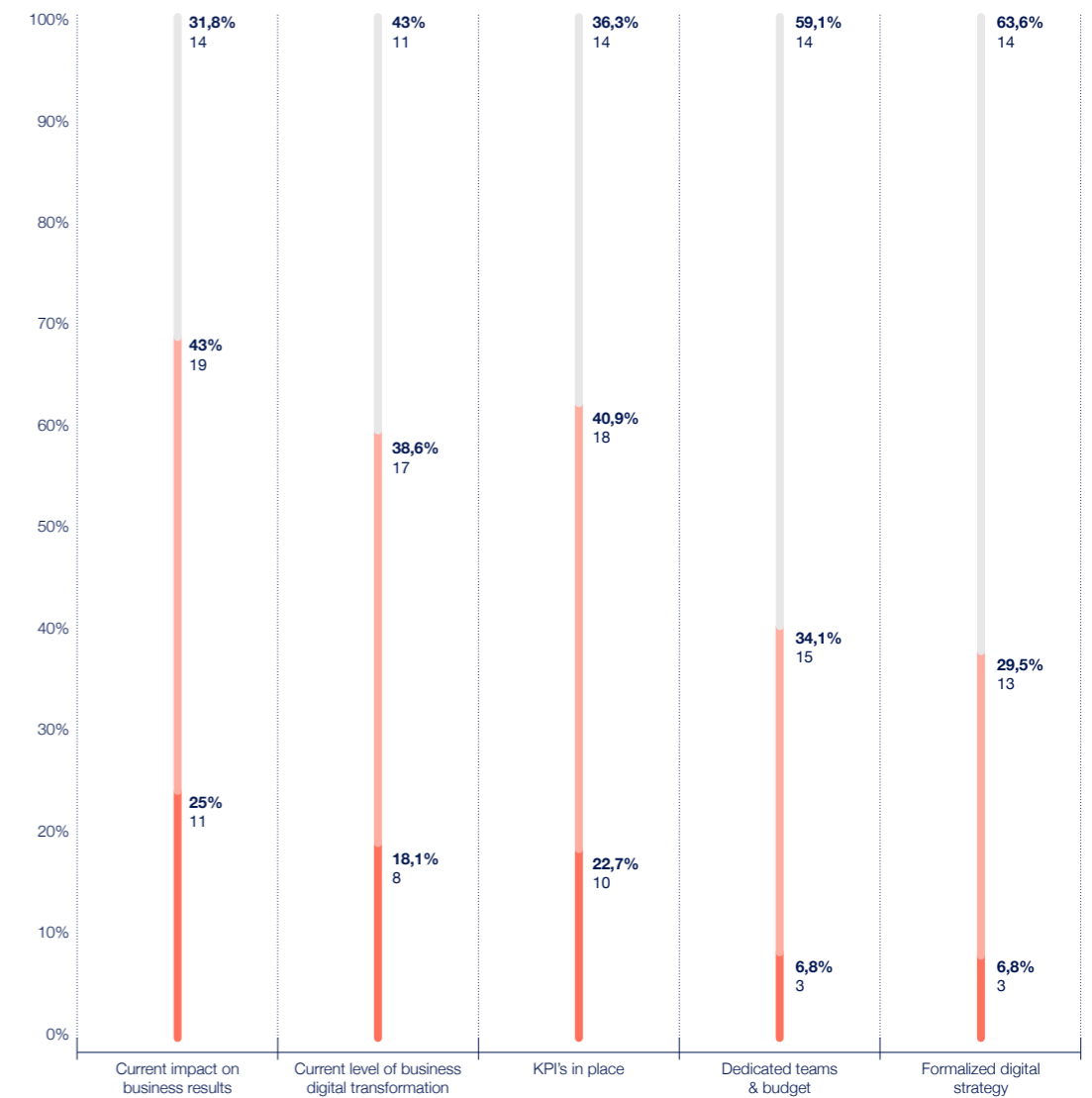
* Includes: Australia, New Zealand, China, Hong Kong, Indonesia, Japan, India, Singapore, Thailand, Vietnam, Philippines, among others.

Survey results.

Survey results.

What is the opinion of CEOs on the maturity of digital transformation.

How would you position the evolution of the digital transformation maturity of your company according to the following attributes?



- Level 1-2
- Level 3
- Level 4-5

Insights:

More than 66% of the respondents consider their company in a mature level (level 4-5) in the formalized digital strategy and the dedicated teams and budget attributes.

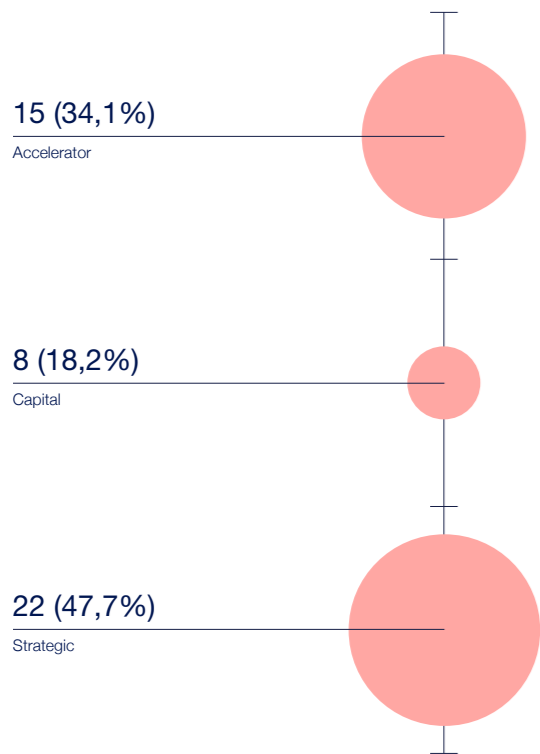
On the other hand, the lowest levels of maturity are identified in the attributes related to having the KPI's in place, as well as the current impact on business results.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Position in the insurtech ecosystem.

How do you think your company is going to position itself in the Insurtech ecosystem?



Insights:

The majority of respondents think that strategic positions are more consistently implemented in the short term by insurance companies. This sector is an expert on strategic relationship – usually the underlying assets business is external, making partnerships crucial.

Accelerators are fairly cheap and easy to implement, but the innovation and business improvements require the creation of an entire ecosystem that can be challenging to create.

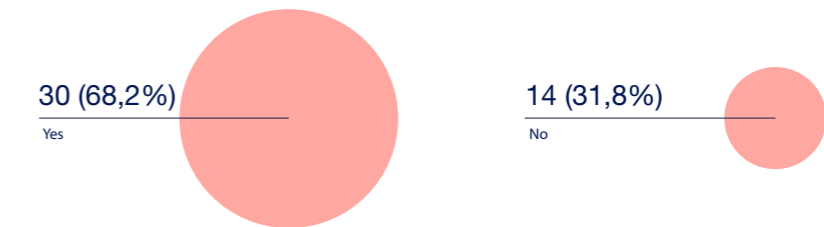
Capital investments are more risky. This decision differs from business as usual with uncertain ROI, intangible assets acquisition and divergence in culture, operational methods and conflict between stakeholders' positions.

Survey answered by 44 CEOs and executives of insurance companies worldwide

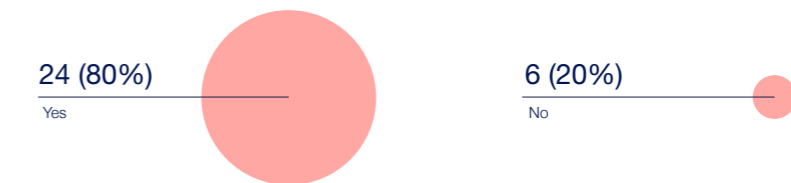
Survey results.

Collaboration with the ecosystem.

Did you collaborate with a startup and/or digital lab/accelerator? If so, could you please provide some details (e.g. name of startup/digital lab, etc.)?



For this collaboration, did you require any specific level of maturity to startups and their solutions?



Did you collaborate with...a startup and/or digital lab/accelerator?



Insights:

The interest to collaborate and innovate is evident in this industry. Most of the respondents have explored one of the options, giving the impression that they are proactively acting towards disruption.

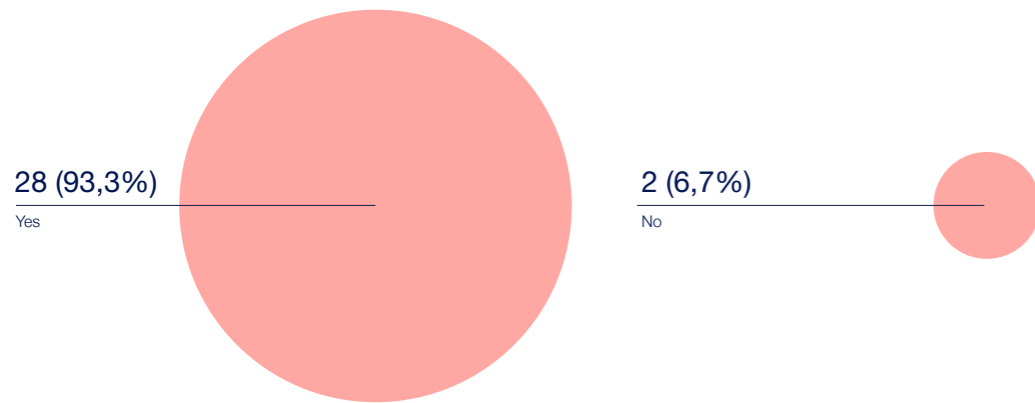
80% require specific level of maturity, signaling more structured processes of collaboration.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Strategy alignment.

Is the solution aligned with your business and IT strategy?



Insights:

Most respondents mentioned that the solution provided by insurtechs/startups is aligned with their business and IT strategy.

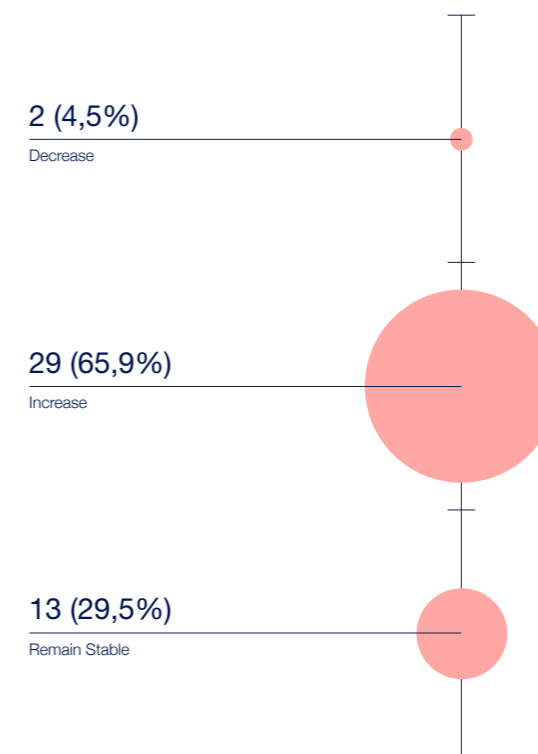
This is probably due to the understanding that startups have today about how to collaborate with solutions adapted to the more traditional industries, disrupting with more innovative and technological proposals.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Private funds trend towards the Insurtech sector.

Considering the growing sustained trend of private funds towards the insurtech sector in the last two analyzed years (2016-2018), do you think this trend will increase, remain stable or decrease over the next 3 years?



Insights:

Increasing private funds towards insurtech is a trend recognized by most respondents to continue growing. This is an evidence that the sector is not saturated and rather is perceived to give positive returns.

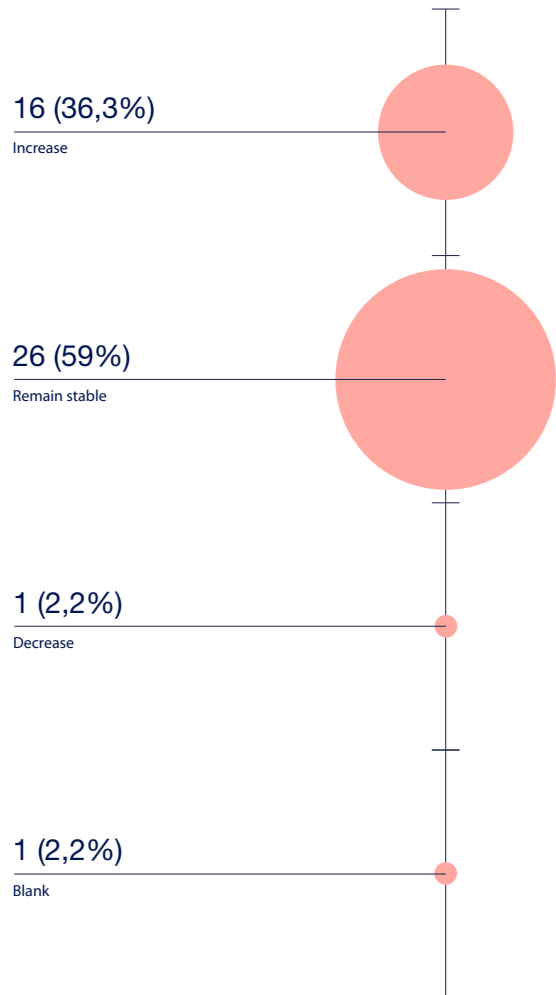
Aligned with the mentioned perception is the large minority of respondents to believe in the shift of the trend.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Investment in the startup ecosystem.

Assuming your company has a committed budget to invest in the startup ecosystem, do you think it will increase, remain stable or decrease over the next 3 years?



Insights:

Respondents see private funds as an increasing trend, but are reluctant to increase their own budget.

The insurance industry might prefer to be second movers and avoid direct startup investment risks, consistent with the intention to form strategic alliances.

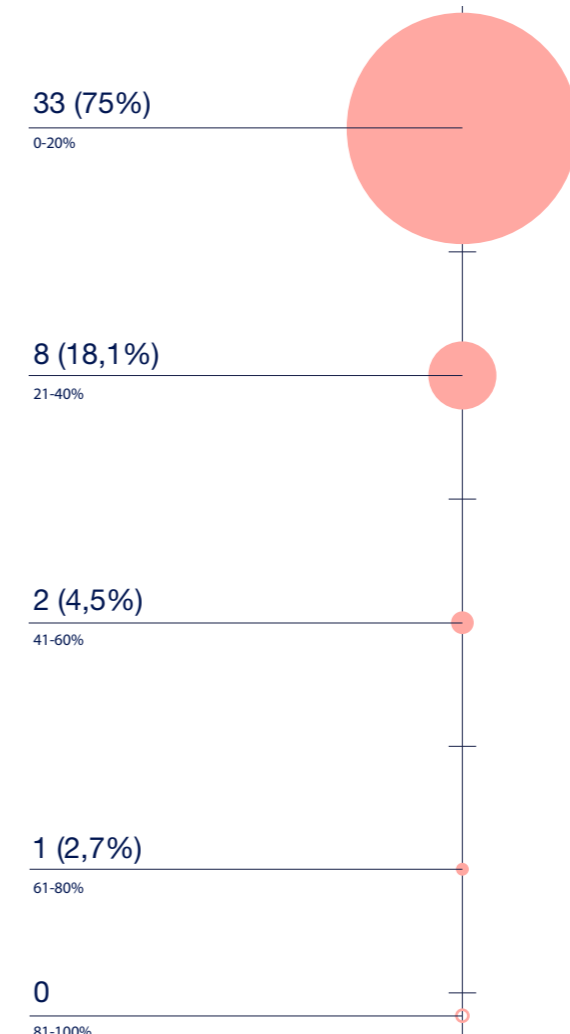
In addition, this fact can reflect the abundance of money available for this purpose already.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Insurance business at risk due to insurtech activities.

In 3 years, what percentage of the insurance business do you think could be at risk due to Insurtech activities?



Insights:

Most of the respondents do not believe 3 years is enough for insurtechs to put large part of their business at risk.

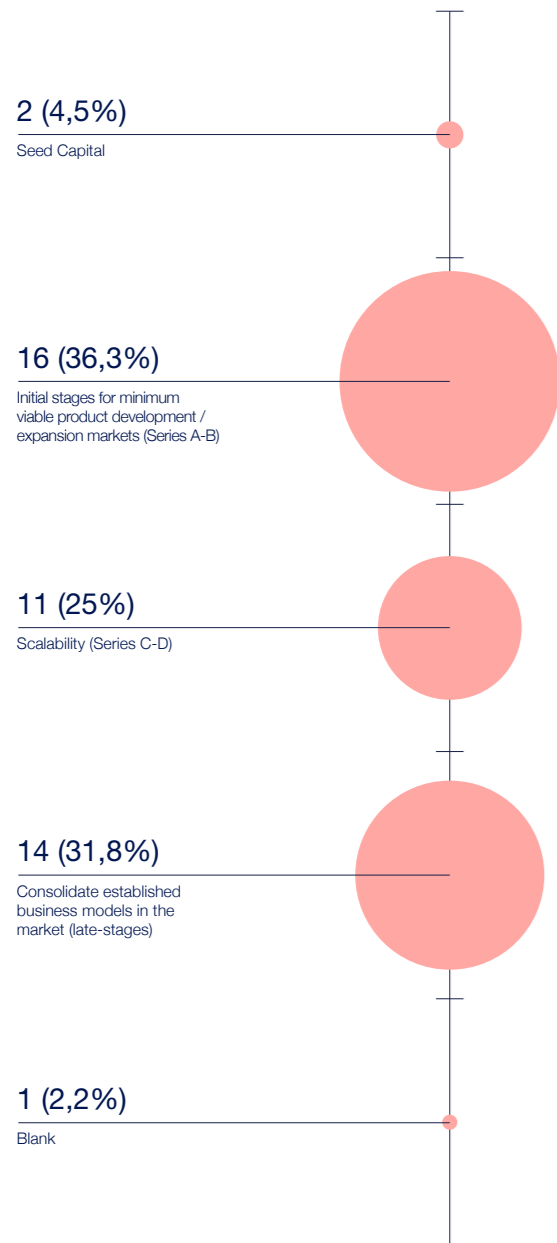
Probably, insurtechs of the past 3 years are not perceived to risk reasonable part of existing business, but to enlarge the opportunities.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Startup's levels of maturity.

At what level/or levels of maturity does your company prefer to invest in a startup?



Insights:

It is observed a relatively balanced sample. In opposition to structured collaboration, the direct investment by respondents does not seem to have a methodic approach.

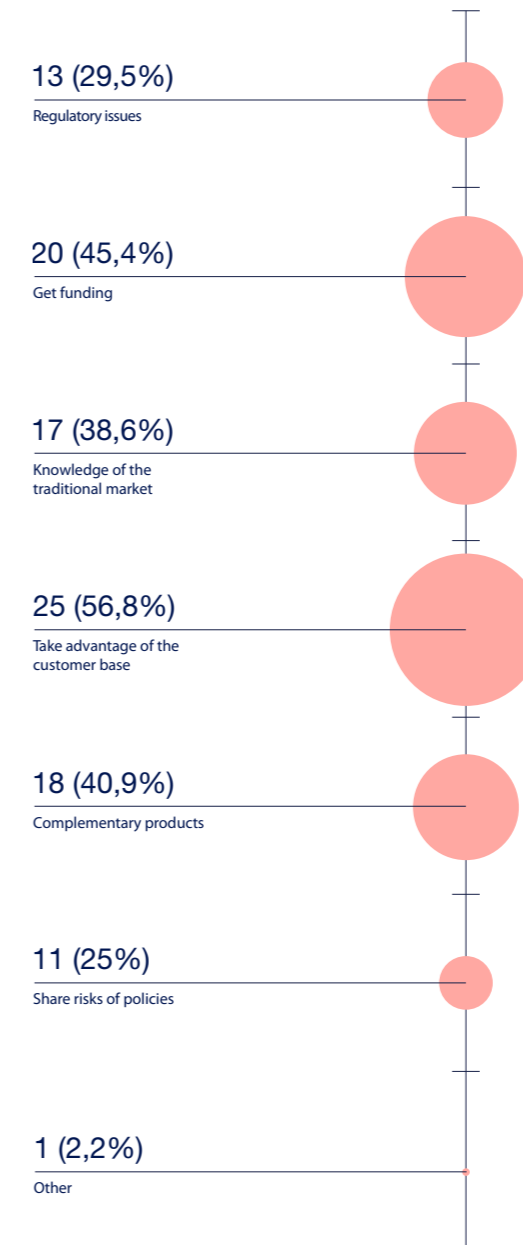
Also, this fact could be reflecting large budgets or different investment arms goals.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Partnership with startups.

In your opinion, why do you think a startup may be interested in partnering with a company like yours? (Please mark those cases that apply. You can choose one or more)



Insights:

Funding and Customer base are seen as the main reasons for startups to partner with respondents' companies. This is a natural interest and aligned with what was expected.

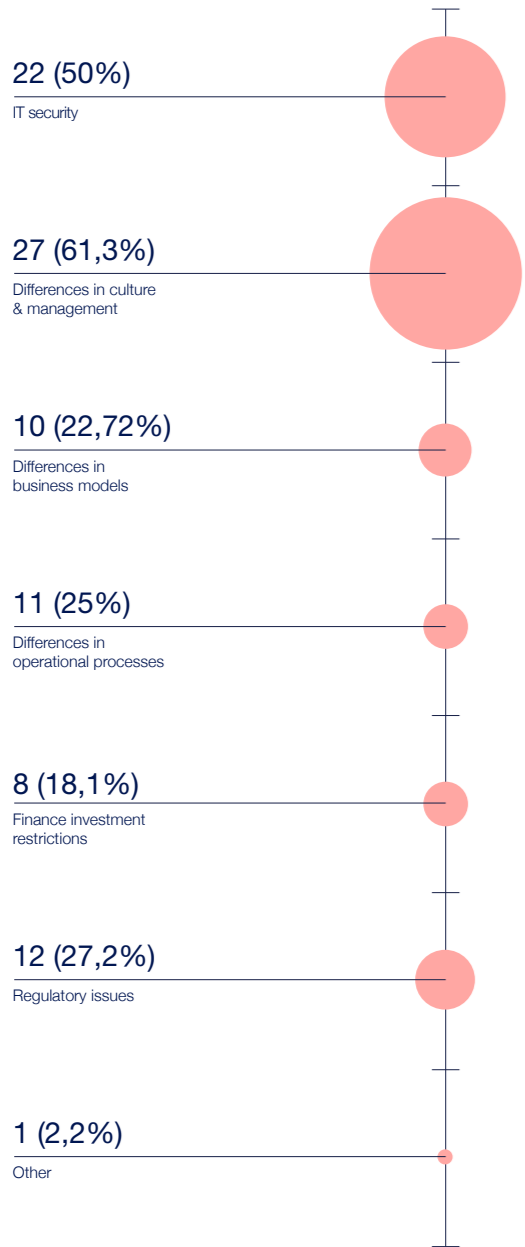
The variables Regulatory issues, connected with Knowledge of traditional market, are indeed complex and require more resources to overcome.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Survey results.

Barriers in partnerships with startups.

According to your company's experiences, what are the main barriers to partner with startups?



Insights:

Startups are unstructured with culture and workflow diverging from the industry guidelines, creating a challenge to align synergy and to form partnerships.

IT security is an important concern for respondents, since data breach probability increases with systems expansion or changes. Companies are more careful to integrate with startups.

Survey answered by 44 CEOs and executives of insurance companies worldwide

Conclusions.

Insurers investment



Insurers investment focused on its core business

From 2010 to 2018, insurers actively participated in the startup ecosystem, investing in nearly 270 tech firms in all sectors as a way to approach innovation based on new technologies and learn how to improve their existing processes.

In 2018-2019, Insurers have been investing more intensively in startups related to insurance activities, which rounds became larger and their business models are directly related to their core businesses.

The insurers' approach for collaborating in Insurtech is shifting to investing or acquiring, where Insurtech firms act as disruptive technological suppliers whereas insurers offer knowledge and extensive customer bases.

Partnerships in business line



Insurers/Insurtech partnership in all insurance business lines focus to tap challenges

Insurers and Insurtechs are partnering in all insurance business lines. Insurers' main objectives, common in all business lines, are to have better customer retention, new revenue streams and operational efficiency improvements, even though each business line has its own challenges and opportunities.

Smart home products, autonomous vehicles, new easier and simpler life products and hyper-personalised health products, among others, are imposing challenges for insurers to enhance their traditional value proposition, in order to adapt to the new digital needs and offerings appearing in their particular business line.

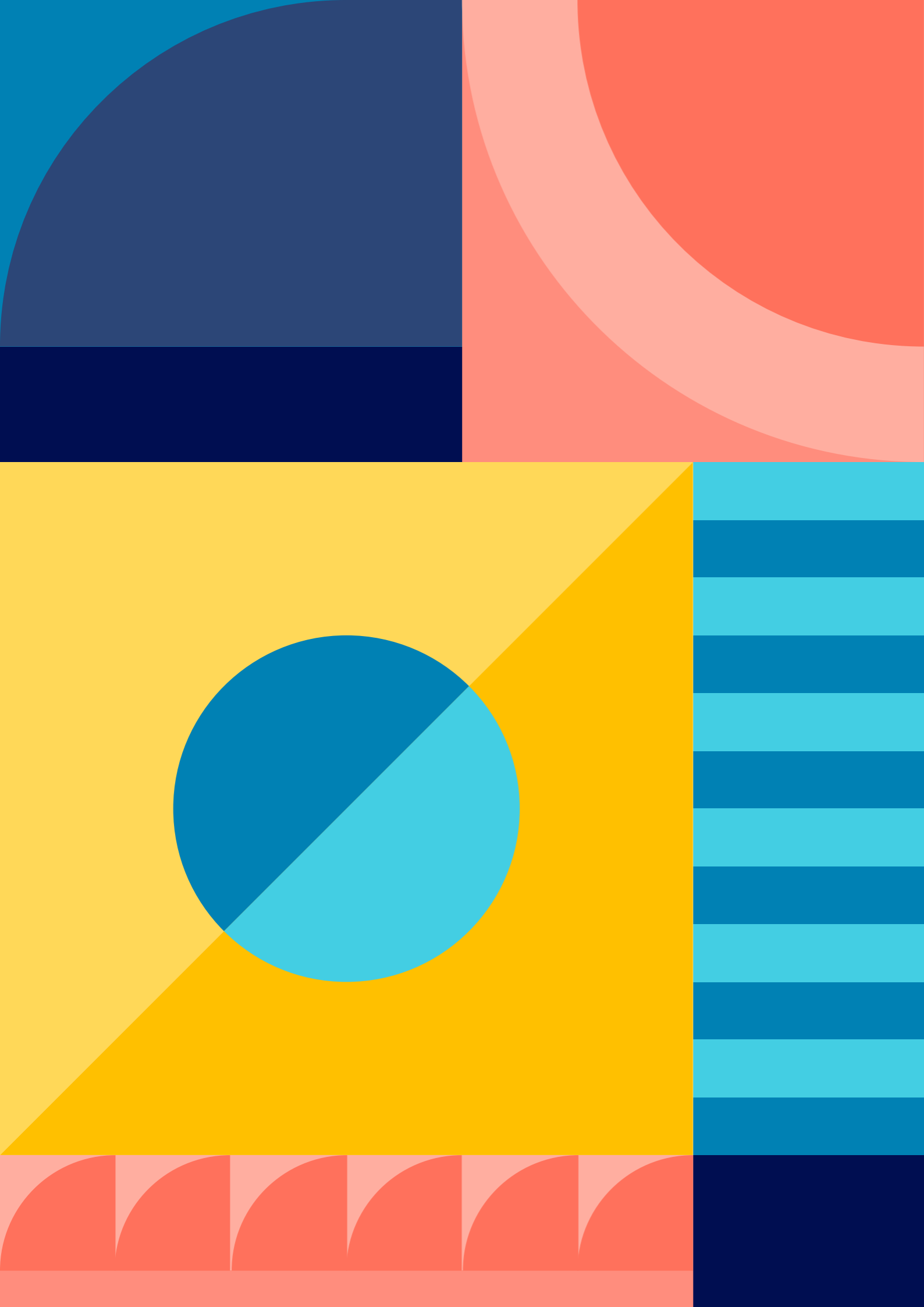
To keep creating value



The big challenge for insurers is to keep creating value in a new digital and reshaped insurance value chain.

The digitalisation of the insurance value chain is converging to one critical task: the capture, management and analysis of information to create incremental value.

Innovations based on data and technology facilitate simpler products like parametric insurance and highly-tailored products and pricing which are at the same time creating opportunities to drive new products and channel new customer strategies for insurers.



03

Liquid Ecosystems.

The liquid ecosystem.

From a value chain model to a constant flow network.

Probably, one of the changes that the insurance industry will experiment in the upcoming years is the fact that companies are transforming the way they interact with their customers. But, how? Relationships occur both ways, where a network of empowered customers (better known as personas), tech-savvy companies and different actors work together to deliver seamless and fluid experiences in a liquid ecosystem.

The liquid ecosystem goes beyond the classic categorization of sectors, value chains, business models or geographies; breaking the affected barriers between them and making all the ecosystems actors coexist inside a constant flow network.

The flow of movement within ecosystems is led by liquid personas who have a unique need. For so, they choose a platform to manage it in a hybrid way where they do not contemplate individual processes but all-in-one experiences where everything is included.

Let's think of a person in Barcelona (Spain) renting an electric car from a Germany-based startup, integrated with a navigation technology system developed in the USA with fully comprehensive insurance policy from a Swiss insurer. In the eyes of the user this is a seamless mobility experience.

In the disruptive technologies arena, it is a must to understand that it is not exclusive that industries themselves develop innovations within ecosystems. It is interesting to see how companies from other sectors bring highly innovative and technological proposals to provide a product or service with added value or with a different flavor than the current one.

Understanding liquid ecosystems

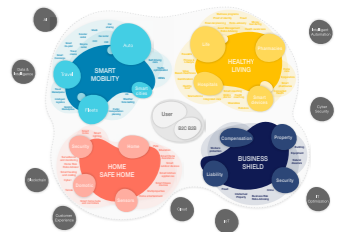
From a siloed value chain model to a constant and open flow network.

CLASSIC LINES OF BUSINESS

- ♥ Health
- ↑ Life
- 🚗 Auto
- 🏠 Home
- 🏢 Commercial
- 🔗 Cross

LIQUID ECOSYSTEMS

- 🌿 Healthy Living
- 🚲 Smart Mobility
- 🏠 Home Safe Home
- 🛡️ Business Shield



🌿 Healthy Living

New ways of living a healthy lifestyle with a 360° vision of personal health with the aid of technology.

🚲 Smart Mobility

Several mobility options whether on foot, by bicycle, public or private transportation with savings in environmental, economics and time costs.

🛡️ Business Shield

AI, Blockchain, Customer Experience, Cloud, Cybersecurity, Data & Intelligence, Intelligent Automation, IoT, and IT Optimization.

🏠 Home Safe Home

360° protection to businesses and workers.

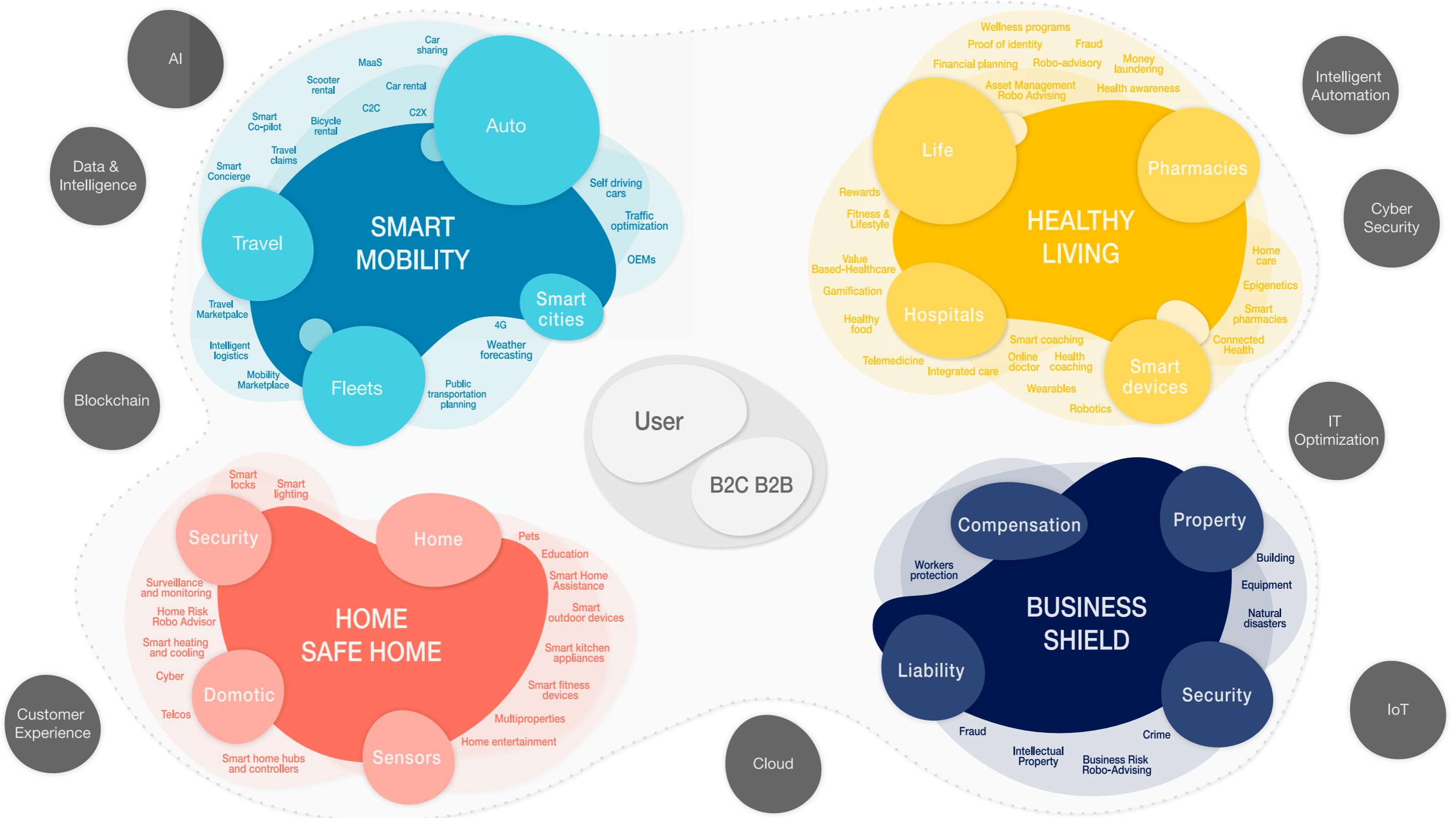
🌿 Business Shield

Generation of security, comfort, convenience and energy efficiency by allowing home owners to control smart devices directly.

🌿 Distribution enablers aggregation

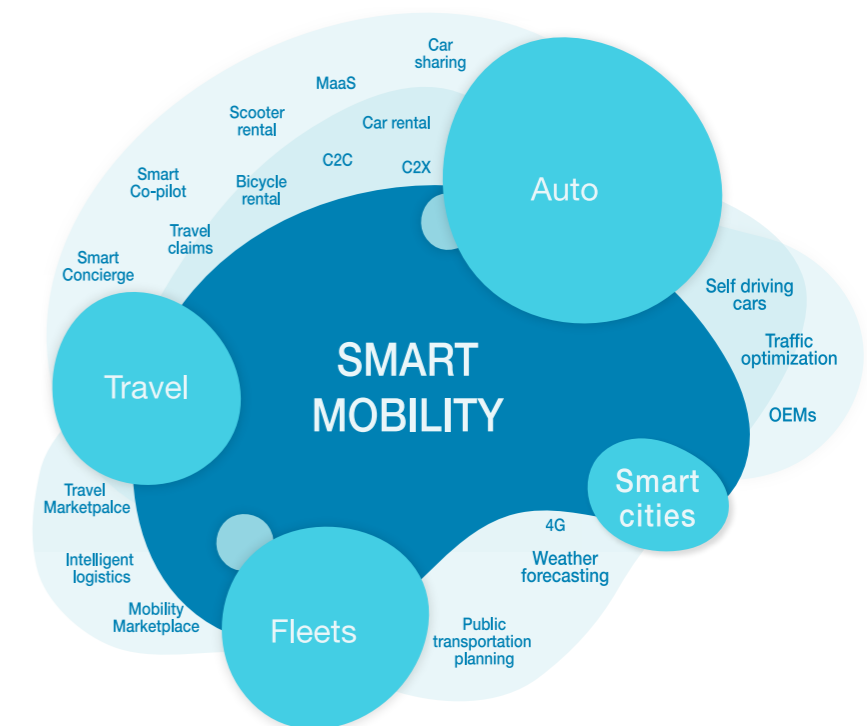
Assortment of platforms based on transparency, providing information through comparison and aggregation.

The Liquid Ecosystem



● Persona & B2B B2C in the center
 ● Companies and intermediaries
 ● Liquid disruptors
 ● Ecosystems

Smart Mobility.



For us, mobility has to do not only with the use of vehicles or commuting, but with all the time that people spend outside their homes or workplaces and how they decide to move between different places. It doesn't matter if the trip lasts 1 minute or 10 hours. Nor if it is done in a private vehicle, in a commercial vehicle or traveling with unknown people.

The world of mobility is changing by leaps and bounds in recent years. Whether due to regulatory changes, due to the high cost of owning a vehicle or the increasing environmental awareness, users are embracing the new transport models.

The lowering of the price of traditional rental cars, the emergence of shared car services and vehicle rental per minute (including motorcycles, bicycles and scooters) or the appearance of vehicles for hire (which have challenged the taxi sector) have radically transformed the way people move through cities. And we must also consider public transportation, which thanks to the exploitation of data, will be improved to adapt to the growing demand.

Elseways, many on-demand courier services have appeared (home delivery, packages, shopping in supermarkets...). This is because people's lifestyles have changed in such a way that the number of companies in this sector has been multiplied in order to meet the demands of users. Additionally, these users have less and less time and tend to buy online and receive products at their homes or workplaces, several times in less than 24 hours.

Likewise, people have more and more economic capacity to travel, so new companies and business models have also emerged around this new reality. From online flight and hotels comparators to low cost airlines to platforms that

bring together owners of tourist apartments and tenants who prefer this option instead of hotels.

All of the above changes represent a risk for insurers, who see, for example, how the number of auto policies associated with owned cars decreases. But on the other hand, new opportunities arise, such as the policies for ride-hailing service drivers, which are not covered while driving on their own (in their free time) or while waiting to receive requests from users (until the service is accepted). It will also change the way of insuring vehicles depending on the route chosen by the driver or the way he or she behaves while driving. And, of course, it also will affect carriers.

But, as well, it will happen with the policies associated with those vehicles that are in the spectrum of car-sharing (those that are rented for minutes in urban areas), car-sharing peer-to-peer (where the one who rents the car is a person and not a company) or ride-sharing (where the users are the ones to decide the route and share it with other users in exchange of a fee).

It will also be important the service provided by insurers, which should be increasingly adapted to each user, should be quick and easy to use, requiring the least effort from the client. In short, making life easier for him or her.

This mobility ecosystem will incorporate new actors. And those existing to date will have to give up part of their value chain to be transferred to the new ones. In this scenario, startups and companies that offer value through new technologies will occupy a relevant space in the ecosystem. What is certain is that many companies will have to change their current focus and move from offering their traditional portfolio to becoming value service providers for the new consumer.

Smart Mobility.

How TechGiants are reshaping the Smart Mobility ecosystem

Alphabet is leading the Smart Mobility ecosystem. It is the TechGiant that is more committed to this new scenario; it is investing in companies that go from the development of autonomous cars to commuting by using different types of vehicles (ride service hailing, food delivery, and a micro mobility system with electric bikes and scooters) or fleet management systems based on the choice of the most optimal or safest routes.

This trend will have its effects on the insurance industry in the upcoming years, when travelers or transport companies will be able to receive directly from their service provider a personalized insurance offer according to their specific needs. Baidu is also leading this ecosystem in Asia with the Apollo project.



How Insurtechs are reshaping the Smart Mobility ecosystem

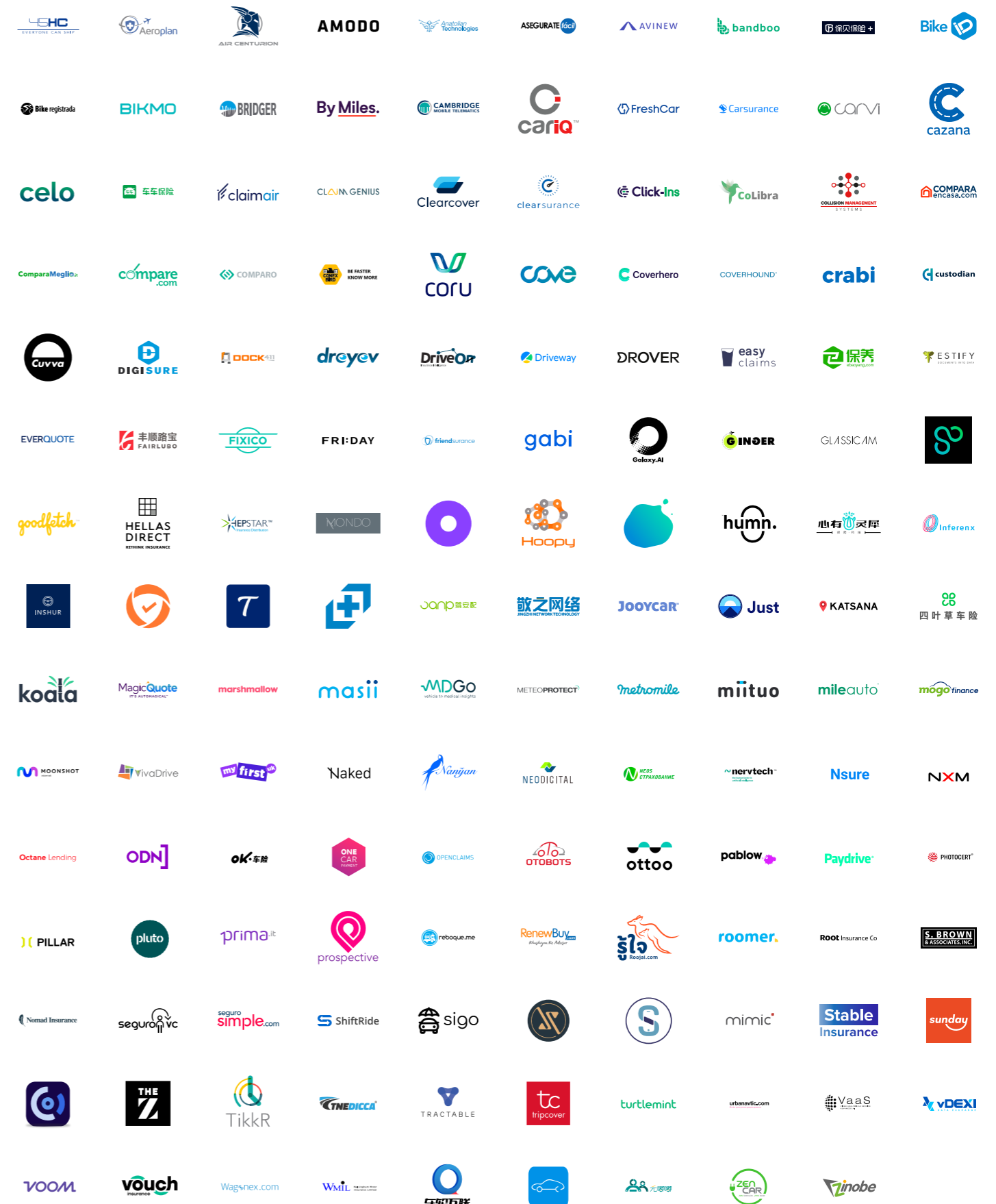
78% of the investment in the startups of this ecosystem (a total of 153 companies) in the last two years was concentrated in Root Insurance, Cambridge Mobile Telematics, Octane Lending and Friday. Only the first two concentrated more than 50% of the investment in the last two years.

In 2019, the strongest entry was Friday, which in its first year received the amount of \$127M. In the case of Metromile, on the other hand, no investment was registered in 2019. It highlights the fact that two companies with a pay-per-kilometer model are ranked in the top five, taking into account that the first one operates in the USA and the other one in Germany.

Keep an eye on



From A to Z in Smart Mobility in Insurance



KEEP AN EYE ON
More detail on this subject?
keep reading the following pages

Root Insurance Co

Country: USA
Employees: 500-1001

Headquarters: Columbus
Founders: Alex Timm & Dan Manges

Auto Insurance

Industry

Product Design & Development

Value Chain

Auto

Line of Business

B2C

Type of client

Year 2015

Foundation date

USD 5M in 2016
(Series A)

First Round of investment

USD 350M in 2019
(Series E)

Last Round of investment

Coatue Mngmnt,
DST Global

Lead Investors

USD 527M

Total funding amount

RELATED STARTUPS:
Metromile / Friday



Root Insurance offers Auto insurance in a total digital process. This company is centered on its app, in which customers can buy personalized or standard plans that include liabilities, vehicle damage and medical coverage. Root's app collects data in customer's phones to determine customers rate using machine learning and Artificial Intelligence based on how they drive, and merges it with conventional data such as drivers age and home location to finally set the best plan and price.

Business model

Root relies on smartphone existing technology to gather clients information to better provide car insurance personalization and prices.

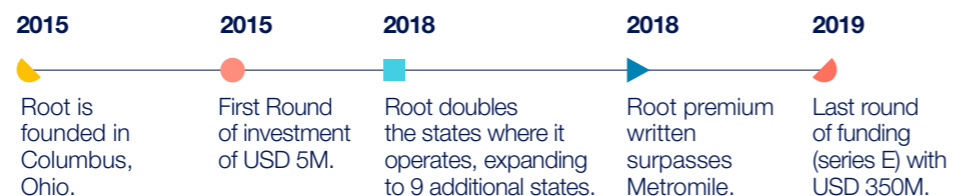
The company has capacity to model clients risks better than conventional insurance methods to offer more suitable plans and prices. Moreover, Root creates incentives to avoid adverse selection in its business, rewarding good drivers that are crucial to insurance business.

The whole digital process from purchase to claim is operationally efficient and scalable due to its Artificial Intelligence and machine learning competences to attend customers demands.

Market

Metromile and Root are expanding to acquire American Customers in new States. The company high expansion to new American states increased the number of claims giving the impression that the model differs within USA - and very likely in other countries. This framework presents the challenge for companies with similar value proposition to grow fast and adjust risk modelling at the same pace, making data of customers behavior and telematics extremely valuable.

Milestones



Country: USA
Employees: 101-250

Headquarters: Cambridge
Founders: Bill Powers, Hari Balakrishnan & Sam Madden

Auto Insurance

Industry

Product Design & Development

Value Chain

Auto

Line of Business

B2C B2B

Type of client

Year 2010

Foundation date

USD 2.5M in 2014
(Venture Round)

First Round of investment

USD 500M in 2018
(Venture Round)

Last Round of investment

SoftBank Vision

Lead Investors

USD 502.5M

Total funding amount

RELATED STARTUPS:
Shift / Root
Insurance Co



Founded in 2010, Cambridge mobile telematics is a technology company. Cambridge is developing solutions to provide insights regarding drivers behavioral risks, increasing accuracy and better fleet management of owners and Insurers. The technology works towards mobile existing sensors and IoT to collect and process data improving risk assessment, tracking and insights to its clients.

Business model

Cambridge mobile telematics is a SaaS company that provides valuable information to its customers.

Insurers or fleet owners can track vehicles, understand drivers behavior and access valuable insights that allows them to model better pricing and risks, track and even recover stolen cars.

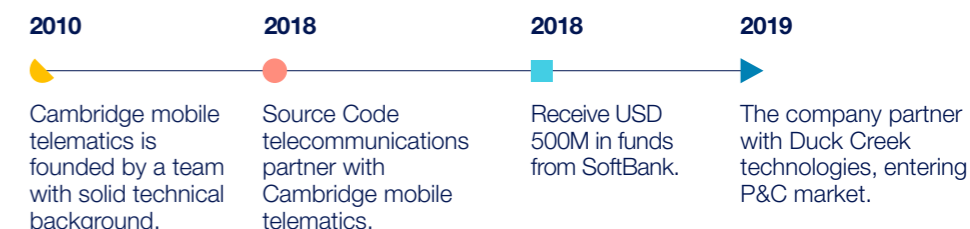
Moreover, Cambridge acts as Claims assistant Artificial Intelligence that provides insurance claims automation process that analyzes severity, location and several other information at the moment of a crash and informs Cambridge's clients.

Market

Most of this Cambridge clients are insurance-related companies that desire to collect relevant and actionable data for their business. Several Insurers and Insurtechs are investing in claims automation or telematics, signaling high potential market to Cambridge mobile telematics that counts with a strong technical team of founders.

Given the nature of the business model, Cambridge can not only create and improve its own product with machine learning and data, but also have a quick expansion.

Milestones



FRIDAY

Auto & Home Insurance

Industry

Marketing & Distribution

Value Chain

Auto, Home

Line of Business

B2C

Type of client

Year 2017

Foundation date

USD 127M in 2019

(Venture Round)

First Round of investment

Baloise Strategic Ventures

Lead Investors

Swiss Baloise Group

Insurer Investor

USD 128M

Total funding amount

RELATED STARTUPS:

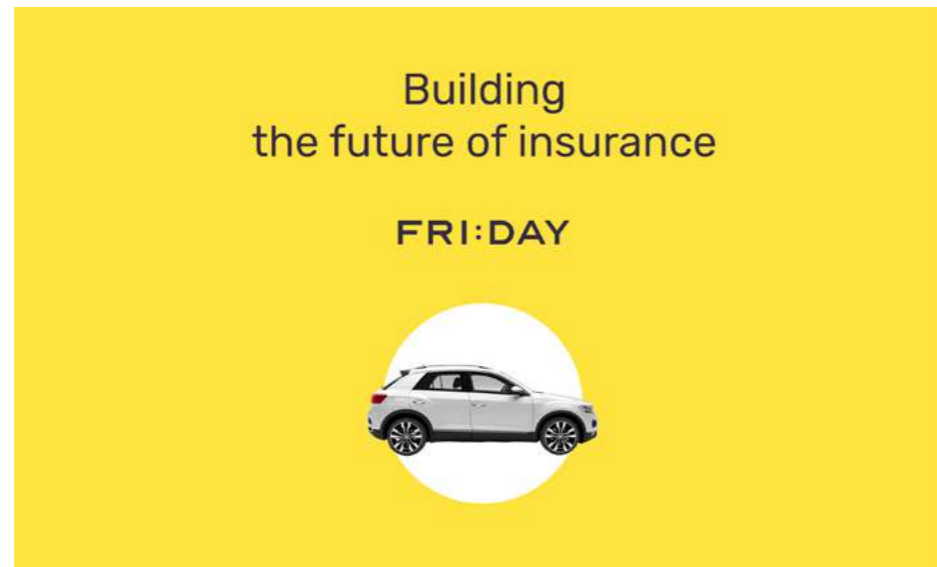
Metromile

Country: Germany

Headquarters: Berlin

Employees: 11-50

Founders: Christoph Samwer & Florian Eismann



FRIDAY is the first insurance company to introduce pay per mile in Germany. Perceived with fair Policy prices by its customers, the company uses an efficient pricing modelling and leverage knowledge from Swiss Baloise Group to offer simple insurance plans for cars and households in a digital yet traditional process that includes quotation, purchase and claims.

Business model

Friday offers mainly two products: car and household insurance to end customers, and an API to integrate its products: with brokers and partners.

The main plans have optional additional packages such as travel and Eco to compensate for Carbon emissions in one click. The whole process is online with premium prices and coverage rules explicit on the front end for the customer.

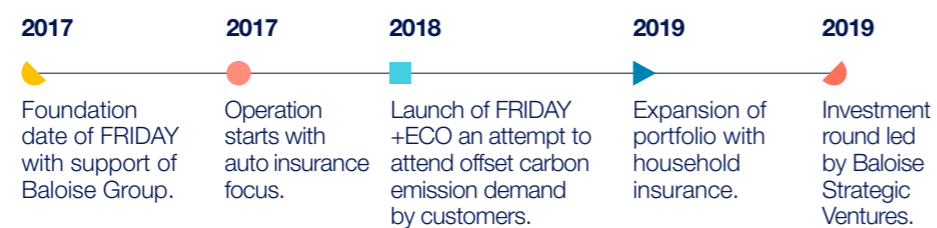
According to Gert De Winter, Baloise Group's CEO, the simple safe strategy, in which FRIDAY is involved, is one of the most profitable non-life portfolios in Europe and shows the commitment in the digital insurer company.

Market

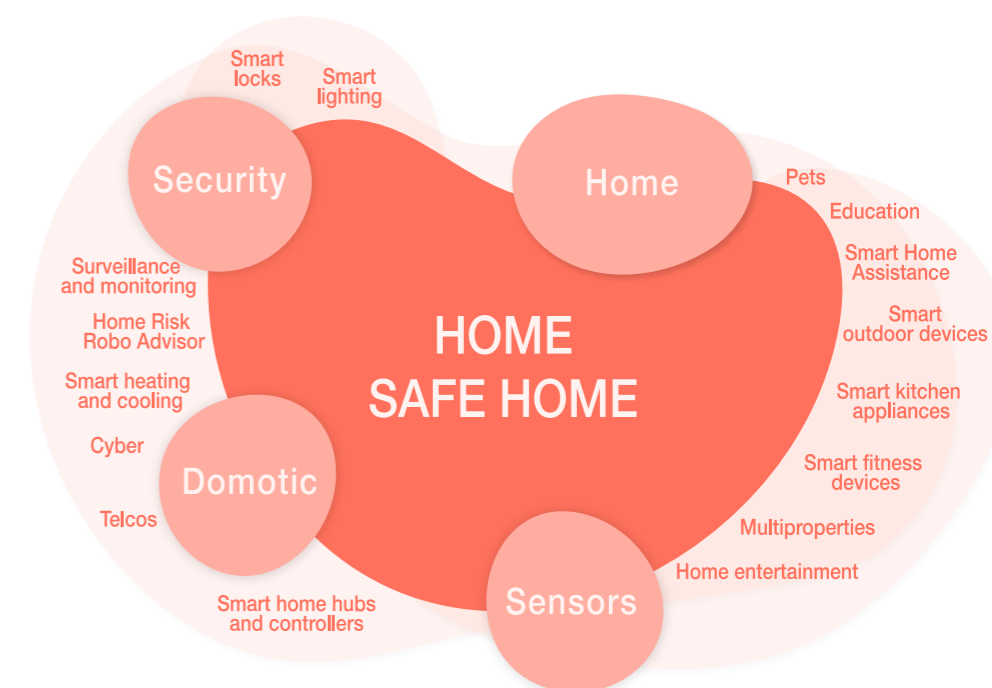
The company is present in 22 countries mainly in Europe with Headquarters in Berlin. FRIDAY products and services are provided digitally to customers that are used to buy traditional insurance or new entrants that values digital engagements and tailored products - that includes carbon compensation, shared cars and on-demand coverage while travelling or borrowing a car.

FRIDAY strategy involves third party investors in a media for equity deal to acquire more customers. In addition, the company is searching for more third party investors.

Milestones



Home Safe Home.



We like to envision the home as that place where people spend the most of their time. So that means a lot of things... We are talking about a lot of spaces that now, as a first glance, have nothing to do with what we consider a home according to the usual meaning of this word.

But we go much further. From our point of view, the home ecosystem is a mix that includes the house as a place where people often spend a few hours; but also their offices or workplaces, where people spend more than 8 hours a day and where they often prefer to receive packages of purchases they make online. Or even school or university, places where students are trained to be what they will be in the future.

It is in these spaces where we interact with others, where we enjoy our leisure (here we include music, social networks, messaging services, etc.), where we eat, where we educate our children, where we practice our hobbies or where our pets live. And above all it is the place where we store everything we buy (appliances, furniture, clothes, devices, books...) and it is the space to which we associate our subscriptions (music, cinema, television...).

All these examples are directly related to our way of life, and this has changed radically in recent years thanks to the capabilities of technology.

This is precisely the ideal space for the entry of technology companies, for the emergence of new players or for the digitalisation of traditional companies.

Let's think about how the improvement in connectivity and the 5G network will begin to allow homes to become connected homes. Aspects as different as home cleaning (autonomous vacuum cleaners), security control (cameras, smart locks, sensors and alarms), smart refrigerators, energy eco-efficiency (thermostats, lighting, smart plug control ...), systems for fire and smoke detection ...; and especially speakers and voice assistants that allow the control of many of these devices remotely.

All these devices will generate a huge series of data, which will serve companies to offer services increasingly adapted to the needs of people based on their behaviour. But it will also help insurers to offer personalised policies (if a house is safer or if the house can protect itself from the weather when it gets worse, the premium the user will have to pay will be cheaper). Users are going to have more and more connected devices in their homes and there is also a risk of receiving cyber attacks, which could cause power supply failures, for example.


In this new ecosystem, telecommunications companies, connected hub providers and insurance companies will play an important role.

Home Safe Home

How TechGiants are reshaping the Home Safe Home ecosystem

Amazon is the leader in the Home Safe Home ecosystem. Since its first launch of Amazon Alexa in 2014, it has been building more than a smart home gadget ecosystem. Is about new touch points with users inside the e-commerce and media environment. Such is the case of the partnership with the New York-based insurance company Travelers Insurance, offering the user the possibility to manage its home insurance policies and get home safety and maintenance tips by simply asking Alexa.

For the insurance industry it is important to work closely with the home devices developer and manufacturer companies, since there is a lot of data collected that can later be used to obtain insights on how people behave in their homes and in a future have the ability to detect possible home accidents and lower the high claims costs of insurers.

		
Leading 	Leading 	Leading 

How Insurtechs are reshaping the Home Safe Home ecosystem

65% of the investment in the startups of this ecosystem (a total of 35 companies) in the last year was concentrated by three American companies who are trying to transform the traditional home insurance: Lemonade, Kin and Hippo.

In 2019, Lemonade demonstrated to be running in a fast pace. With the investment of \$300M led by SoftBank, it will be able to start their expansion beyond the US with a first step on Europe and to explore new product lines. Also Hippo will start its expansion outside the US with its latest investment. On the other side Kin will continue growing on the national geography.

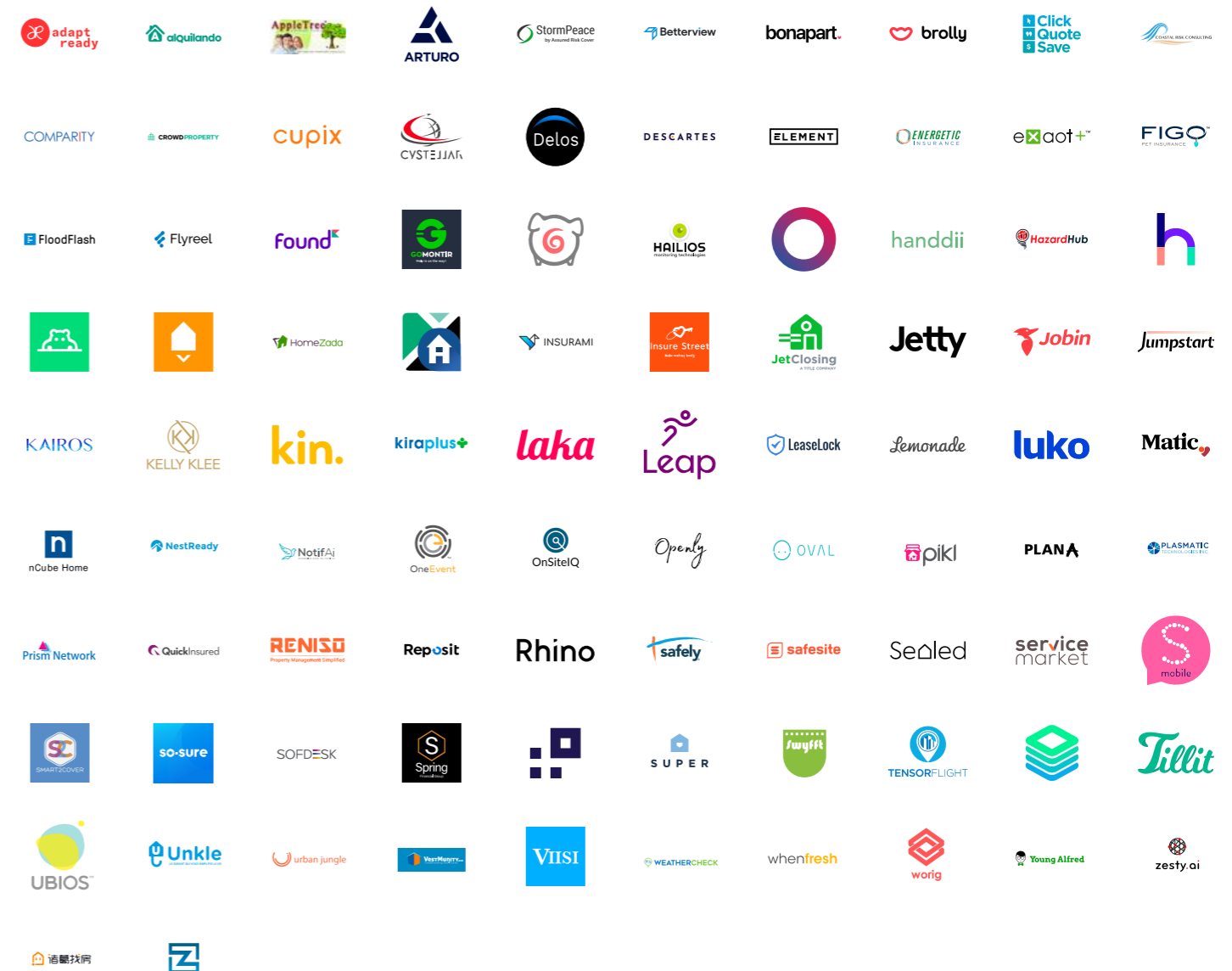
Regarding new players in the home ecosystem, a new startup was founded during 2019, the Croatian Worig, who raised \$65K.

Keep an eye on

		
\$300M 	\$47M 	\$100M 

KEEP AN EYE ON
More detail on this subject?
keep reading the following pages

From A to Z in Home Safe Home in Insurance



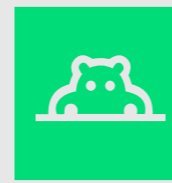
Lemonade

Country: USA

Headquarters: New York

Employees: 101-250

Founders: Daniel Schreiber & Shai Wininger



Country: USA

Headquarters: San Francisco

Employees: 101-250

Founders: Assaf Wand & Eyal Navon

Home Insurance

Industry

Product Design & Development

Value Chain

Home

Line of Business

B2C B2B

Type of client

Year 2015

Foundation date

USD 13M in 2015

(Seed)

First Round of investment

USD 300M in 2019

(Series D)

Last Round of investment

SoftBank

Lead Investors

Allianz, Allianz X

Insurer Investor

USD 480M

Total funding amount

RELATED STARTUPS:

Metromile / Naked / WEFOX



Lemonade

Get insurance in 90 seconds with Lemonade's app

Lemonade is an insurance company offering protection of personal belongings kept in customers homes. The digital platform counts with Artificial Intelligence to manage claims and uses partnerships with reinsurance companies to cover its portfolios. All products and services are optimized through technology with data scientists and usage of customers data that allow Lemonade to provide personalized and transparent policies with suitable premium-risk to each customer.

Business model

Lemonade offers coverage to belongings inside customers homes. Asymmetric information leads to inefficient premiums and attracts customers' with poor behavior (lemons), that is what Lemonade tries to avoid with fair pricing model and transparent policies. The company works to decrease operational costs via automation of insurance processes and have a flat fee business model - that is charged in all premiums to cover operational costs and expected profits. The residual, then, is used to pay claims and reinsurance partners. After all this costs are covered, Lemonade invests in social causes ("Lemonade Giveback"). The latter is a extra effort to incentivize less selfish acts from customers and frauds.

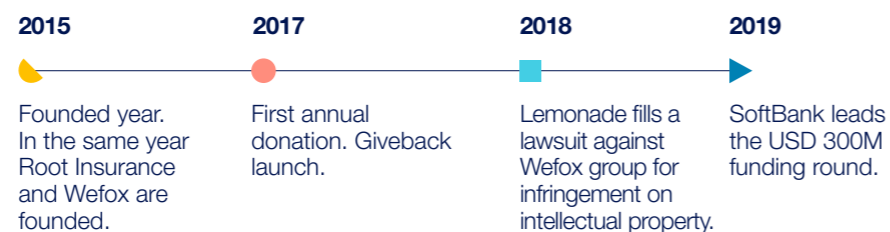
Market

The company operates in Germany and most of American states, making Lemonade one of few Insurtechs present in more than one continent.

Given the success of Lemonade, this model of efficient and personalized pricing in digital platforms is one step closer to the maturity.

For instance, few large Insurtechs in USA seem to concentrate a disproportional part of the funding and market.

Milestones



Home Insurance

Industry

Product Design & Development

Value Chain

Home

Line of Business

B2C

Type of client

Year 2015

Foundation date

USD 14M in 2016

(Series A)

First Round of investment

USD 100M in 2019

(Series D)

Last Round of investment

BOND

Lead Investors

Munich Re Ventures

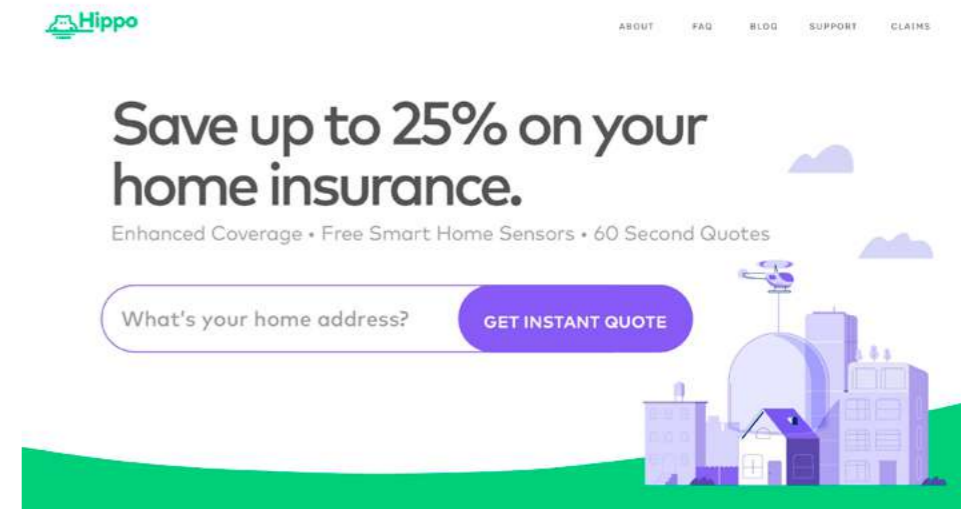
Insurer Investor

USD 209M

Total funding amount

RELATED STARTUPS:

Lemonade / Root Insurance Co



Based in San Francisco, California, Hippo is a home insurance company with a proactive loss prevention approach and automated coverage process. Using smart devices, Hippo focuses on prevention and home safety to provide premium discounts and diminish the claims of possible fire, water damage and break-ins of its customers homes. The whole insurance process from purchase to claims can be assisted by phone, chat, email or twitter.

Business model

Hippo lowers premium prices by automating the insurance process and diminishing claims through smart devices.

This insurtech works with several partners to hold their policies' risks, reinsure its portfolio and underwrite policies. Also, Hippo provides its own coverage products with complimentary smart sensors and tailored policies to current lifestyles with different sets of home belongs.

Hippo's online platform sells partners products and recognizes customer's home features automatically. The company counts with an edge technology to operate, while developing products to adapt current customer lifestyles trends.

Market

Hippo is a licensed insurance company and operates in 20 US states.

Even though Hippo uses technology to automatize the insurance process, the company focuses on the user's whole experience using concierge claim service and technology to enhance and personalize home owners insurance processes.

The company also avoids risks rejecting certain types of properties coverage, but offers partners products as part of its portfolio to cover additional needs from its customers.

Milestones



kin.

Country: USA

Headquarters: Chicago

Employees: 51-100

Founders: Lucas Ward, Sean Harper, Sebastian Villarreal, Stephen Wooten



Kin offers homeowners insurance products to protect customer's homes and related assets against different types of risks such as flood, hurricanes and theft. Through an online platform, Kin collects and analyzes data to recommend a suitable coverage and provides home devices deals that can be purchased by its customers. The whole process is digital and transparent, allowing customers to buy intuitive coverage in minutes.

Business model

The company personalizes home insurance providing coverage for additional risks such as guest medical expenses (in case someone is hurt at customer's home) and hurricane protection. Kin analyses different sets of data to recommend personalized insurance or additional services and smart home devices, increasing the coverage efficiency and lowering potential risks.

Kin is an insurance provider and connects customers with partners. The company is paid commission and uses partners to underwrite, reinsure policies and offer additional connected security devices.

Market

Kin is expanding within USA- California is in the company expansion plan- and is available in Florida, Alabama, Georgia and Texas.

The company owns a recommendation system that searches for the best coverage available to each customer specific needs working with partners to build plans, secure homes through smart devices and reinsure its portfolio to satisfy American homeowners insurance demand for natural disaster, theft and other coverages.

Milestones



Home Insurance

Industry

Marketing & Distribution

Value Chain

Home

Line of Business

B2C

Type of client

Year 2016

Foundation date

USD 650K in 2016

(Pre Seed)

First Round of investment

USD 47M in 2019

(Ventures Round)

Last Round of investment

August Capital

Lead Investors

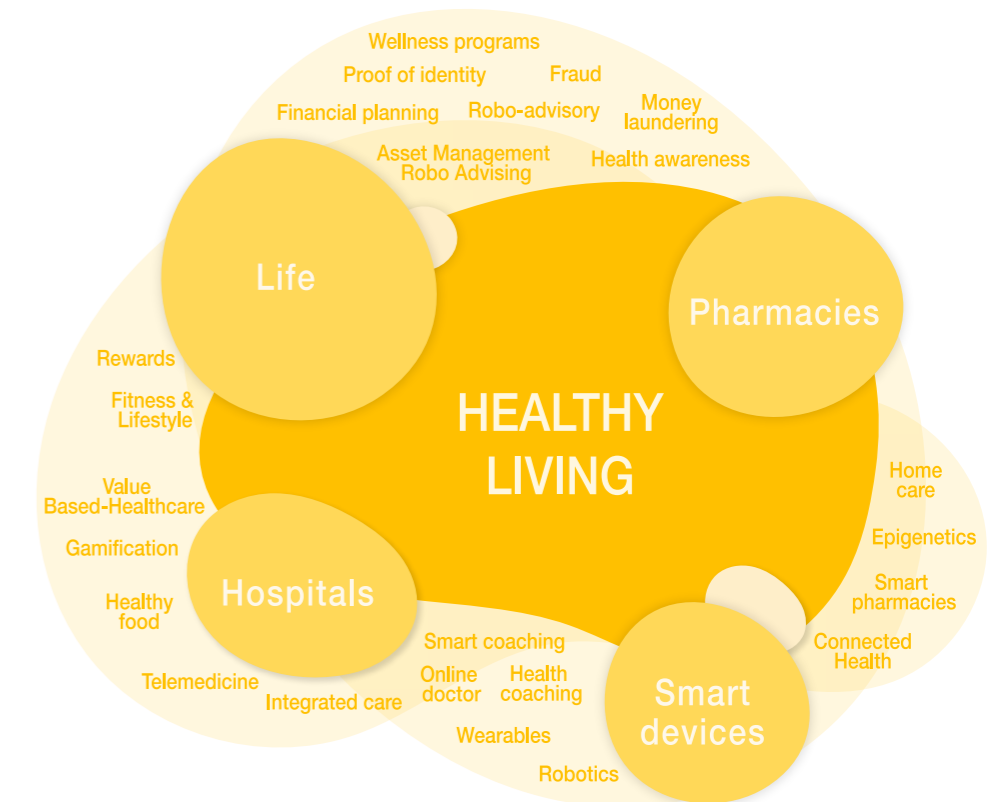
USD 64M

Total funding amount

RELATED STARTUPS:

Hippo

Healthy living.



People in developed countries are living longer and longer. The progressive disappearance of diseases, together with improvements in lifestyle habits, have meant a great change in recent decades. Living longer and doing it better has become one of the challenges of our time.

For years we have seen how people are more interested in eating healthier and exercising more. Taking care of oneself has become an important part of life, and it is no longer done only as a response to the excesses committed with food or drink or by the lack of physical activity, but it is done in a preventive way.

It is already a lifestyle in which the user is informed and selects the ingredients of the meal (both those bought in supermarkets and those consumed in restaurants) and where nutritionists consultations are also used to improve the way of eating and, therefore, of having a better health.

Sports practice is another aspect related to this change into healthier lifestyles. People are increasingly aware that exercising helps them have a better quality of life. And as with food, it's not just about everyday life, but it has its benefits in the future.

For many years now, and progressively, people have spent part of their time and budget practising sports on their own or in sports facilities. In addition, thanks to wearable devices, they know their performance and evolution and are actively involved in maintaining this lifestyle.

Health companies and insurers are also impacted by this change in longevity and new healthy lifestyle habits. They are starting to reward users (with discounts on premiums) that show them that they take care of themselves on a daily basis, since, among other factors, healthier users generate less hospitalization costs.

On the other hand, thanks to the use of data, medicine and health services can be increasingly preventive and will help people much earlier, without waiting for symptoms to be more noticeable. Likewise, advances in the field of genomics will allow the production of hyper-personalized medicines designed specifically for each patient.

The challenges for the insurance industry in relation to people's health are many, but so are the opportunities that arise for insurers.

Healthy Living

How TechGiants are reshaping the Healthy Living ecosystem

Alphabet (including CapitalG and GV) is clearly heading the healthy living ecosystem surrounding itself from big names some of them are: Fitbit (Wearables), Calico (longevity and well-being research), Verily (life-science research), 23andMe (genomics), Oscar Health (insurance) and Doctor on Demand (telemedicine).

The insurance industry is a key actor in this ecosystem moving from its traditional role in the financial compensation to a prevention and mitigation partner of the healthcare industry.

The Chinese web giant Tencent is a strong player with its “everything app” - WeChat has integrated a messenger app with healthcare, insurance, payments, gaming among other features that is promoting the environment so a new ecosystem flourishes.

		
Leading 	Leading 	Leading 

How Insurtechs are reshaping the Healthy Living ecosystem

70% of the investment in startups of this ecosystem (a total of 69 companies) in the last year was concentrated by four companies: Bright Health, Clover, Water Drop and Singlife. In the case of the US, companies their respective significant investments affirm how investors are visualizing a better healthcare experience to meet patients' demands.

Both Asian startups Waterdrop and Singlife are betting hard on the disruption of the health insurance industry by offering a digital experience powered by smart technologies.

New health startups like Nadia, Hey Healthcare and Osana emerged during 2019.

Keep an eye on

		
\$500M 	\$635M 	\$145M 

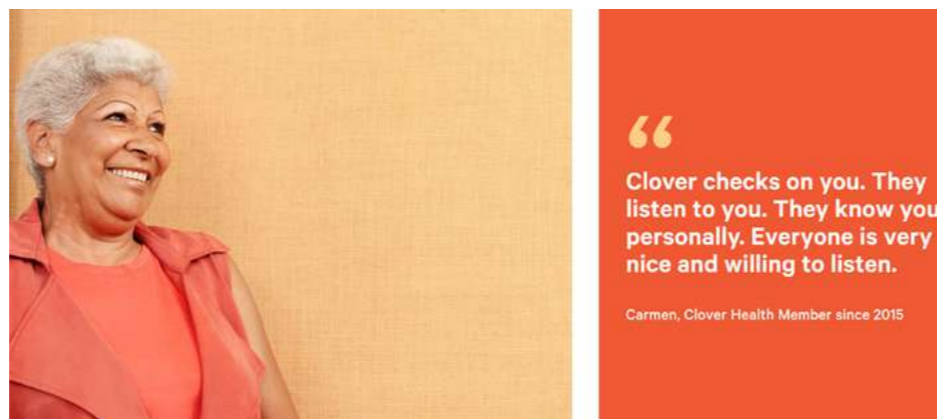
KEEP AN EYE ON
More detail on this subject?
keep reading the following pages

From A to Z in Healthy living in Insurance

Clover

Country: USA
Employees: 501-1000

Headquarters: Sunnyvale
Founders: Kris Gale & Vivek Garipalli



Clover is an Insurance company in the USA focused on Medicare – the American Federal insurance Program for elderly. Customers can enhance their public health plan by adding Clover coverage that will provide from 24/7 doctors to online digital assistance. Clover works with its network of health providers that includes gyms, board doctors, pharmacy and In home care nurses. Since Clover’s customers are elderly people, the company offers both online and phone calls to assist new customers in the whole purchase process or existing customers to require any service or request help.

Business model

Clover has its own network of health care providers that is available to all customers that pay a premium to have personalized services.

This customers must have Public Medicare coverage to acquire Clover insurance. That will solve main elderly pain points such as human assistance, pharmacy refill and in person check ups. Clover business scalability requires an hybrid between technology and human labor due to its humanized and personalized services to attend this specific target customer.

Market

Since Clover operates as an additional to public health care, the company is exposed to structural risks.

For instance, privatization of Medicare would probably change Clover entire operations and open new opportunities for the domestic sector in general.

Clover is delivering its products and services in only seven American states which contrasts with the number of markets of other new insurance companies, signaling Clover specific challenges to expand.

Milestones



Health Insurance

Industry

Marketing & Distribution

Value Chain

Health

Line of Business

B2C B2B

Type of client

Year 2013

Foundation date

USD 100M in 2015
(Series A)

First Round of investment

USD 500M in 2019
(Series E)

Last Round of investment

Greenoaks

Lead Investors

USD 925M

Total funding amount

RELATED STARTUPS:

OSCAR /
Bright Health

水滴

WATERDROP INC.

Country: China
Employees: 70

Headquarters: Beijing
Founders: Shen Peng



Health Insurance

Industry

Marketing & Distribution

Value Chain

Health

Line of Business

B2C B2B

Type of client

Year 2016

Foundation date

USD 24K in 2015
(Seed)

USD 750K in 2016
(Series A)

First Round of investment

USD 145M in 2019
(Ventures Round)

Last Round of investment

Boyu Capital, China Capital Investment Group, Gaorong Capital, Tencent Holdings

Lead Investors

Ping An

Insurer Investor

USD 220M

Total funding amount

RELATED STARTUPS:

Naked / Zhong An

Waterdrop is a Chinese platform that connects insurers with potential customers and allows people to start crowdfunding campaigns to help patients in need of financial support in health care expenses. Founded in 2016, the company counts with more than 80 million users and its mutual fund helped almost 10 thousands families.

Business model

The company operates with risk pooling efficiency and provides health insurance or mutual aid fund in China.

Users can engage in social platform (WeChat) to ask for healthcare aid and receive financial assistance from millions of users. Besides that, the company increases the trust using technology to improve transparency and eliminate false caring demand.

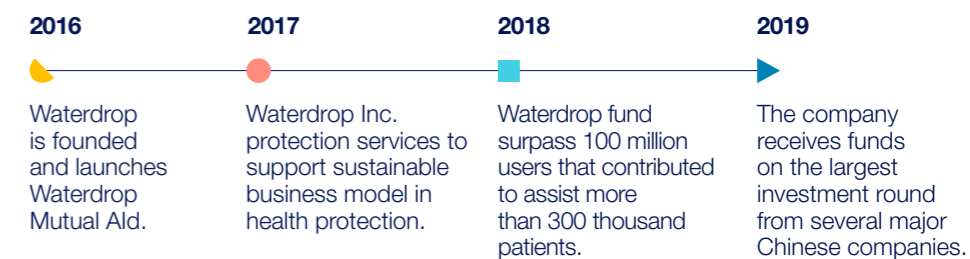
Waterdrop offers low cost and cost-effective insurance with assistance of large partners that includes Ping An and Zhong An insurance companies and became the one of the main distribution channel for several Chinese insurance companies.

Market

Waterdrop positions to be a health care provider to assist families in need and distribution channel for Chinese insurers

The company counts with leading Chinese enterprises assistance and funding to continue to protect major not covered diseases and create a positive impact in the social insurance ecosystem.

Milestones



Country: USA

Headquarters: Cambridge

Employees: 101-250

Founders: Kyle Rolfing, Robert John Sheehy & Tom Valdivia



Bright Health operates in the USA offering both Individual/Family plans and Medicare. The company is consumer focused driven by technology to enhance the experience, simplifying and digitalizing the health insurance process. By using its healthcare network - with doctors, clinics and hospitals – and analytics, Bright Health provides efficient prices and products to its customers.

Business model

Bright Health has its own network of healthcare providers that is available to its customers. In the website, customers can access Bright healthcare partners network that is one of the company focuses and selling points to end customers.

The company provides products and services for insurance providers, brokers and navigators that are able to partner with Bright Health and connect with its large customer base.

Furthermore, end customers can quote, purchase and receive assistance in Medicare, individual and family plans in the Bright Health online platform.

Market

Bright Health's value proposition is addressed to all Americans in need for health insurance, healthcare providers and insurance brokers.

The company is present in 12 states in the USA, being highly exposed to American Regulations as large Health insurtechs such as Oscar and Clover.

Milestones



Health Insurance

Industry

Marketing & Distribution

Value Chain

Health

Line of Business

B2B B2C

Type of client

Year 2015

Foundation date

USD 80M in 2016

(Series A)

First Round of investment

USD 635M in 2017

(Series D)

Last Round of investment

New Enterprise Associates

Lead Investors

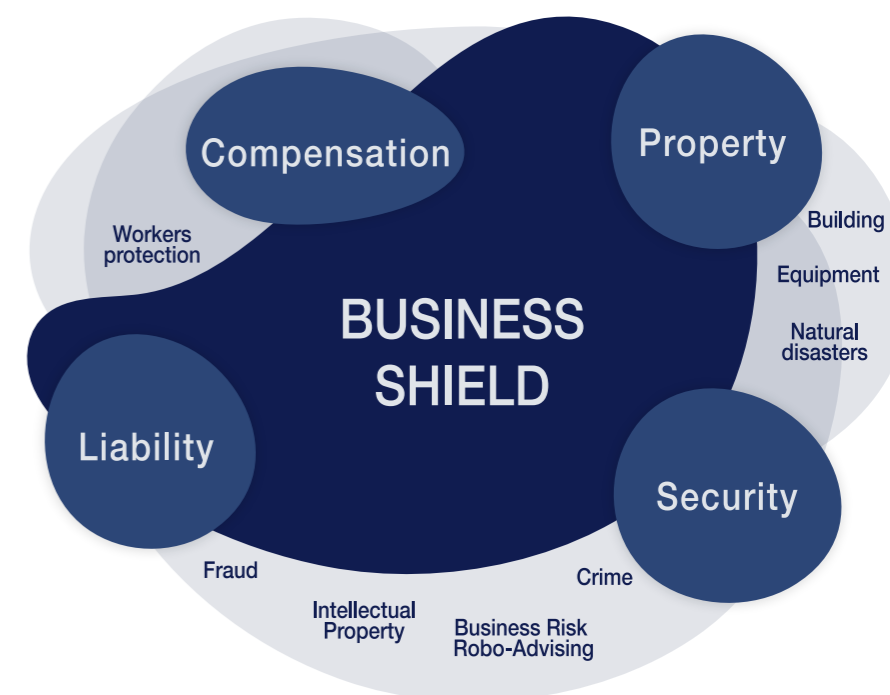
USD 1.1B

Total funding amount

RELATED STARTUPS:

Clover / Oscar

Business Shield.



Due to market evolution and competitiveness, companies have a major exposure to new risks that require making more decisions that are affected by regulatory changes and make companies willing to pay more for coverage and security adapted to these needs.

Companies, in this context, also need to make partnerships or agreements with other companies with which they had not yet thought about relating. Precisely at a time when consumers are more open to receive services or buy products from companies belonging to different sectors or even competitors with each other.

Traditional models are being reinvented. For example, the taxi sector has changed and requires companies (Cabify or Uber...) to protect their drivers in a different way than taxis protect their workers. In this case, drivers are only protected when they are hired for a service, while the traditional taxi driver is protected even outside their working hours or while they have no customers.

This change affects large and small companies, which are constantly evolving to offer value in an increasingly changing and competitive world, which demands business decisions and, therefore, leads them to take on new risks.

On the other hand, in this constant struggle to gain a foothold in the market is the digital relationship with customers. Not only in terms of online selling of products, but in the way in which data is collected and exploited, where security breaches can occur and where companies face legal and regulatory problems that can impact their activity and business continuity.

Companies, depending on their size and sector, have different needs in terms of protection, so many are looking for a one-site that helps them centralize their coverage options in a simple and personalized way. There is an opportunity for insurers to offer services adapted to this new reality, understanding this ecosystem more focused on commercial activity and B2B transactions.

Business Shield

How TechGiants are reshaping the Business Shield ecosystem

In the specific case of the Business Shield ecosystem, TechGiants are more focused on the direct relationship with consumers, knowing their needs and connecting directly with them, not entering into the traditional direct B2B relationship of commercial insurance.

Despite this, Asian giants are investing in developing B2B e-commerce platforms, since in this continent the level of digitalization of small and medium-sized enterprises is lower and therefore they need tools to be able to carry out their operations in countries where infrastructures are not as solid as in Europe or Asia.



How Insurtechs are reshaping the Business Shield ecosystem

52% of the investment in startups of this ecosystem (a total of 48 companies) in the last year was concentrated by four companies: Shift, Next Insurance, Bold Penguin and Summit Risk Advisors. The latter was founded in 2019 as well as Cowbell Cyber Inc, Incito and Wetterheld.

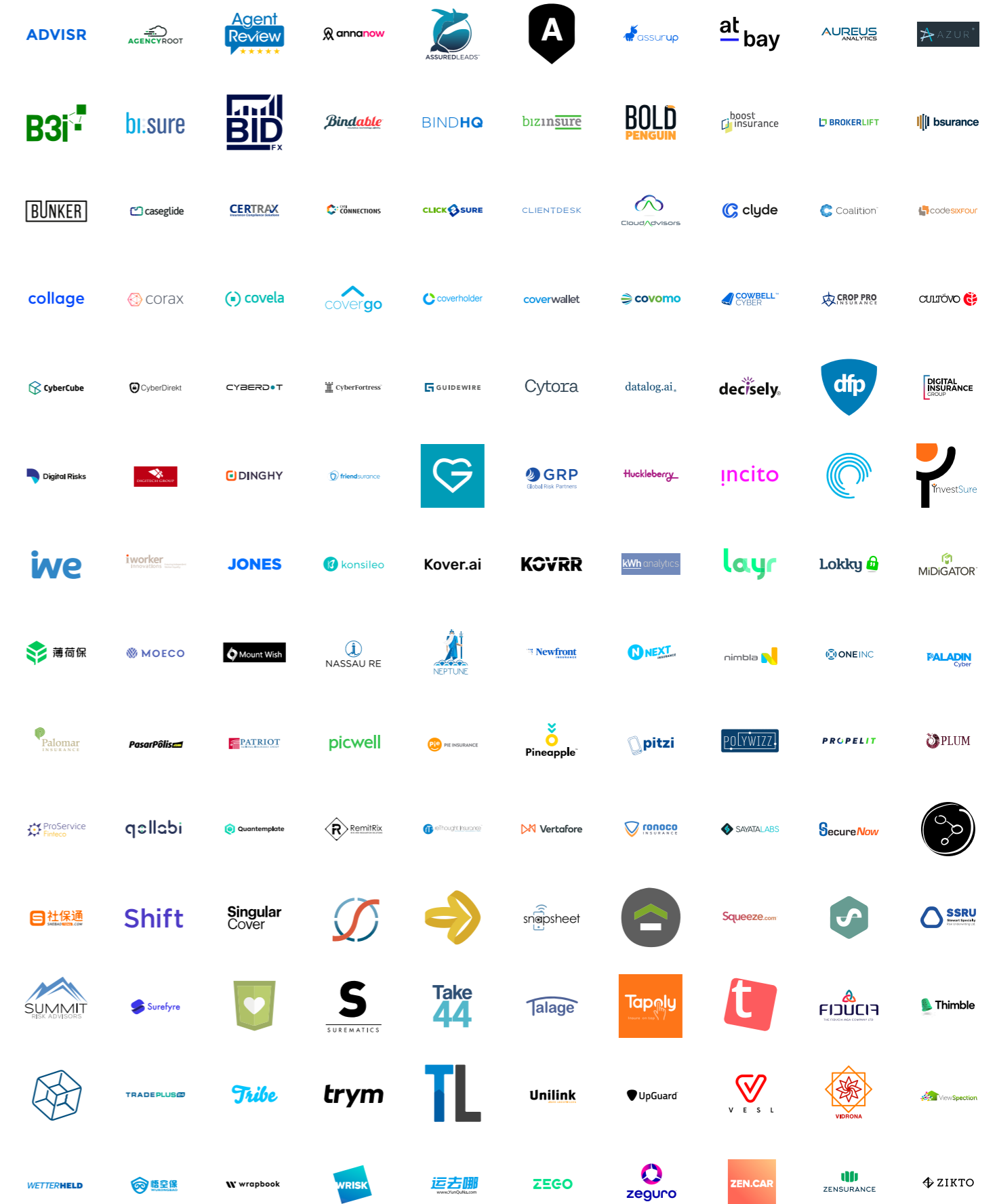
In the Business Shield ecosystem we can observe that more than a half of the startups are focused in the cloud technology. Other technologies that are also helping in the disruptive offering of startups are AI, Blockchain and Big Data.

Keep an eye on



KEEP AN EYE ON
More detail on this subject?
keep reading the following pages

From A to Z in Business Shield in Insurance



Shift

Country: France
Employees: 51-100

Headquarters: Paris
Founders: David Durrleman, Eric Sibony & Jeremy Jawish

Commercial Insurance

Industry

Product Design & Development

Value Chain

Commercial

Line of Business

B2B

Type of client

Year 2014

Foundation date

USD 112K in 2013
(Pre-seed)

USD 1.8M in 2014
(Seed)

First Round of investment

USD 60M in 2019
(Series C)

Last Round of investment

Bessemer Venture Partners

Lead Investors

USD 100M

Total funding amount

RELATED STARTUPS:
Gradient AI



Stop insurance fraud in its tracks.

Extremely Accurate
We detect potential fraud in insurance claims with a **75% hit rate**. Fewer false positives lead to more productive investigations and improved loss ratio.

Incredibly Insightful

Reliable & Secure

[LEARN MORE](#)

Shift develops technology driven products focused on the insurance industry. The company helps insurance providers through AI native solutions to improve the customer experience and prevent fraud. Shift is a SaaS company empowering leading insurers around the world with two main products: FORCE fraud detection and LUKE automation of claims.

Business model

Shift attacks two important pain points of the insurance industry for both end users and insurers. Insurers can automatize the claims and fraud detection with Shift technological products, that increase the volume of claims settlements and identify with Artificial Intelligence (based on historical and third parties data that collect from social media to criminal records) potential fraud attempts.

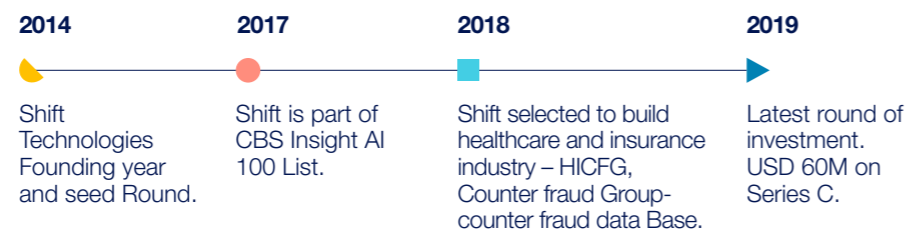
The company claims to increase Insurers efficiency to solve claims and improve their clients end user experience through an intuitive digital claim process. Shift data science team is oriented to design or develop products that increase Insurers ROI adding even more value to this Insurance clients.

Market

The Automation of the insurance market is evident with several technology driven companies and digital products. In this way, traditional Insurers are being disrupted and are searching for new ways to deliver value to their customers.

Shift market includes global insurance brands and insurtechs, leveraging the scalability of its Software as a service business model. The company offers services globally and have offices in Paris, Boston, Tokyo and Singapore.

Milestones



Country: USA
Employees: 101-250

Headquarters: Palo Alto
Founders: Alon Huri, Guy Goldstein & Nissim Tapiro

Commercial Insurance

Industry

Product Design & Development

Value Chain

Commercial

Line of Business

B2B

Type of client

Year 2016

Foundation date

USD 13M in 2016
(Seed)

First Round of investment

USD 250M in 2019
(Series C)

Last Round of investment

Munich RE Ventures

Lead Investors

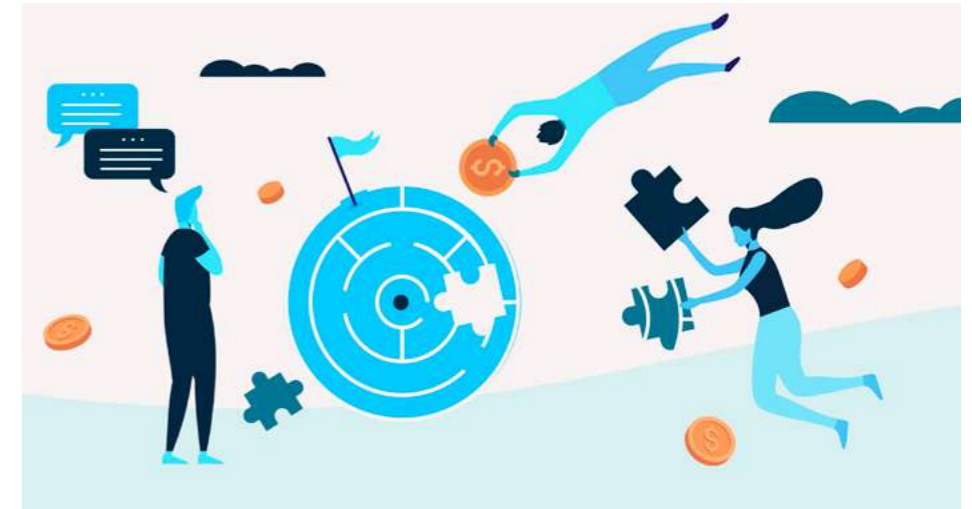
Munich RE Ventures

Insurer Investor

USD 381M

Total funding amount

RELATED STARTUPS:
Coverwallet



Next Insurance is an online insurance company for small business and entrepreneurs. Next's products are personalized to specific needs of each customer, increasing the efficiency of coverages. Customers are able to quote, buy policy or file a claim in minutes within Next's online platform with support of Artificial Intelligence to facilitate the process and offer the best coverage to customer's businesses.

Business model

Next Insurance charges monthly payments with no extra costs for all coverages, that include live insurance certificate and customer support. The company lowers the costs with automation of several insurance process such as quotation and purchase powered by Artificial Intelligence that allows tailored and instant coverage match customers.

Next also provides transparency and simple policies to increase the efficiency of its products and the customer experience, addressing the main pain points of insurance policies. Along with solid partners such as Munich RE and American express Ventures, Next Insurance is constantly improving its operations, products and services.

Market

Present in most American States, Next Insurance is providing services to help small businesses diminish their risks.

The company allows customers to acquire personalized insurance with affordable prices and a digital process that supports consistent business growth and investments.

Next Insurance is expanding its products to attend more small business needs with the coverage of workers' compensation.

Milestones



Country: USA **Headquarters:** Columbus
Employees: 101-250 **Founders:** Ilya Bodner

Commercial Insurance

Industry

Marketing & Distribution

Value Chain

Commercial

Line of Business

B2C B2B

Type of client

Year 2016

Foundation date

USD 1.5M in 2017
(Seed)

First Round of investment

USD 32M in 2019
(Series B)

Last Round of investment

Guggenheim Partners, Hudson Structured Capital Management, Lightstone Ventures, Lockton, Stone Point Capital

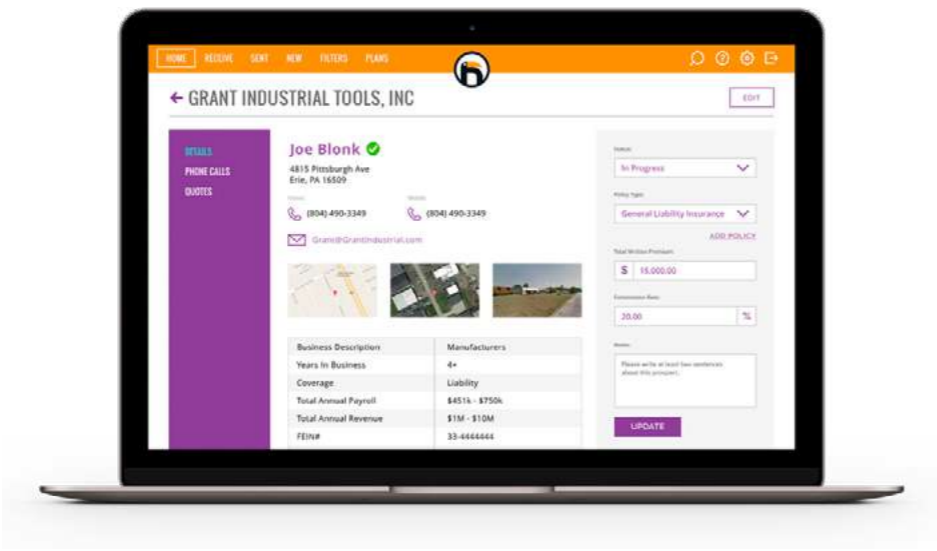
Lead Investors

USD 50.5M

Total funding amount

RELATED STARTUPS:

Next Insurance



Bold Penguin connects agents, insurers and small businesses in a digital platform. Agents are Bold Penguin's main clients, they are able to find commercial coverage for their customers through Bold Penguin's software that matches business to suitable coverage from insurance providers. The software reduces friction to find, quote and buy suitable coverage with technology solutions that can be integrated via API with any customer's digital platform.

Business model

Bold Penguin is a SaaS company that uses open API and technology to facilitate and increase flexibility of business coverage process.

With the company infrastructure, agents can use the matching engineering, that ranks and organize available coverage, to offer quick and more solution options to their business clients.

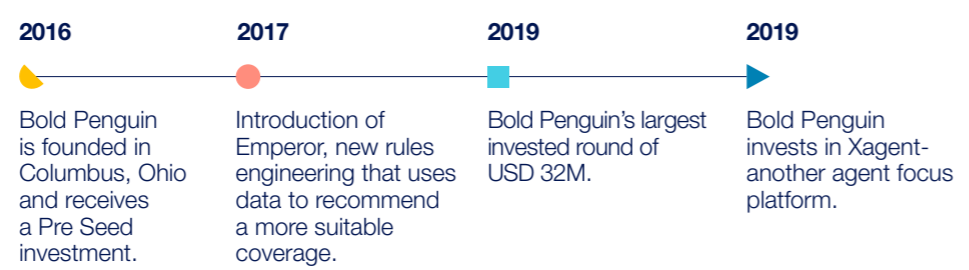
Furthermore, Bold Penguin Platform allows insurers to market products more efficiently and receive and send prospects according to the risk profile of each business and risk appetite of insurers.

Market

Bold Penguin operates in the USA and improves the small business insurance mechanism system.

The company focuses on agents and brokers mainly, helping other stakeholders in the process by leveraging the reach of its digital platform and partnership network, that includes large insurance companies such as Liberty and Nationwide.

Milestones



Distribution

360° business protection for both owners and businesses.

People spend most of their day in messaging applications, this being the main channel where they demand services and information for the decision-making of their purchases is changing the way in which products and services are distributed.

A clear example of this is how the Asian giant Tencent with WeChat is trying to keep users hooked in its ecosystem, offering a multi-purpose and indispensable app where users can be able to chat, book a cab, transfer money, play games or simply order food.

The main focuses of people in their interaction with these platforms have to do with the total transparency of the information (e.g. price, options, coverage, risks), the customization of the offer presented (there is no longer an interest in the concept "one size fits all") and finally the speed with which the options are presented since the person has no time to lose.

How Insurtechs are reshaping the Distribution ecosystem

63% of the investment in startups of this ecosystem (a total of 15 companies) in the last year was concentrated by three companies: WeFox, Duobaoyu Insurance and Acko. The three countries cover 3 different markets.

In the Asian Market, Duobaoyu Insurance is perceived by investors as a company with great potential as the current penetration rate of online long-term insurance in China is less than 2% meaning there is great potential for growth.

It is important to note that in 2019 no new insurtech distribution companies were founded.

Keep an eye on



\$235M

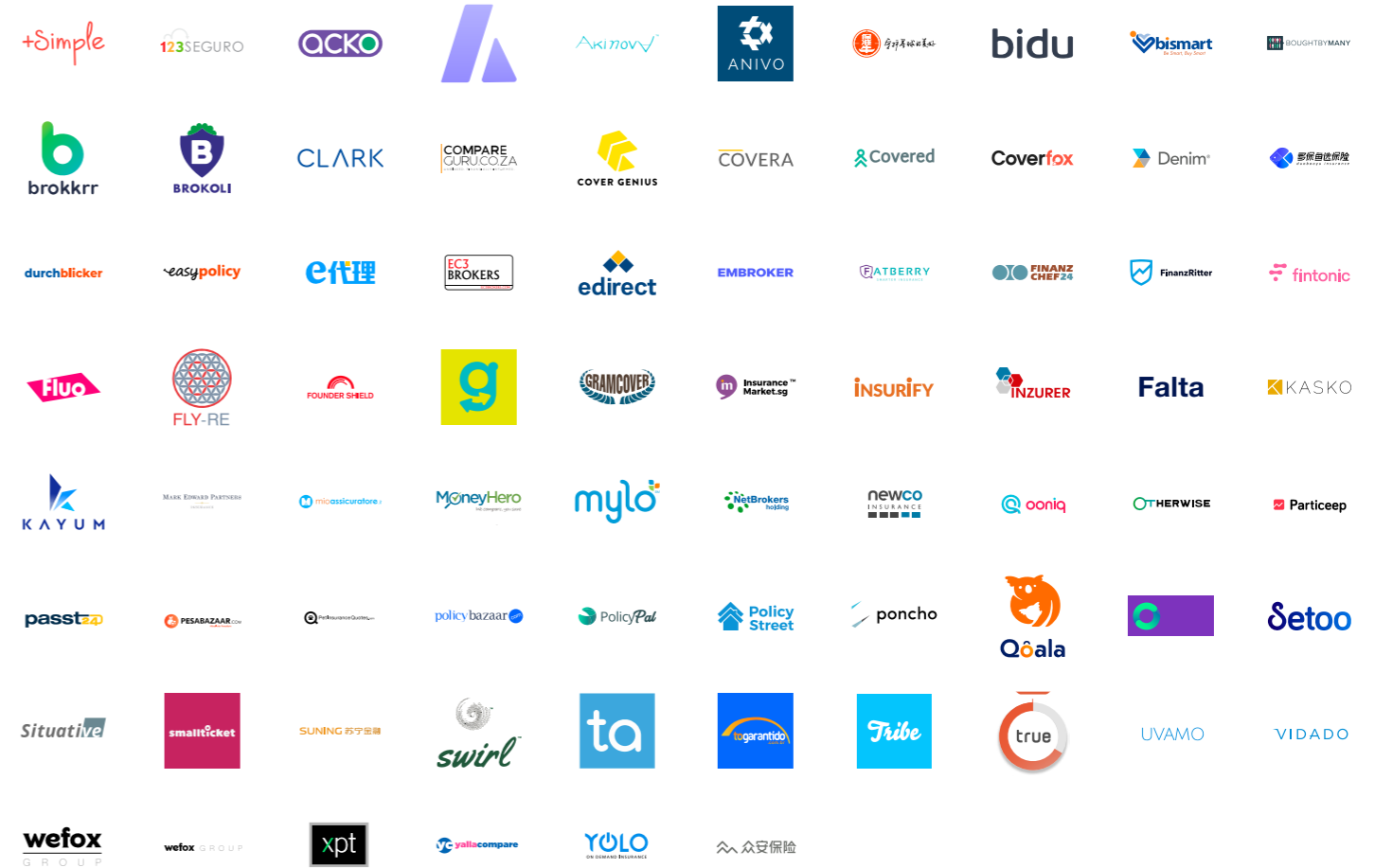


\$41M



\$101M

From A to Z in Distribution in Insurance



Marketplace Insurance

Industry

Marketing & Distribution

Value Chain

Marketplace/Platform

Line of Business

B2B B2C

Type of client

Year 2015

Foundation date

USD 5.5M in 2016
(Seed)

First Round of investment

USD 110M in 2019
(Series D)

Last Round of investment

OMERS Ventures

Lead Investor

USD 268.5M

Total funding amount

RELATED STARTUPS:

Yulife

Country: Germany **Headquarters:** Berlin
Employees: 251-500 **Founders:** Dario Fazlic, Fabian Wesemann, Jonathan Seoane, Julian Teicke & Teodoro Martino



Wefox connects insurance companies, brokers and customers all together in a digital platform. In 2018, One was created to manufacture products, based on AI and IoT to identify and protect customers' relevant risks. Wefox and One form Wefox Group the German Unicorn - significant responsible for the European Insurance digitalization.

Business model

Wefox gathers traditional insurance plans in a single platform. The company claims that it has been created to support Insurers and not replace them.

Hence, by partnering with insurers, providers and brokers, Wefox delivers a totally digitalized experience to the end user collecting several options in the market and displaying them in the platform. Further, partners can manage, consult and run data-driven campaigns to the right customer with personalized products. One, the other arm of Wefox group, is using Artificial Intelligence and IoT devices to develop products to protect likely risks for customers and, ultimately, integrating the products in Wefox platform signaling that the company might indeed compete with traditional insurers.

Market

This typical two-sided business, where Insurance providers are taking advantage of a large customer base entering Wefox platform - that was designed to a fully online experience- and Insurance customers are benefiting from a better set of options, is scaling fast receiving more than USD 250M in funding since its foundation.

The spin-off from the data collected in the platform, One, showed that Wefox is designing products based on Big Data models and expecting to offer more Insurance options to its customer base. Wefox group offices are present in Berlin, Barcelona, Madrid, Milano, Viena and Zurich.

Milestones



Country: India **Headquarters:** Mumbai
Employees: 101-250 **Founders:** Varun Dua

Auto Insurance

Industry

Marketing & Distribution

Value Chain

Auto

Line of Business

B2C B2B

Type of client

Year 2017

Foundation date

USD 30M in 2017
(Seed)

First Round of investment

USD 65M in 2019
(Series C)

USD 30M in 2019
(Ventures Round)

Last Round of investment

Amazon
(Series C)
 Ascent Capital,
 Binny Bansal
(Ventures Round)

Lead Investors

Swiss RE

Insurer Investor

USD 143M

Total funding amount

RELATED STARTUPS:

TechGiant in emerging market



acko insurance products cover two-wheel vehicles and cars in India. Through its online platform, acko provides a hassle free experience where customers can quote, buy, renew and claim coverage for their vehicles. acko is able to cut premiums prices with a totally digital process that uses data to provide direct personalized insurance. The company works with several partners to underwrite and distribute its products.

Business model

acko has a powerful partnership network that leverage the distribution of its services and products. For instance, users can access acko insurance from Amazon India and several other platforms.

The technology and data analytics allow the company to offer better prices and coverage to end customers, that can make claims via acko app or renew their plans. Moreover, acko's partnership embraces a vast number of other products including smartphones, travel or ride sharing coverage.

Market

acko is creating an incredible portfolio with its partners, allowing users to buy and claim insurance for different types of assets.

The last Indian government movement with Motor vehicle act has increased acko's customer base, that alongside with capital raise pushes acko to grow its market and partnerships.

Milestones



Country: China

Headquarters: Hangzhou

Employees: USD 41.2M

Founders:



Duobaoyu is an online platform that provides insurance services. In Duobaoyu's website, users can access valuable information regarding the insurance industry and find answers to common insurance related questions. For instance, travel policies from Ping An Insurance are detailed in the company's digital encyclopedia and can be shared via large Chinese social media platforms.

Business model

Duobaoyu began operations in 2017 and since then, the company is creating knowledge in the insurance sector for Chinese customers.

Users have information access through different platforms such as WeChat and website. These information engage users and insurers to share information, reviews, Q&A, funding insurance sector rounds and even policies or insurance company ratings.

Duobaoyu also provides internal consulting and brokerage services to solve main customers insurance problems and long-term insurance selection support, generating balance over the industry information and improve the sector as a whole.

Market

Spread of information and knowledge in the insurance sector is essential to improve the industry.

Several insurance companies and new insurtechs recognize asymmetric or lack of information the main challenges of this sector.

Duobaoyu's platform successfully addresses to this issue, awarding the company USD 30M Series B investment round.

Milestones

2017

Duobaoyu's foundation year.

2019

Two investment rounds totaling more than USD 40M led by YF capital, Co-founded by Jack Ma.

Cross

Industry

Platform Ecosystem / Marketplace

Value Chain

Cross

Line of Business

B2C

Type of client

Year 2017

Foundation date

USD 3M in 2019
(Series A)

First Round of investment

USD 30M in 2019
(Series B)

Last Round of investment

YF Capital

Lead Investor

USD 41.2M

Total funding amount

RELATED STARTUPS:

Shift/ ROOT's telematics technologies

Technology

Liquid disruptors for ecosystems.

Technology plays a fundamental role within ecosystems, since they live together in a satellite way, being present at all times and helping to improve and break up traditional products and services of the insurance industry.

We envision technology as a liquid disruptor for ecosystems. Specifically in the case of the ecosystem around the insurance industry, they are generating changes in very traditional processes that will never be the same.

Changes are happening everywhere in the insurance industry. From the business models, a new consumer more digital and with a constant need for personalization, the high demand for transparency, until the arrival of new players seeking to inject their technological experience in the sector.

AI, Blockchain, Customer Experience, Cloud, Cybersecurity, Data & Intelligence, Intelligent Automation, IoT, and IT Optimization are the liquid disruptors identify as those that will generate the rapid transformation of the sector.

How Insurtechs are reshaping Liquid Disruptors

58% of the investment in startups of this ecosystem (a total of 60 companies) in the last year was concentrated by three companies: Digit, Unqork and Everledger.

The three companies based in diverse markets are disrupting general insurance in different ways. In the case of Digit who owns a technology to auto-detect delayed flights and send policyholders a text message to initiate their claim process, meanwhile Unqork's pioneer cloud technology which is used by relevant companies like Liberty Mutual, Goldman Sachs and John Hancock, and finally Everledger who tracks and protects items of value by using Blockchain technology for provenance and fighting insurance fraud.

The most relevant technologies present in insurtech companies from the report's sample are Cloud and Mobile Applications, AI, Big Data and Blockchain.

Keep an eye on

EVERLEDGER

\$30M



unqork

\$80M



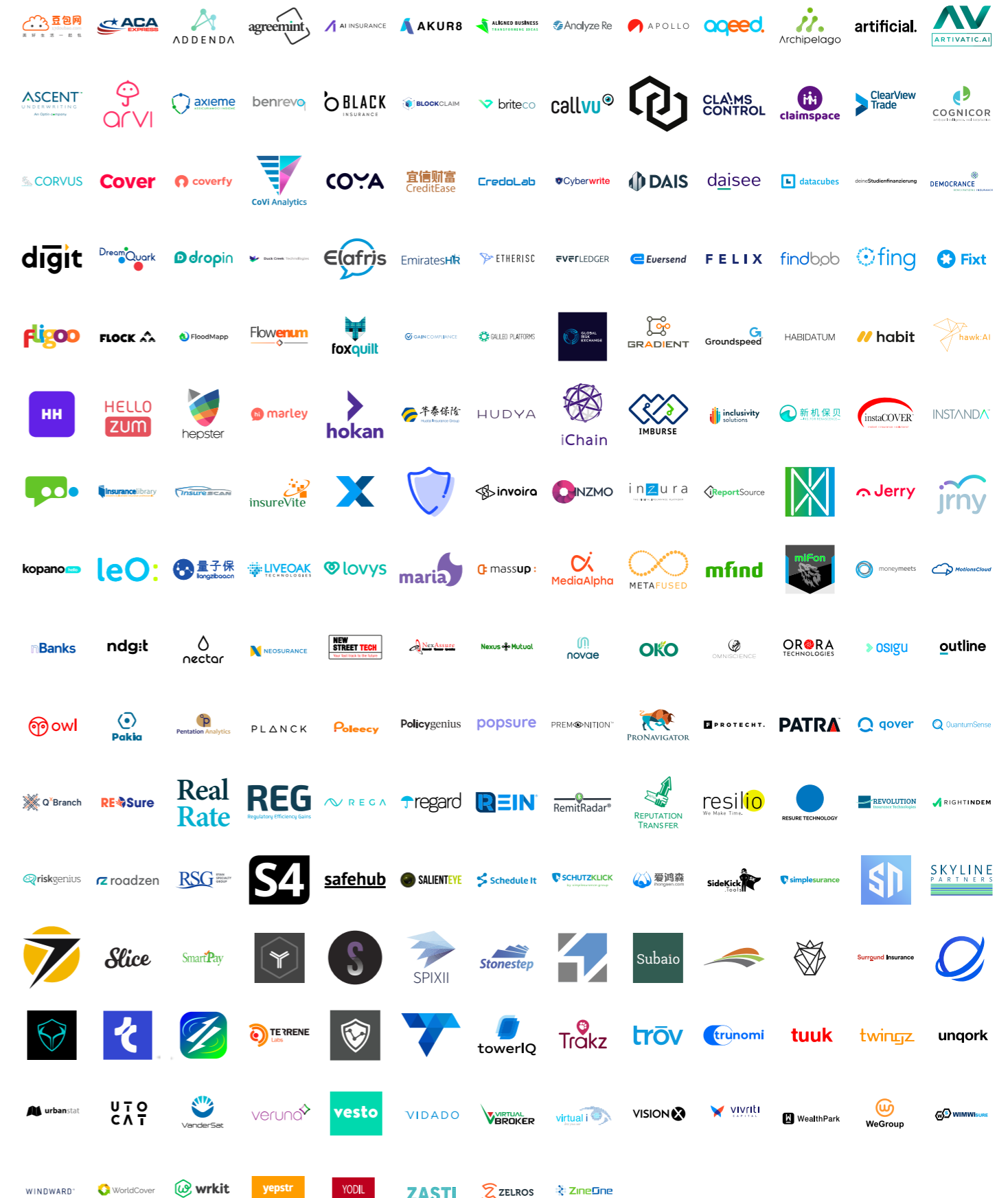
digit

\$50M



KEEP AN EYE ON
More detail on this subject?
keep reading the following pages

From A to Z in Technology in Insurance



unqork

Country: USA

Headquarters: New York

Employees: 101-250

Founders: Gary Hoberman



Unqork is a SaaS company that allows clients to build robust digital applications without coding. This tech company is helping large businesses to design and deliver products faster and more efficiently, providing a better experience to client's end users. Insurers are benefiting from Unqork services, developing innovative products that can adapt to customer's demands or changes in the industry regulation, launching new applications faster than conventional product development.

Business model

Unqork's technology improves efficiency to create internal or external products. Insurers can create internal tailored products to integrate different information and digitalize manual processes.

Furthermore, they are allowed to build front end applications to customers in order to collect new information, create new digitalized products, facilitate digital documents generation or manage customers digital footprint.

Increasing demand for process automation and personalized products demand from Insurance companies, make Unqork a valuable solution for this industry.

Market

Unqork's technology helps clients in distinct industries such as banking, insurance and education to enhance from internal processes to the end user experience.

In the insurance industry, for instance, companies are exposed, among other risks, to divergence of processes and regulatory rules. That, in addition to its customer's increasing needs for efficient and tailored products, makes agility essential to provide better services and products to be able to compete fairly in this sector.

Milestones



Cross

Industry

Product Design & Development

Value Chain

Cross

Line of Business

B2B

Type of client

Year 2017

Foundation date

USD 5M in 2018

(Seed)

First Round of investment

USD 80M in 2019

(Series B)

Last Round of investment

Capital G

Lead Investors

USD 107M

Total funding amount

RELATED STARTUPS:

B3i / Everledger / Shift

digit

Country: India

Headquarters: Bengaluru

Employees: >1000

Founders: Kamesh Goyal

Cross

Industry

Marketing & Distribution

Value Chain

Cross

Line of Business

B2C B2B

Type of client

Year 2016

Foundation date

USD 45M in 2018

(Venture Round)

First Round of investment

USD 50M in 2019

(Ventures Round)

Last Round of investment

Fairfax Financial Holdings

Lead Investors

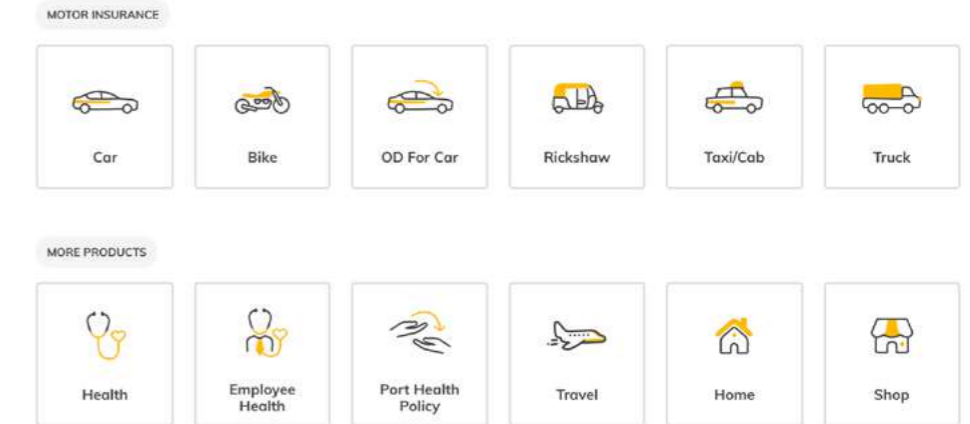
USD 180M

Total funding amount

RELATED STARTUPS:

acko

What would you like to protect today?



Digit is an insurance company that provides cross coverage including vehicles, health and mobile insurance. Digit provides a complete online customer journey; the company has customer services on Whatsapp, website and mobile application. Customers are able to purchase, quote and make claims digitally using Digit's network of hospitals or vehicle shops.

Business model

Digit is able to lower operational costs by automating several steps of insurance process.

The coverage premium are paid online and most of Digit's network is made with cashless payments, that creates traceable transactions and improves the amount of disposable customers' data and better cash management.

Likewise, the data collected by Digit is used to nourish the company's mission to deliver a simple digital experience, model better pricing and allow fast claim process.

Market

Digit's products address to Indians main pain points and simplify all the insurance process with automation and policy transparency, that suits the company most memorable statement that a 15 years old person can understand.

The company is operating in India where an offline and online approach has been practiced to scale with the help of partners and agents.

Milestones



Country: UK **Headquarters:** London
Employees: 51-100 **Founders:** Leanne Kemp

Cross

Industry

Policy & Claims Management

Value Chain

Cross

Line of Business

B2B

Type of client

Year 2015

Foundation date

Non – disclosed in 2015
(Venture Round)

First Round of investment

USD 10M in 2019
(Series A)

USD 20M in 2019
(Series A)

Last Round of investment

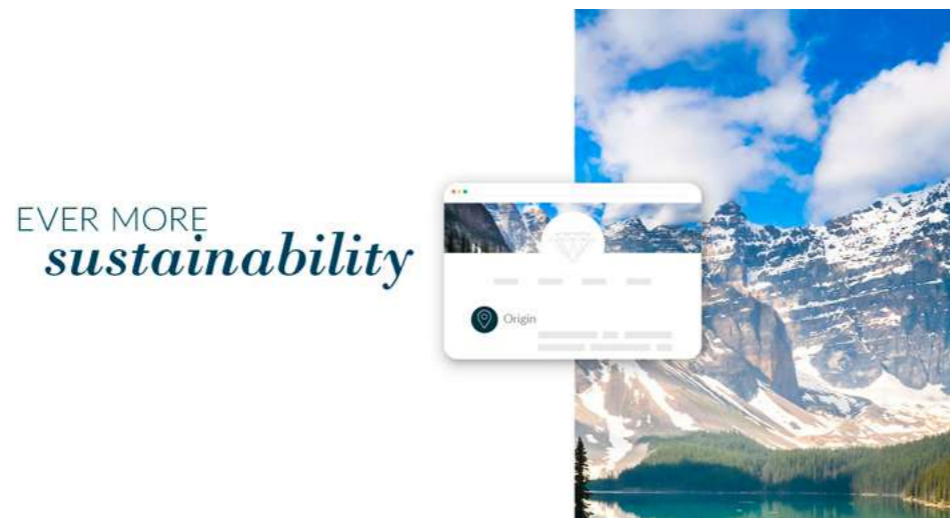
Fidelity, GMP Securities
 Tencent Holdings

Lead Investors

USD 30.4M

Total funding amount

RELATED STARTUPS:
 B3i



Everledger is a technology company that provides different solution across multiple industries. In general, Everledger’s solutions increases transparency to its clients processes, transactions and assets information through Artificial intelligence, Blockchain and IoT. These solutions are able to deal with a large amount of data more efficiently, securing and tracking all transactions that can decrease insurance risks and improve overall efficiency.

Business model

Everledger is a SaaS company that can provide insurance company better solutions to: ⁽¹⁾ See records of each contract or asset, ⁽²⁾ View and query any asset, ⁽³⁾ Link unique identifiers to each transaction and records and ⁽⁴⁾ Register and track new ownership of contracts or assets.

Along with these solutions, Everledger technology enables Insurers to recognize duplicate or fraudulent transactions and collect information in a transparent network to model risk and premium prices more efficiently.

Market

By automating several steps in the insurance process, Everledger’s technology is delivering a security and transparent way that insurance and its stakeholders can benefit from.

Reduction in transactions, administrative and fraud costs, the offered value proposition is according to the Insurance industry trend, in which insurance companies try to create more transparency to its customers, automatize claims and lower process friction.

Milestones





03.1

TechGiants & ecosystems.

TechGiants and liquid ecosystems.

TechGiants use their most competitive advantages in order to shape the market according to them.

Disruption on ecosystems occurs when big players bet to collaborate with the most innovative startups and with the latest technologies. Such is the case of TechGiants (on the US side: Alphabet, Amazon, Apple, Facebook and in Asia: Alibaba, Baidu, Tencent and Rakuten), their core business usually does not have to do with the sectors of the startups where they invest in, otherwise their goal is to use their most competitive advantages in order to shape the market according to them.

Ecosystems will always be in a constant alteration, and we should not be surprised to see how companies, that until now were not taken into account, appear on the scene breaking schemes in the most conservative industries with innovative proposals powered by emerging technologies.

The TechGiants are possibly one of the most relevant examples of ecosystems today. Although they started as search engines, email platforms or social networks, they have been able to perfectly understand the new scenario and are incorporating services related to Insurance or Health to their portfolio.

TechGiants and emerging markets

Although American companies (GAFA) keep leading the ecosystems in their traditional markets and they are also expanding their operations to other geographies, Asian companies (BATR) have the greatest growth potential in the mentioned ecosystems.

A good example of a big tech contributing to ecosystem building is the Chinese Baidu. As an emerging player in the smart mobility ecosystem with the Apollo project, an open source software platform designed to foster collaboration throughout the automotive industry to accelerate the development of autonomous cars. Baidu has motivated industry leaders and also non-industry leaders throughout the automotive ecosystem to join in this odyssey, with more than 100 partners, working with major OEMs, car suppliers and chip manufacturers.

Alibaba and Tencent, already in 2013, started a path that is already paying off today. They created with Ping An the digital giant Zhong An, who leads the sale of online insurance policies in China.

“The key is to know which actors will dominate these ecosystems in the future and how insurers will participate in them”

In addition, Alibaba, through Ant Financial, launched in 2018 (within AliPay) a health coverage product for certain diseases (Xiang Hu Bao) with which it expects to have 300 million subscribers by 2021. As in the case of Alibaba, Tencent also takes advantage of the linking of its users, in this case through WeChat, to offer insurance products on its WeSure platform, in which it has already secured more than 25 million customers in two years.

Baidu, meanwhile, has recently launched a Blockchain-based solution (Baidu XuperChain) that will be used to store medical records of patients (diagnoses, treatments, prescriptions or health insurance data). This initiative will begin focusing on the sharing of data between health centers and pharmacies to improve and simplify the customer experience when buying their medicines in nearby pharmacies.

Alphabet

Alphabet is understanding the ecosystems in a way still unknown to many organizations: by collaborating with other companies, participating or leading projects until they are in a mature phase and evolving traditional business models.

All this with the unmistakable seal that characterizes other services of this company: using, acquiring and exploiting the data in a much more efficient way than other organizations; and always backed by an excellent customer experience.

Developments, partnerships, investments or acquisitions made by Alphabet, CapitalG or GV



Alphabet's most invested startups of our study 2010-2019



SMART MOBILITY

Alphabet is clearly betting on the mobility ecosystem. Participation in companies or related projects is very remarkable, with clear examples of success, but also with failed projects: such as Compare Auto Insurance.

Its strategy is both B2B and B2C (for example Convoy) and also focuses on initiatives such as Sidewalk Labs, that wants to reimagine cities to improve people's quality of life.

HOME SAFE HOME

The company has taken important steps in terms of smart devices, domotic and connectivity with an approach based on artificial intelligence and security.

It is also offering home services with Care.com (care for the elderly, children, pets, household arrangements). Regarding the sale or rental of properties, Google has also invested in companies such as Homelight or Airbnb.

HEALTHY LIVING

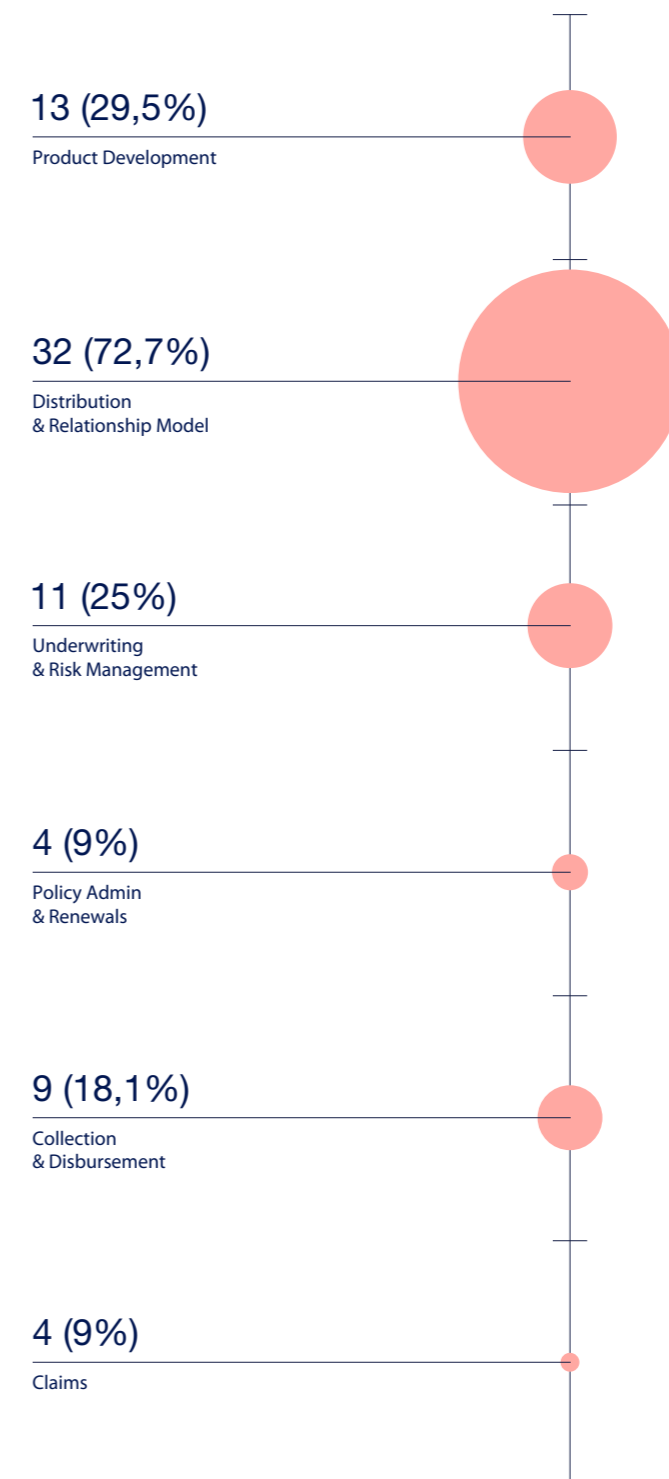
Alphabet, through its investments, is exploring areas such as biotechnology, healthy eating, genomics, fertility, healthy living or research for the cure of multiple diseases. GV, previously Google Ventures, has invested in Oscar (one of the most important insurtech worldwide). Alphabet now leads the investment in Oscar's last round (474M), and the head of the YouTube platform is part of its board of directors. Alphabet has done important investments in Verily (also known as Google Life Science) to improve prevention of diseases and also in Calico, a company specialized in research of medical solutions.

TechGiants' impact.

72,7% of the respondents see Alphabet's impact on Distribution & Relationship more than other area of the value chain.

On the other hand, the areas of Policy Administration & Renewals and Claims are the least seen as having an impact on the value chain.

ALPHABET: In which of the following areas of the value chain do you think there will be a greater impact?



Survey answered by 44 CEOs and executives of insurance companies worldwide



Amazon is clearly betting on ecosystems related to the transport of products and the mobility of people, connected homes and healthy living. It is important to highlight that India is the second territory with more startups invested by Amazon (far behind the USA) and that, of the 6 unicorns in which it has invested, two come from this Asian country.

Amazon's most invested startups of our study 2010-2019

Acko

Developments, partnerships, investments or acquisitions

SMART MOBILITY

HOME SAFE HOME

HEALTHY LIVING

SMART MOBILITY

Amazon has a strong connection with this ecosystem. It is exploring a vast range of solutions provided from different startups. It is investing in companies related to its core business (logistics and distribution) and it is focusing on the possibilities of autonomous vehicles at a time when online commerce grows steadily and where home deliveries of all kinds of goods have become a new reality. It is also innovating with an app to obtain a driver's license, Dribo, and has even invested in an insurance company in India focused on auto insurance. Amazon has also invested in Acko, that offers personalized underwriting, micro-insurance policies, and an automated micro claims process.

HOME SAFE HOME

One of the key ecosystems for Amazon is the one related with the place where people and their family live. It is focused on a connected home in which internet connectivity, online security management and intelligent device control are easily operated by the user. Amazon is also betting on Entertainment and Education, two areas with great growth potential and very connected to the home environment. It is also investing in a platform that allows people to search and book service providers for their homes.

HEALTHY LIVING

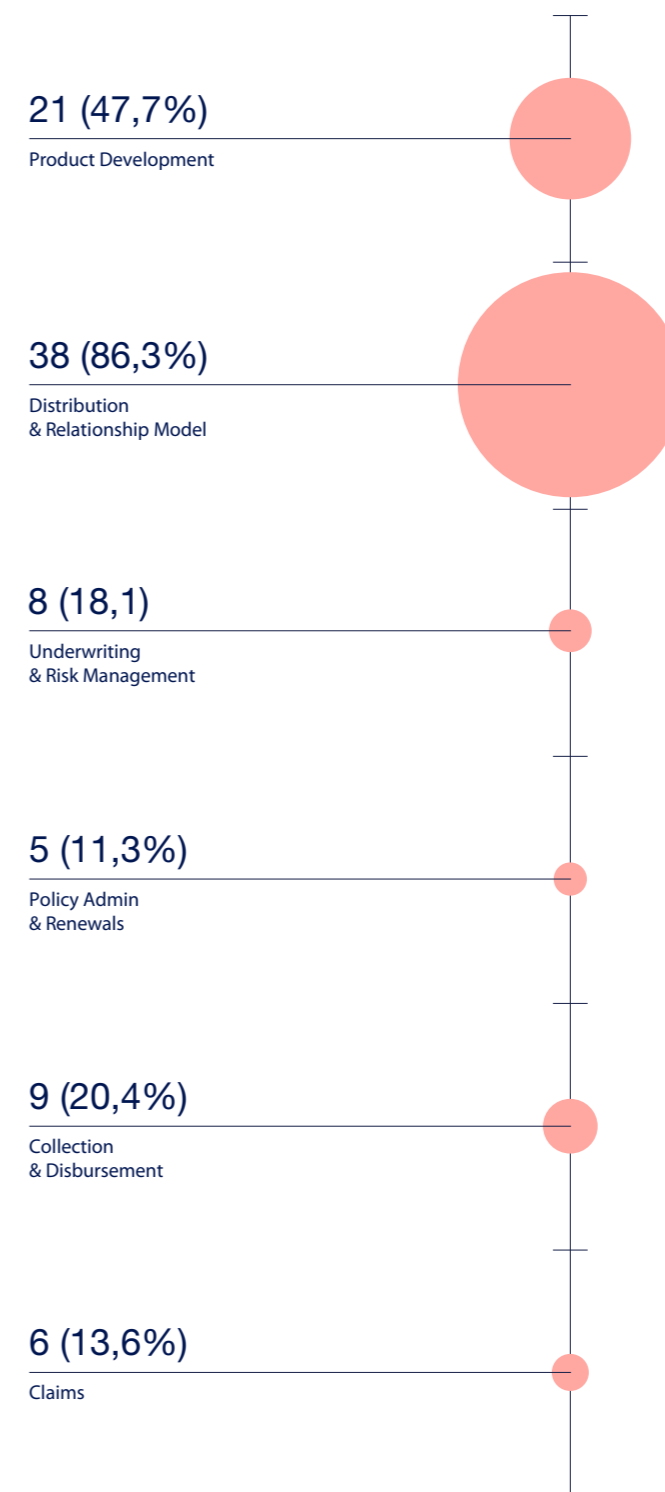
This is probably one of the most promising ecosystems for Amazon, although its investment is not as high as that of other TechGiants, it is taking its company model to an industry such as health. Amazon Care is the best example (still in the pilot phase), that it provides a first-rate digital experience, innovates by taking doctors to the workplace or intends to become the leader in the distribution of medicines. Amazon is also backing Grail, which relies on the use of deep sequencing technology to detect the first signs of blood cancer, while this disease is in a phase where it is still treatable.

TechGiants' impact.

86,3% of the respondents identify Amazon on the area of Distribution & Relationship as the one that will have the greatest impact in the value chain.

Meanwhile, 11,3% of the CEOs identify Policy Administration and Renewals as the area that will have the least impact on the value chain.

AMAZON: In which of the following areas of the value chain do you think there will be a greater impact?



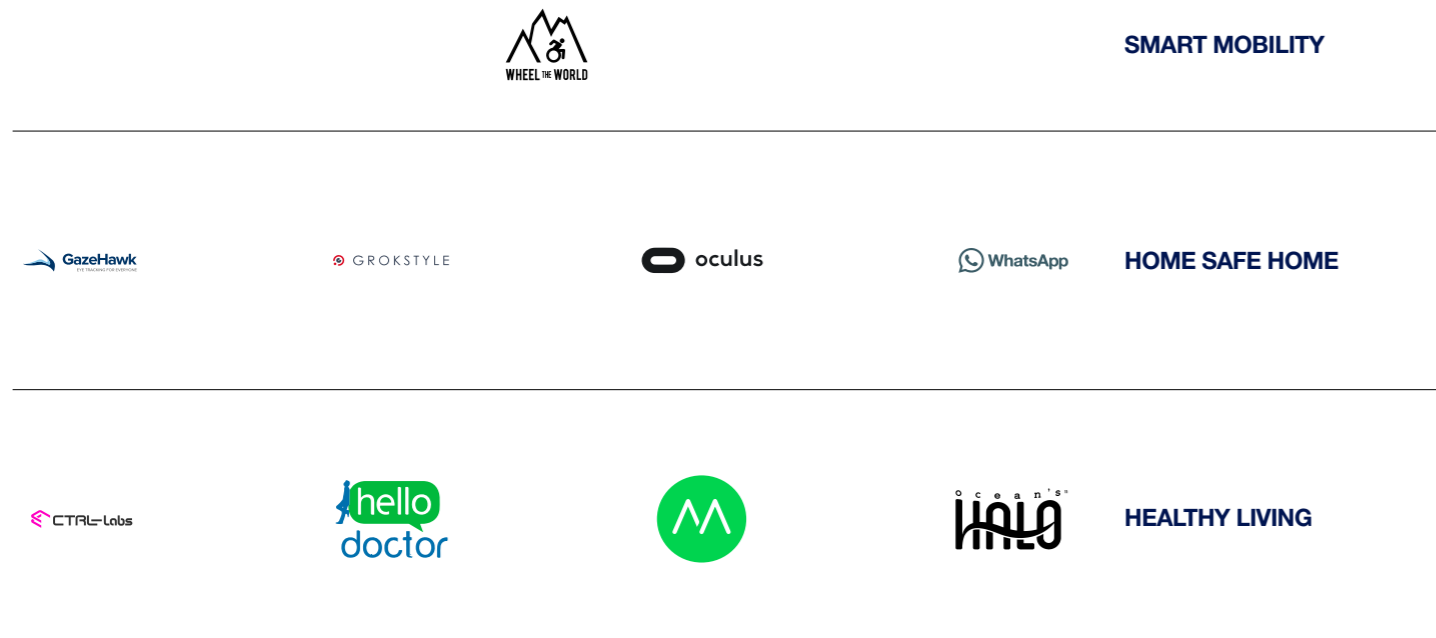
Survey answered by 44 CEOs and executives of insurance companies worldwide

facebook

Facebook’s presence on new ecosystems out of its core business is happening in an organic pace compared to the rest of the TechGiants.

It seems like the big tech is building it’s very own ecosystem by surrounding itself from the best startups and technologies that strengthen the social network more and more.

Developments, partnerships, investments or acquisitions



SMART MOBILITY

The TechGiant is not currently working on the hardware part related to Smart mobility products, yet they is more interested in the “connected consumer” who is demanding customized experiences. Such is the case of the Oculus Rift + Touch which has potential in the automotive industry by connecting a Facebook account and get into a voice and avatar body language experience.

HOME SAFE HOME

Facebook enters the Smart home gadgets ecosystem with the Portal Family products, focusing on the use of augmented and virtual reality to change the way people can make calls no matter the location in an immersive way.

This is a clear bet of Facebook to stay current on the new ways people will communicate the a future, as well as other Techgiants are already doing: Amazon and Google.

HEALTHY LIVING

Facebook begins to show interest in the health ecosystem with its own initiatives such is the case of “Facebook Preventive Health Tool”, which helps users on checkup-reminders and suggesting them nearby sites for flu shots, cancer screenings, and blood-pressure tests; also the feature will suggest free clinics for the uninsured people.

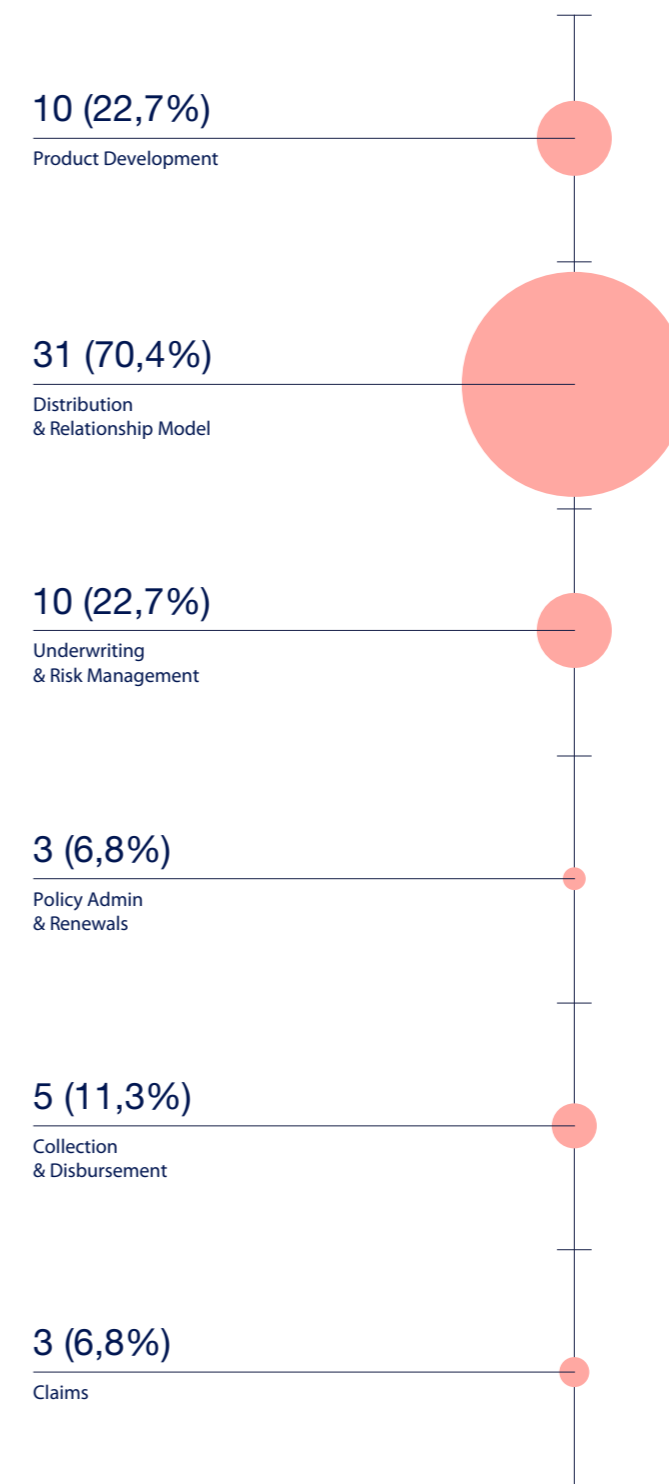
The company is also investing in interesting companies such as Hello Doctor, focused on a mobile platform that allows patients to access records from multiple healthcare providers in one patient-facing app.

TechGiants’ impact.

70,4% of the respondents identify Facebook the area of Distribution & Relationship as the one that will have the greatest impact on the value chain.

Meanwhile 6,8% of the CEOs identify Policy Administration and Renewals as the area that will have the least impact on the value chain for the social network.

FACEBOOK: In which of the following areas of the value chain do you think there will be a greater impact?



Survey answered by 44 CEOs and executives of insurance companies worldwide



Alibaba, outside its main business, focuses on two major problems for China: the mobility of millions of people in that country and the pressing need to provide health solutions to such a large population that progressively increases its purchasing power.

Alibaba's most invested startups of our study 2010-2019
Knowtions Research

Developments, partnerships, investments or acquisitions



SMART MOBILITY



HOME SAFE HOME



HEALTHY LIVING

SMART MOBILITY

The company works on different lines related to mobility: daily commuting of people, delivery of goods and the improvement of the autonomous car by incorporating all kinds of disruptive technologies, for which it collaborates with car manufacturers, not only in Asia, but also with large European groups.

HOME SAFE HOME

In the home ecosystem, Alibaba is positioned in services such as the sale of household appliances, maintenance and repairs of the home, cleaning, childcare at home, transportation of pets, or sites dedicated to lifestyle that teach cooking to the younger public.

HEALTHY LIVING

With Ali Health, Alibaba covers a large part of the patients' relationship with the medical and pharmaceutical sector.

From the request for an appointment with a doctor, online consultations, prescription of medications and delivery thereof.

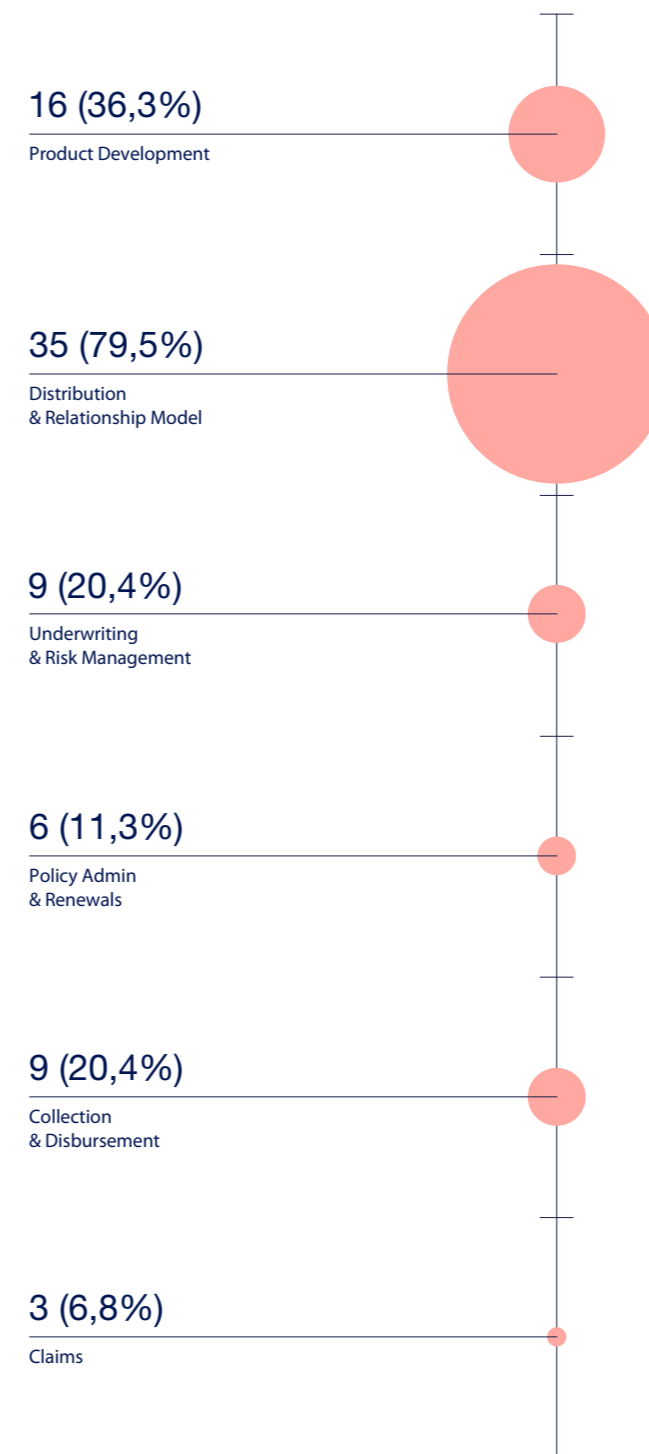
It also allows to know at all times the traceability of medications, which is a value in a market where counterfeits occur.

TechGiants' impact.

79,5% of the respondents identify the Asian Giant Alibaba the area of Distribution & Relationship as the one that will have the greatest impact in the value chain.

Meanwhile, 6,8% of the CEOs identify the Claims area as the one that will have the least impact on the value chain.

ALIBABA: In which of the following areas of the value chain do you think there will be a greater impact?

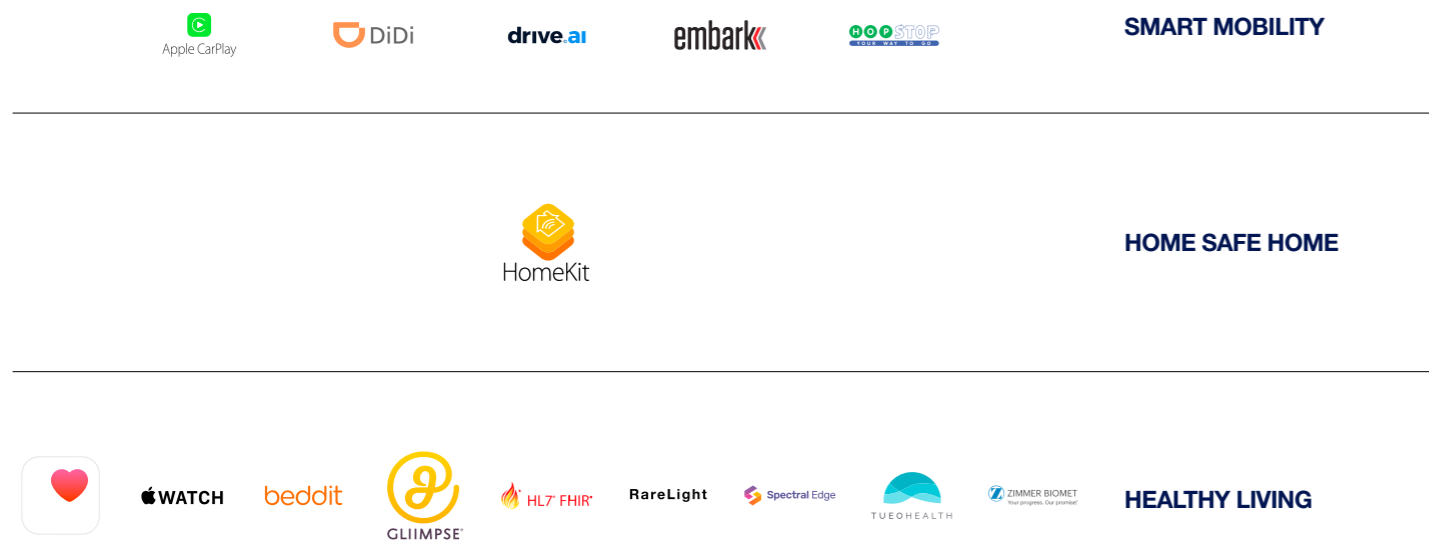


Survey answered by 44 CEOs and executives of insurance companies worldwide



Apple's investments have traditionally been based on startups related to technologies that help improve its products and devices (artificial intelligence, facial recognition, 3D and graphics, security, maps...) although, for years, it has established itself as one of the great players in the field of physical activity monitoring, which highlights the acquisition of Glimpse.

Developments, partnerships, investments or acquisitions



SMART MOBILITY

Apple is the leader in fitness and health tracking and it does it mostly by using their own devices. In addition, it offers great security guarantees to its users as far as the protection of their data is concerned.

This data management strategy is oriented to lead a high potential field like that of preventive medicine, which in the future will have the participation of medical companies, but also technology companies.

HOME SAFE HOME

Although Apple launched HomeKit, which works with up to 22 different types of devices at the home (cameras, bells, doors, lights...), there are less than 500 devices that are compatible with it, compared to that more than 10,000 that connect to Google or the more than 80,000 of Amazon. Apple continues to focus its strategy towards entertainment rather than home.

HEALTHY LIVING

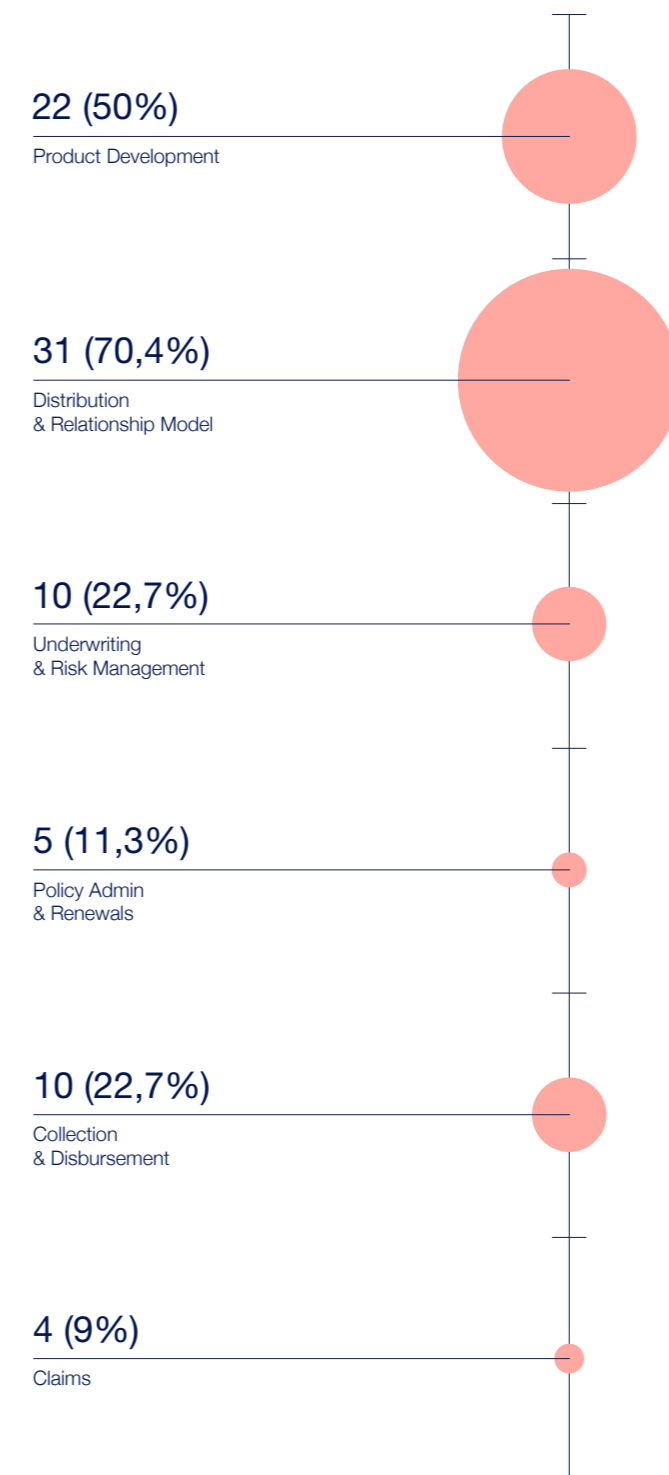
In the field of mobility, Apple has acquired over the years several startups related to map visualization to integrate these new features into its Maps app. On the other hand, it has recently invested \$1B in the Chinese ride-hailing company Didi Chuxing, which operates in different countries in Asia and Latin America.

TechGiants' impact.

70,4% of the respondents identify Apple the area of Distribution & Relationship as the one that will have the greatest impact on the value chain.

Meanwhile, 9% of the respondents identify the Claims area as the one that will have the least impact on the value chain.

APPLE: In which of the following areas of the value chain do you think there will be a greater impact?



Survey answered by 44 CEOs and executives of insurance companies worldwide



Baidu has a clear investment and strategic partnership philosophy on companies using AI on several ways, since this technology is present in our daily life transforming the way we live and work. The giant has been investing heavily in top notch companies focused on automated personal assistance, autonomous vehicles and healthcare.

Baidu's most invested startups of our study 2010-2019

Nuohui Medical

Developments, partnerships, investments or acquisitions

SMART MOBILITY

HOME SAFE HOME

HEALTHY LIVING

SMART MOBILITY

Baidu begins to be a leader in the autonomous mobility ecosystem, with Apollo Enterprise, a suite of autonomous that has been connected services for mass-produced cars and already used by 130 partners around the world.

One of its partners is the Chinese electric vehicle startup WM Motors who plans to deploy level 3 autonomous vehicles by 2021.

HOME SAFE HOME

Baidu's moves in the smart home gadget field are important, by making partnerships with big data companies that can allow them expand in other countries. Such is the case of the launching of their AI assistant Aladdin in Japan. Another important partnership is with the AI robotics startup AI Nemo, with whom they developed the home robot Little Fish. The company is also working in other home products powered by DuerOS its conversational AI system.

HEALTHY LIVING

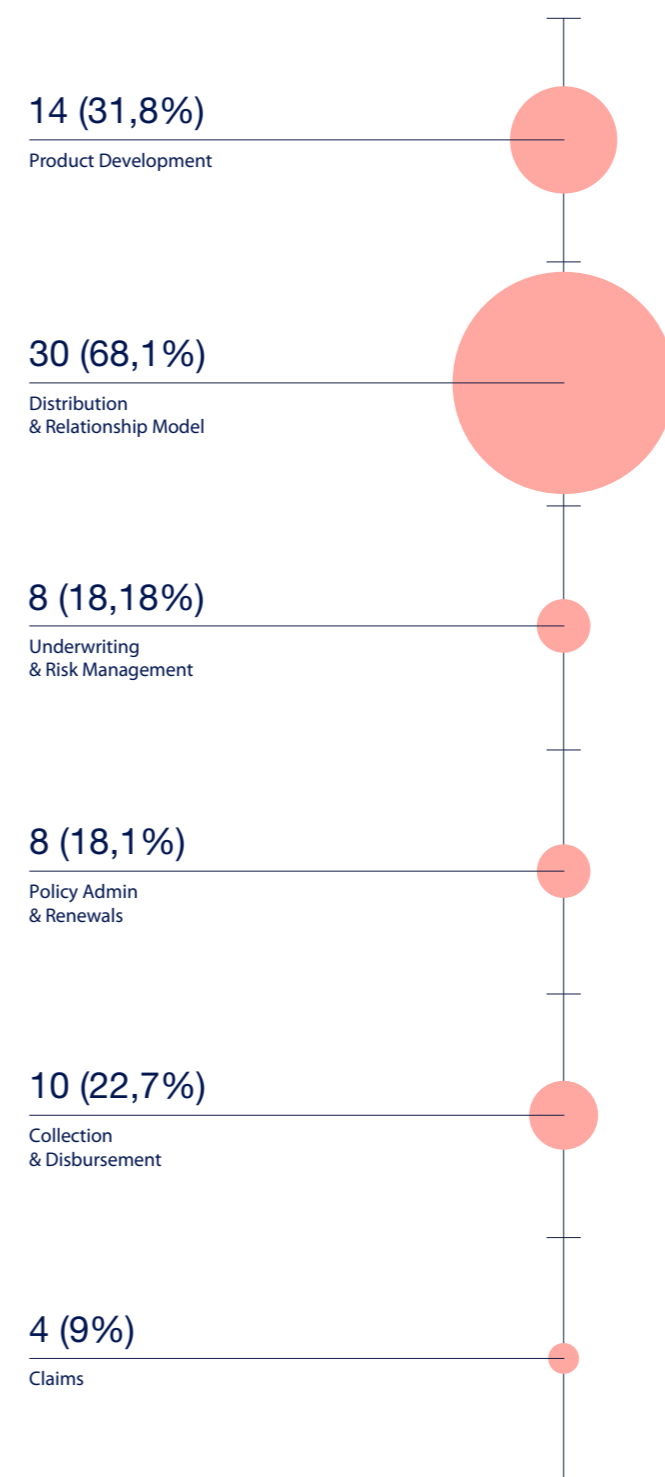
Biotech is a priority for Baidu; in its portfolio includes 14 disruptive companies most of them powered up by AI. Such is the case of Coral Genomics, which uses genomic data from patients to determine how they will respond to a drug before they get treated and Root Path which develops a personalized T cell therapy platform.

TechGiants' impact.

68,1% of the respondents identify Baidu the area of Distribution & Relationship as the one that will have the greatest impact on the value chain.

Meanwhile, 9% of the respondents identify the Claims area as the one that will have the least impact on the value chain.

BAIDU: In which of the following areas of the value chain do you think there will be a greater impact??







Survey answered by 44 CEOs and executives of insurance companies worldwide

Tencent 腾讯

Tencent is in a constant and fast investing pace, though its main focus is to build the Company's social media and payment platforms to global expansion, the big tech has a strong drive on health, home and Smart mobility.

Tencent's most invested startups of our study 2010-2019

- Waterdrop 
- PolicyBazaar 
- Cover 
- Circle Medical 

Developments, partnerships, investments or acquisitions



SMART MOBILITY

HOME SAFE HOME

HEALTHY LIVING

SMART MOBILITY

Tencent considered as China's social networking and video game leader has a seat in the autonomous car, including partnerships with six Chinese automakers to develop autonomous vehicles and has received one of the first licenses to test self-driving cars.

HOME SAFE HOME

Tencent seems to build an ecosystem around its leader product: We Chat, such is the case of the Xiaowei a home assistant who has the function of being the best companion of the social network within the connected home.

HEALTHY LIVING

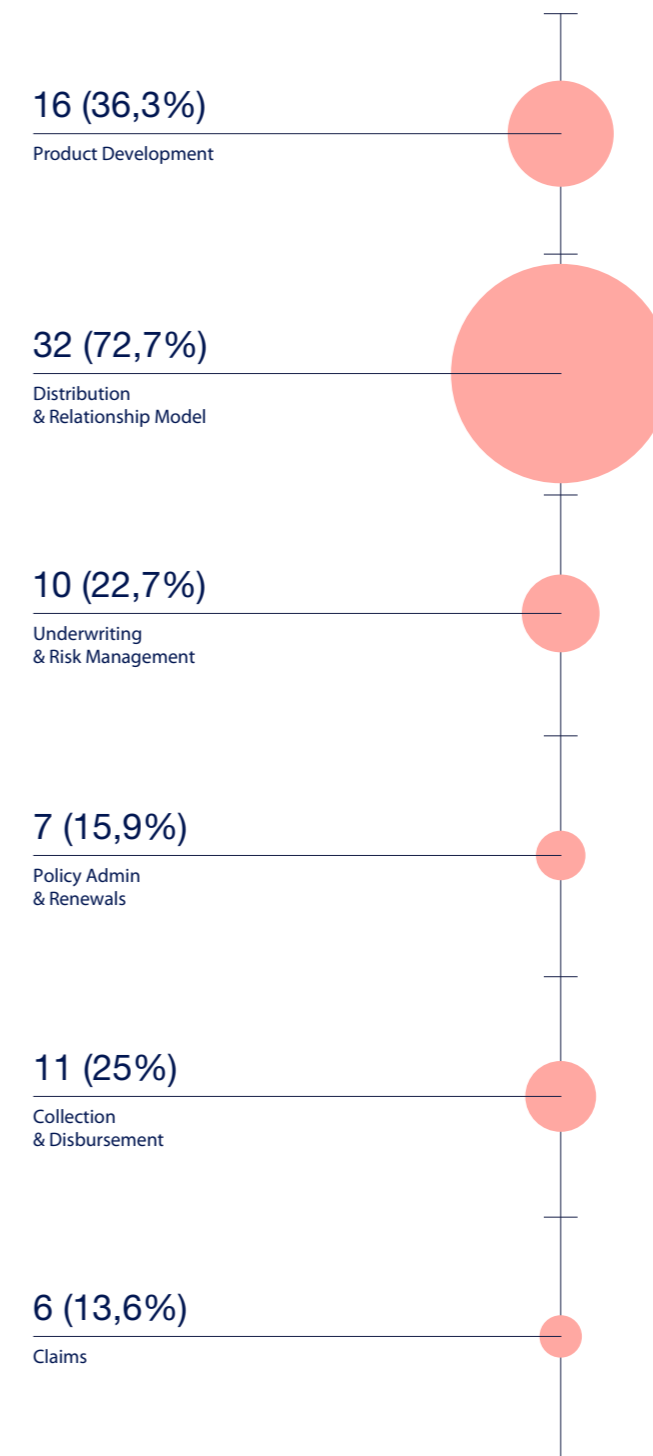
The big tech has transformed the way patients relate in the healthcare ecosystem, by using WeChat patients and medical facilities are connected with online consultations, bill payment through WeChat Pay, and an online insurance with disruptive features including AI-powered recommendations, one-click termination of insurance contracts.

TechGiants' impact.

72,7% of the respondents identify Tencent the area of Distribution & Relationship as the one that will have the greatest impact in the value chain.

Meanwhile, 13,6% of the respondents identify the Claims area as the one that will have the least impact on the value chain.

TENCENT: In which of the following areas of the value chain do you think there will be a greater impact?




Survey answered by 44 CEOs and executives of insurance companies worldwide

Rakuten

Rakuten is still mainly oriented to online commerce, being one of the world leaders in this sector, both in Japan and in other continents thanks to its acquisitions. In the area of mobility and health, it is making important acquisitions or participations in recent years, but in the home ecosystem its presence is almost nil, except for its Rakuten TV service.

Rakuten's most invested startups of our study 2010-2019

- Simple Insurance 
- Everledger 
- Premfina 

Developments, partnerships, investments or acquisitions



SMART MOBILITY

Rakuten has invested in recent years in companies related to transport services such as Lyft, Gojek, Cabify or Careem. It is also approaching the automobile insurance sector with acquisitions in Galaxy.ai, to automate claims management with AI. It has also invested in Glovo, a platform for sending products on demand or the World Travel System travel services company.

HEALTHY LIVING

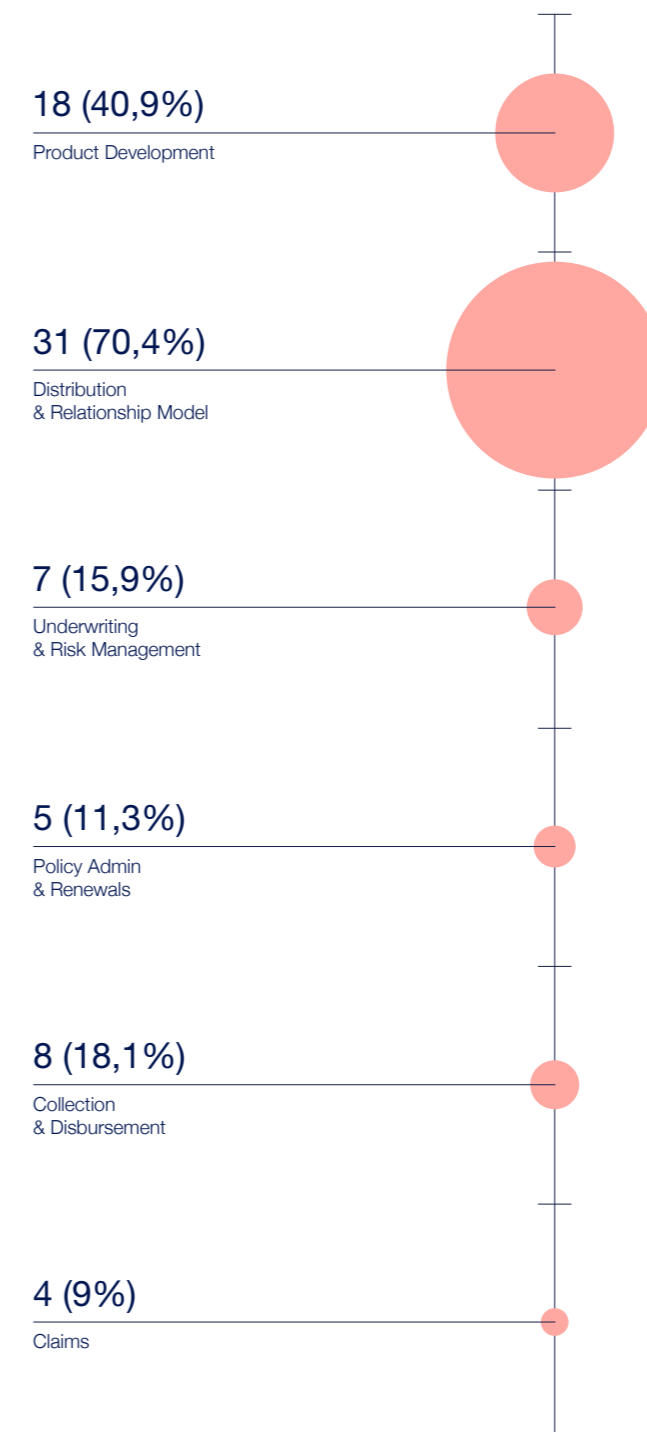
As far as the Healthy Living ecosystem is concerned, Rakuten has its own Life insurance and general insurance company. It has also invested in companies such as Dacadoo, which offers data on user risk to insurers; Genelife (to make genetic tests); Overture (in the field of embryology) or Asppyrian (to treat cancer).

TechGiants' impact.

70,4% of the respondents identify Rakuten the area of Distribution & Relationship as the one that will have the greatest impact on the value chain.

Meanwhile, 9% of the respondents identify the Claims area as the one that will have the least impact on the value chain.

RAKUTEN: In which of the following areas of the value chain do you think there will be a greater impact?



Survey answered by 44 CEOs and executives of insurance companies worldwide

TechGiants recent activity in insurtech market.

ASIA, BUT SPECIALLY CHINA, IS BECOMING A TERRITORY WHERE INVESTMENT IN THE HEALTHY LIVING AND SMART MOBILITY ECOSYSTEMS IS GROWING SIGNIFICANTLY.

The technology giants Alibaba and Tencent are the ones who lead the ecosystem related to health and lifestyle in Asia. In the ecosystem related to intelligent mobility, Alibaba repeats and ranks among the first, this time with Baidu.

The number of potential clients of both types of services is growing steadily in Asia, so the opportunity to offer services is very wide. These organizations, which were born as e-commerce companies or search engines, respectively, are betting on becoming service providers, among with those of health, insurance or mobility. And they do this by incorporating these services into their platforms.

These giants also make investments outside their home markets, eventually investing in large companies that operate in European or American markets.

ALPHABET IS DIVERSIFYING ITS INVESTMENT AND OCCUPIES THE TOP POSITIONS OF THE THREE MAIN B2B ECOSYSTEMS.

Through two of its investment funds (CapitalG and GV), it is present in a large number of companies that are transforming the mobility, home and health and life ecosystems. In addition, in many cases it has opted to create companies internally that aim to radically transform the lives of people in these fields.

Alphabet invests in companies so varied that they range from medical research to devices (health or home) through the provision of services (as in the case of mobility or marketplaces of home services).

SMART MOBILITY & HEALTHY LIVING ARE THE ECOSYSTEMS WITH THE MOST IMPORTANT DEALS IN 2019.

The smart mobility ecosystem is attracting more and more investments in an increasingly global way. Participation and companies in the mobility ecosystem is growing both in the United States, as in Europe and Asia. Although in each region it does so from a different perspective: knowledge and exploitation of the data (Cambridge Mobile Telematics), pay-per-mile model (Root or Friday); or online distribution in less mature markets such as the Indian one (Acko).

The same goes for the healthy living ecosystem, where there is a large investment in the United States due to its private health system, but also in China, with the emergence of a platform that connects insurers with potential customers and allows people to start crowdfunding campaigns to help patients in need of financial support.



04

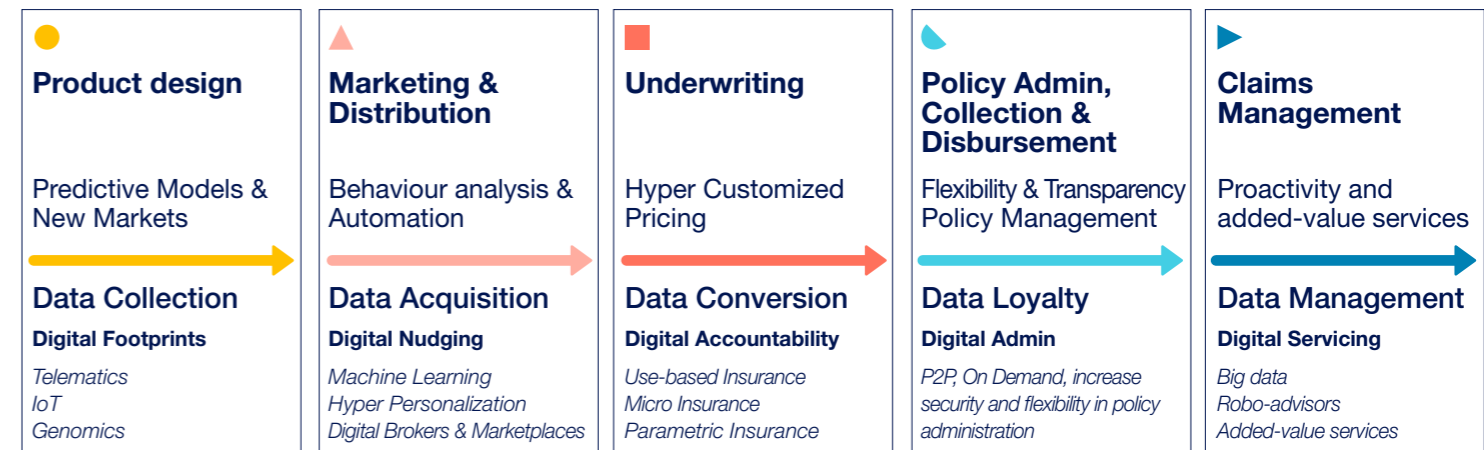
Fragmentation of the value chain.

Key Research Insights.

Transformation of the Value Chain

The transformation of the insurance value chain leveraged by new technologies helps new incumbents to generate new products, reduce distribution costs, increase customer retention and improve prevention for reducing claims. Just in 2019 more than \$5B were injected in insurtech companies with new business models related to this transformation.

• 2015-2019 CAGR

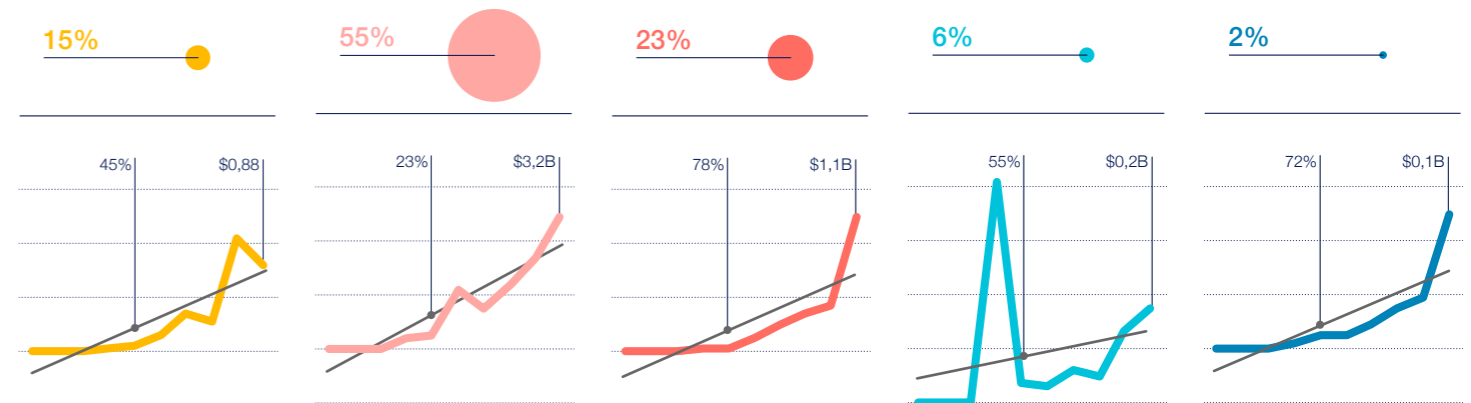


As we have seen along this study, the relationship between insurers and clients is changing, as the type of risks and issues faced by this industry.

Due to changes in VUCA (volatility, uncertainty, complexity and ambiguity) framework and constant shift in customer's preferences, Insurers have the challenge to find new ways to collect customer data and reshape their products and services with portfolio diversification, underwritten and pricing optimization based on customer's relevant data.

The new exponential technologies enable Insurance Companies to attend all of these challenges, but it implies to acquire new capabilities, or integrate these capabilities from others, along with its traditional value chain.

These new capabilities are allowing Insurance Companies to move from generic and reactive to personalized and proactive organizations.



Product design

Predictive Models & New Markets

Data Collection

Digital Footprints

Telematics
IoT
Genomics



2019 Key findings related to Product design.



Raised \$500M from Softbank helping the insurance industry to provide more accurate data about how people operate their vehicles.

FRI:DAY

The first insurance company to introduce pay per mile in Germany, raised \$127M led by Insurance Company Swiss Baloise Insurance Group.



The pay as you go car insurance, raised \$15M Series A led by RTP Global. ByMiles pay-per-mile solution raised another \$8M led by Octopus. Both operate in the UK market.

• DATA DISRUPTING AUTO

Telecom companies are mostly buying Data from Auto. The highly saturated Smartphone market forces these companies to expand through other devices such as connected car.

Insurance companies are investing in insurtech companies based on pay-per-mile or usage plans. The world is changing, car ownership is contracting in response of new mobility options. New business models, car sharing and fleet management edge technologies (Uber, Lyft...) are enabling alternative models for the Auto Insurance products.



The company that develops a more accurate profile based on IoT resulting in qualified customers receiving a comprehensive, tailored and accurate quote, raised \$100M Series E led by Bond.



Allows you to receive instant alerts and makes it easy to check on your home from anywhere is going to be used by Topdanmark home insurance because of its recent partnership with Homeserve.



The company providing genetic testing and interpretation to individual consumers raised \$300M investment from Pharma GlaxoSmithKline. Alphabet is main investor through Verily.



Shift Technology raised \$100M from Goldman Sach & Lithia Motors. CoverHound, cybersecurity policy for SME raised \$56M from Hiscox, Aflac, Chubb. Coalition cybersecurity insurance that covers expenses incurred from liabilities related to ransomware attacks raised \$40M series B led by Ribbit Capital and Greenoaks.

unqork

Helping businesses to design and deliver products faster and more efficiently, providing a better experience to new customers demands raised \$110M series B led by CapitalG & Alphabet.



Offering innovative insurance products via open APIs and white-label front-ends raised \$8M Series A from Alven and made partnership with MunichRe and Swiss Baloise or Deliveroo insuring its riders. Zego insurance for emerging mobility services, such as ride hailing and transport sharing raised \$42M series B led by Target Global & DST Global.

• RISK ACCURACY

Insurtech companies based on IoT, which include water leak, fire, temperature and humidity sensors, allow Insurance companies to introduce new products and coverages that will reduce the impact of claims in their future operational costs.

Wearables and Genomics help customers to adopt a healthy life and allow health care companies to implement personalized medicine to better prevent or treat patients that will probably reduce the impact in the future illness related costs.

These new technologies support predictive models, allowing Insurance companies to create cross selling activities around the ecosystems (new mobility models, healthy lifestyle...).

• EMERGING COVERAGE

New business models like Deliveroo and Glovo widen Insurtech companies opportunities to create new products and coverages for these particular markets.

The rise of the IoT and the adoption of 5G technology in 2020 will also be an important opportunity for Cybersecurity, specially for small and medium businesses.



Country: USA
Employees: 501-1000

Headquarters: Sunnyvale
Founders: Anne Wojcicki, Linda Avey & Paul Cusenza

Health

Industry

Pricing & Underwriting

Value Chain

Health

Line of Business

B2C B2B

Type of client

Year 2015

Foundation date

USD 900K in 2007
(Series A)

First Round of investment

USD 300M in 2018
(Corporate Round)

Last Round of investment

GlaxoSmithKline

Lead Investors

USD 786M

Total funding amount

RELATED STARTUPS:
Google / Verily / Doctor on demand

TRAITS FEATURES
Know what makes you, you. Explore your traits.

- Physical Features
Discover what makes you unique. With reports like hair photobleaching and freckles, learn how your DNA can influence your physical features.
- Taste and Smell
- Weird And Wonderful

Learn more



23andMe is a genome research company that provides actionable genetic insights to its customers. They are able to collect their own saliva with 23andMe products to map accurate information regarding their Health predisposition, ancestry composition, Physical features and other genome related data. These products can be purchased online and the genome information is provided via the company's app.

Business model

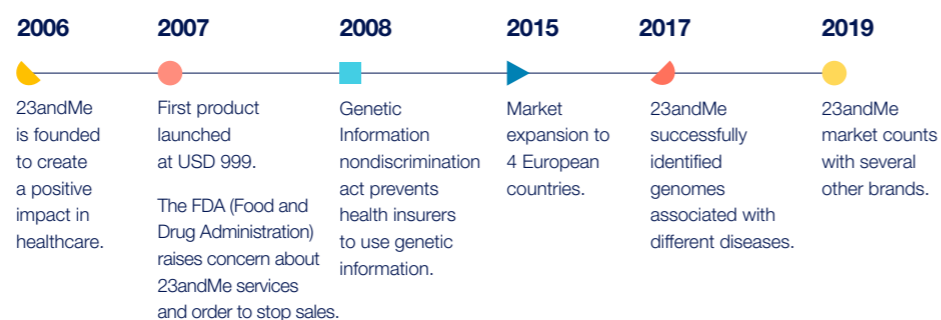
23andMe sells affordable and interactive product to customers analyzes their genome features. All data is collected and stored to be used on research or product development.

Customers can also engage in social DNA relative finder, participate on scientific studies or explore their traits

On the one hand, genome data may work for customer's interest or against it, for instance, insurance companies would be able to quickly identify high risk customers and price premiums accordingly.

On the other hand, Genome knowledge can fuel human health research preventing diseases, improve wellbeing and create innovative products that are valuable to end users and ultimately to the society.

Milestones



Country: Belgium
Employees: 11-50

Headquarters: Brussels
Founders: Jean-Charles Velge & Quentin Colmant

Cross

Industry

Marketing & Distribution

Value Chain

Cross

Line of Business

B2B B2C

Type of client

Year 2016

Foundation date

USD 1.7M in 2016
(Seed)

First Round of investment

USD 9M in 2019
(Venture Round)

Last Round of investment

Alven

Lead Investors

USD 16.6M

Total funding amount

RELATED STARTUPS:
Vitality



Qover is an insurtech that offers coverage to digital business users. Through a plug and play open API technology, the company gives the option to its clients to offer Insurance to the end consumer or user, using a personalized interface to each client. Modularized solutions and simple integration helps Qover to scale and partner with more digital-focused businesses that is interested in offering insurance solutions inside their online platforms.

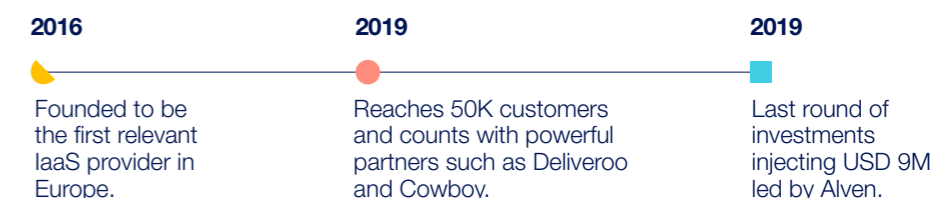
Business model

Qover is the first laaS (insurance as a service) that allows partners to distribute insurance products to end users. For instance, Deliveroo is offering Qover coverage to its couriers by integrating Qover's insurance option plans within Deliveroo's platform.

Partners can provide insurance to all users and generate additional sources of revenue selling coverage from Qover, that provides tailored dashboards and manage the whole insurance coverage process to its partners.

Moreover, the company builds and develops new products and makes them available in real time, creating a transparent and fast environment to all stakeholders.

Milestones



Marketing & Distribution

Behaviour analysis & Automation

➔

Data Acquisition

Digital Nudging

Machine Learning
Hyper Personalization
Digital Brokers & Marketplaces



2019 Key findings related to Marketing & Distribution.



A wide-range of insurance coverage to more than 1,000 unique types of small business becoming the latests unicorn in the nation. Munich Re invested \$250M.

coverwallet

Insurtech using data and analytics to provide special reports and insurance personalization for small and medium business has been acquired by AON.

EMBROKER

All-in-one platform for small and medium businesses with unified view of their policies company-wide, real-time claims tracking, and instant certificates has raised a \$42M Series B led by Tola Capital and Manulife Venture Capital.

COMMERCIAL STRIKES AGAIN

Insurtech companies are radically improving the way Insurance companies build and distribute products for Small and Medium Enterprises through data analysis, process automation and digitalization.

Insurance Companies are investing large amounts of money in these insurtech companies that are growing rapidly.

Lemonade

Raised \$300M D Series from Softbank, Allianz and GV with the goal of expanding its business to Europe invested \$300M in Lemonade. AXA Germany made a partnership with Lemonade to start its expansion in Germany.



Insurance organization, which includes a wholesale brokerage firm (RT Specialty) and an underwriting management organization, raised \$150M from Onex.

wefox

G R O U P

Raised \$110M B Series led by Goldman Sachs. Wefox works with insurance brokers, agencies, and individuals through a digital platform that allows for simple and personalized consultations for all types of Insurance. Wefox made a partnership with MunichRe because of its One Insurance product.



An online life insurance and general insurance comparison portal raised \$150M G Series from Tencent for a 10% of the Company.



bowtie

First authorized digital agency in Hong Kong offering plans to a range of health-focused insurance products raised \$30M from Tencent and Sun Life.

turtlemint

Tech platform that provides recommendations to customers based on proprietary algorithms and data analytics, raised \$25M series B led by Sequoia.



A SaaS platform that reduces friction to find, quote and buy coverage with technology solutions that can be integrate via API with any customer's digital platform, raised \$32M series B led by Guggenheim partners.

NEXT GENERATION BROKERS LANDS IN EUROPE

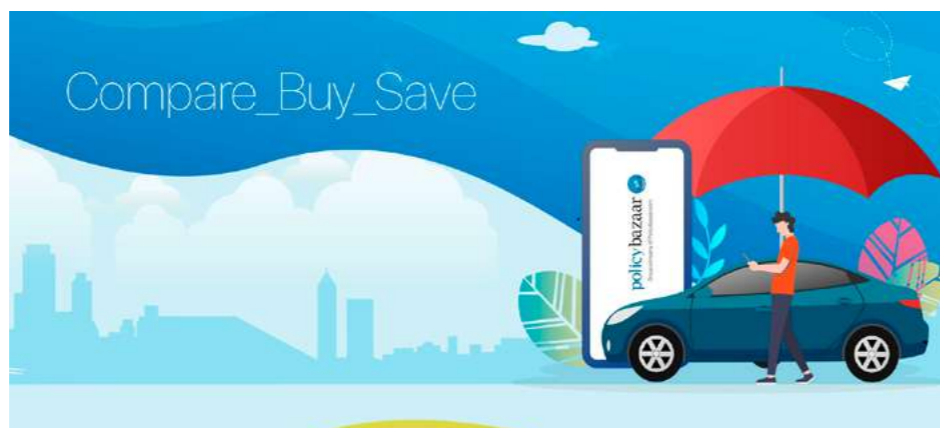
With data leading the transformation of the value chain, Artificial Intelligence is transforming the distribution in ways never seen before. AI chatbots to answer customer questions, machine learning for eliminating paperwork and optimize the process for customers, behavioural economics for Insurance personalization have been proved to be useful not only for the US markets, but also for the European.

INSURERS LEADING THE INVESTMENTS & PARTNERSHIPS

In 2019 Insurance Companies performed the most important investments, acquisitions and partnerships related to Insurtechs operating in marketing and distribution activity. For instance, MunichRe with Next and WeFox, Allianz and AXA with Lemonade, Sun Life with Bowtie and AON in CoverWallet.

Insurers and Techgiants seem to be forced to collaborate. The current scenario shows that they will have an important role in the distribution transformation as one of the main stakeholders.

Country: India **Headquarters:** Gurgaron
Employees: >10000 **Founders:** Alok Bansal & Yashish Dahiya



PolicyBazaar is an online insurer aggregator platform, that compares several policies to each customer's demand. In the company website, users can access different policies from distinct insurers and compare coverage plans, that embrace life, health, car and travel insurance. Thanks to a unbiased algorithm, users are able to search millions of insurance plans and choose the most suitable one through a total digital and hassle-free process.

Business model

PolicyBazaar provides its services through a mobile app or website, in which customers can compare numerous insurance policies. Additionally, the company works with hundreds of insurer partners that are able to distribute its products through PolicyBazaar's platform to suitable customers. These customers can benefit from PolicyBazaar efficiency to find better policies at lower prices, due to automation and a data-driven technology that uses different variables to identify suitable coverage options and shrink operational costs.

Market

Operating in India, PolicyBazaar enlarges the insurers customer base and improves end users experience. Using technology and automation, the company counts with important partners in the insurance sector, enhances the access and transparency of Indian customers, improving the overall efficiency of Insurance in the country.

Milestones



Cross

Industry

Platform Ecosystem / Marketplace

Value Chain

Cross

Line of Business

B2C

Type of client

Year 2008

Foundation date

USD 4.6M in 2013 (Series A)

First Round of investment

USD 150M in 2019 (Series G)

Last Round of investment

Tencent Holdings

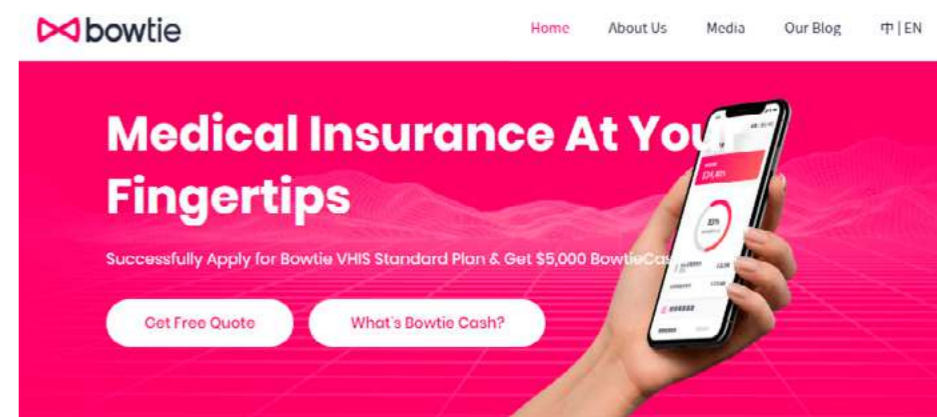
Lead Investor

USD 486.6M

Total funding amount

RELATED STARTUPS:
Digit partner

Country: China **Headquarters:** Hong Kong
Employees: 11-50 **Founders:** Fred Ngan & Michael Chan



Health Insurance

Industry

Marketing & Distribution

Value Chain

Health

Line of Business

B2B B2C

Type of client

Year 2018

Foundation date

USD 30M (Series A)

First Round of investment

Sun Life Financial

Lead Investor

Sun Life Financial (Fintech)

Insurer investor

USD 30M

Total funding amount

RELATED STARTUPS:
OSCAR

Hong Kong First Virtual Insurance Company

Bowtie is the first all-digital insurance to receive legal authorization to operate in Hong Kong. The company, founded in 2018, is challenging the domestic sector, claiming that the traditional industry is focused on savings and investments, instead of protection and transparency. The application, purchase and claim is done digitally via intelligent automation and an encrypted system to protect your personal data with commission-free and pay-as-you-go basis monthly charges.

Business model

This recent insurtech is consolidating partnerships to expand its customer base. Bowtie is already offering its services through the VHIS (Voluntary Health insurance program)- Hong Kong Food and Health Bureau program to improve the healthcare in the region. Competing with solid insurance players in the VHIS program such as the insurance giants AXA and CHUBB, the startup bets on the simplified and friendly user experience within an online end to end customer journey. Moreover, Bowtie's cash program is unique to its clients, showing the company's interest to create cashless and digital currency payments.

Market

Hong Kong has a traditional insurance industry, but Insurtechs are gaining traction in recent years with 8 startups in seed stage receiving more than USD 60M in funding and hosting one of the largest Asia Insurtech event: InsureTech Insights. AIA Group, Sun life Financial and Greenlight Insurance are investing in early stage insurtech companies including Bowtie. The startup counts with Former Hong Kong's Financial Secretary as a senior adviser to grow internally and expand to other southeast Asia countries.

Milestones



Underwriting

Hyper Customized Pricing

→

Data Conversion

Digital Accountability

Use-based Insurance
Micro Insurance
Parametric Insurance



2019 Key findings related to Underwriting.

Root Insurance Co

Personalized car insurance coverage that gives good drivers the low rates, raised \$350M Series E from DST Global.



Car Insurance marketplace applying data-driven algorithms to offer best rate to its customer, raised \$100M series A led by Goldman Sachs.

Cytora

Applies AI to public and proprietary data, including property construction features, to better predict risk and ensure more transparent pricing raised \$30M.

Quantemplate

Machine learning data platform for market and pricing insights with flexible analytics tools, or export and share clean data, raised \$12M B Series led by Allianz X.

PROACTIVE PRICING

Improvements on data collection allow the implementation of the behavioural analysis in all types of products in the Insurance industry.

Drivers, renters and healthy customer lifestyle pushes the demand for one of the most important trends in Insurance value chain: the underwriting process.

Relevant investments started to appear in this value chain from main investors and insurance companies.



Invested \$96M in BIMA a European startup that builds and sells “microinsurance” services for low-income consumers in Africa, Asia and Latin America.



The insurtech that connects, through mobile phones, health payers to millions of people in Africa who are currently excluded from access to affordable, quality healthcare services, raised \$45M growth capital in Series A from The Investment Funds for Health in Africa.



Selling automotive insurance in India and microinsurance products has raised \$100M from investors like Flipkart or Amazon.



The company that uses an online health quiz and data analysis to determine personalized pricing discounts tied to healthier living, raised \$55M D Series. Among VCs is Horowitz firm.

Clover

The health insurer that collects and analyses health and behavioural data to lower costs and improved medical outcomes, raised another \$500M, from Greenoaks.



The insurtech that collaborates with health systems to co-develop health plans with affordable pricing and improved medical outcomes raised \$635M series D led by NEA.

EMERGING MARKETS

Insurtech companies found a huge opportunity for Micro Insurance in emerging markets. The adoption of new techs and new business models in these markets enables Insurers to sell customized products to low-income and uncovered customers tailored for their specific needs.

Insurance Companies and Tech Giants are leading the main investments related to emerging market products, having the possibility to operate in new geographies with substantial growth rates.

RISK ACCURACY

The largest venture funding rounds in 2019- and in the whole period- have been raised by two healthcare companies focused on improving Insurance health plans with affordable pricing and enhanced medical services.

In the specific context of Public Healthcare in the US market, Insurtechs are using technology to improve the domestic healthcare processes and model accurate pricing segmentation. This sector has gained traction rapidly with support from VCs firms that are investing large amounts of money behind these models.



Country: Sweden
Employees: > 1000

Headquarters: Stockholm
Founders: Gustaf Agartson



BIMA is an insurtech player leading emerging market insurance and mobile health, using innovative mobile technology to reach people who have never had insurance and health services that include life, accident and health coverage. BIMA deep understands its special consumer needs, serving insurance to underprivileged people with a sustainable and profitable business. To attend BIMA customer's special needs, the company developed a proprietary technology that uses a mobile operator network to allow transactions and services towards simple phone devices.

Business model

BIMA is a leading insurance for underserved customers and is fueling inclusion through technology, cost – efficiency distribution – direct sale to end customers – and a unique agent approach that assists and educates people regarding insurance and mobile health.

The company counts with mobile operators, Micro finance institutions and banks as partners to scale and improve its services.

This framework allows customers to pay affordable premiums for BIMA's services, which includes health insurance, micro insurance and tele-doctors via mobile phones, while keeping BIMA's sustainable and profitable business.

Market

BIMA offers affordable insurance in developing countries, being present in 13 emerging markets.

BIMA reaches more than 31 million customers, that mostly live under USD 10 a day, making solid partnerships and cost-efficiency products essential to increase the customer base that is currently increasing with exponential rates.

Milestones



Life and Health Insurance

Industry

Product Design & Development

Value Chain

Life and Health

Line of Business

B2C B2B

Type of client

Year 2010

Foundation date

USD 2.5M in 2012
(Seed)

First Round of investment

USD 36M in 2017
(Series B)

Last Round of investment

Allianz X

Lead Investor

Allianz

Insurer investor

USD 176M

Total funding amount

RELATED STARTUPS:

Next Insurance



Country: Netherlands
Employees: 101-250

Headquarters: Amsterdam
Founders: Onno Schellekens, Rens Alban & Arnoud Martens

Health Insurance

Industry

Collection & Reimbursement

Value Chain

Health

Line of Business

B2C

Type of client

Year 2015

Foundation date

USD 44.9M in 2019
(Series A)

First Round of investment

Dutch Ministry of Foreign Affairs, ELMA Philanthropies, Investment Funds for Health in Africa

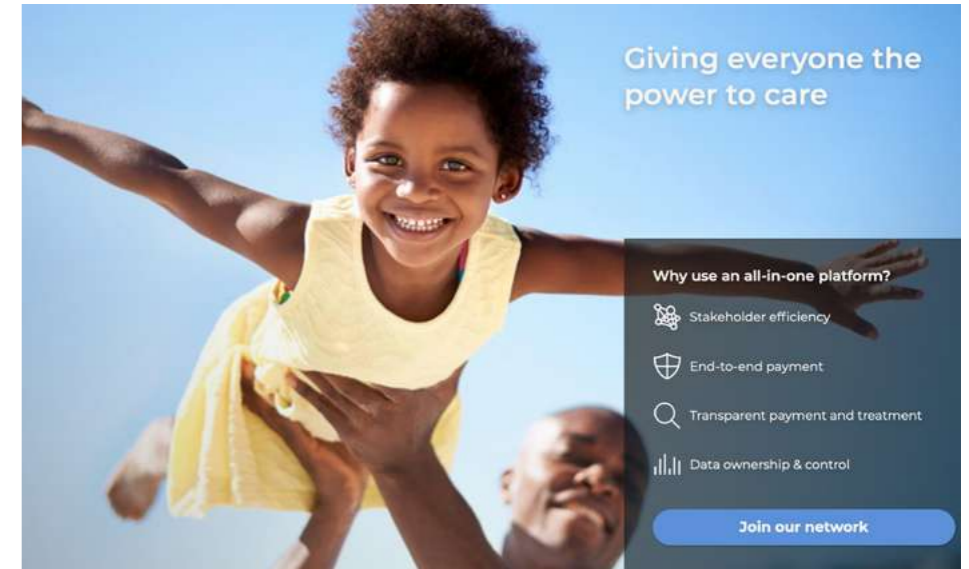
Lead Investors

USD 45.2M

Total funding amount

RELATED STARTUPS:

BIMA



Carepay international uses existing mobile phone technology to transform healthcare industry. The company facilitates financial transactions and patient data related to healthcare using a digital platform to connect patients, providers and payers. Besides that, Carepay platform allows donors and providers to analyze patient data, request and receive health care payments.

Business model

Carepay International increases healthcare transactions efficiency through one integrated platform.

Users pay insurance premium to help them cover healthcare needs in one single platform that connects to a vast network of donors, insurers and providers that can visualize users in need for healthcare.

The company decreases costs by digitalizing patients real time data and payments that are made via mobile health wallets, – leveraging current telecom partnerships –. Once the treatment is made, providers can request the payment to insurers or donors depending on each patient status.

Market

The company has both the intention to provide healthcare inclusion and bridge financial transactions in this industry

This Dutch company operates in Kenya, Tanzania and Nigeria that sum 4 million users and thousands of healthcare providers.

Due to Carepay transparency and consistency, the company also provides its services to governments.

Milestones



Policy Admin, Collection & Disbursement
Flexibility & Transparency
Policy Management

Data Loyalty
Digital Admin

P2P, On Demand, increase security and flexibility in policy administration



2019 Key findings related to Policy Admin, Collection & Disbursement

EVERLEDGER

Technology to create a secure and permanent digital record of an asset's origin, characteristics and ownership raised \$20M A Series led by Rakuten, Tencent and Fidelity



design index-insurance products that automatically compensate farmers when they are facing adverse weather raised \$0.5M from Swiss Capacity Building Facility and ImpactAssets.



Logistics tracking, cargo handling and insurance for trans-border trade business raised \$70M from Sequoia.



New parametric insurance based on the IoT goods tracking for cargo marine made a partnership with AXA XL.

BLOCKCHAIN AND IOT FOUND ITS SPOTS IN GOODS TRACKING

Digitalization and ubiquitous data in the supply chain due to IoT technology make possible to track location and conditions of goods, enabling Insurtechs to underwrite more precisely the risk.

Smart Contracts for new parametric Insurance in supply chain or assets origin digital records starts to receive important investments and partnerships specially if they are applied in cargo marine or rural businesses.



insurtech that enables travelers to purchase on-demand policies up to the time of their flight takeoff raised \$23M from W.R. Berkley and IA Capital Group.



provides regulated insurance policies like sports equipment, pets, electronics, contracting work, jewelry, flight tickets, and cars and purchase online claims via its instant payments platform in more than 90 currencies, raised \$10M Series B from King River.



First on-demand, telematics based for specialized mobility (drones, e-scooters, small planes..) raised \$5M series A led by Arbor and Verizon.



The P2P health mutual plan based on blockchain technology covering more than 100 critical illness onboard in 2019 50 million users. Tencent and Alibaba are main investors.



A aiming to provide more affordable medical alternatives including crowdfunding, mutual, and insurance products raised \$75M series B led by Tencent.

RISK ACCURACY

The Gig and Sharing economy keep pushing new add-on services for those uncovered products and services.

New business providing services related to travel delays and cancellations, and shared economy are completing the current surge for on demand products.

Likewise, P2P models seem to be the new way, in Asia, to cover unattended patients that are uncovered because of critical illness or due to disease-stricken.



Country: China **Headquarters:** Beijing
Employees: 70 **Founders:** Shen Peng



Waterdrop is a Chinese platform that connects insurers with potential customers and allows people to start crowdfunding campaigns to help patients in need of financial support in health care expenses. Founded in 2016, the company counts with more than 80 million users and its mutual fund helped almost 10 thousands families.

Business model

The company operates with risk pooling efficiency and provides health insurance or mutual aid fund in China.

Users can engage in social platform (WeChat) to ask for healthcare aid and receive financial assistance from millions of users. Besides that, the company increases the trust using technology to improve transparency and eliminate false caring demand.

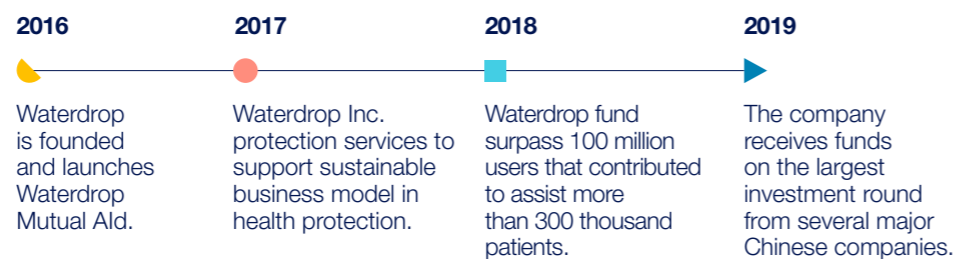
Waterdrop offers low cost and cost-effective insurance with assistance of large partners that includes Ping An and Zhong An insurance companies and became the one of the main distribution channel for several Chinese insurance companies.

Market

Waterdrop positions to be a health care provider to assist families in need and distribution channel for Chinese insurers

The company counts with leading Chinese enterprises assistance and funding to continue to protect major not covered diseases and create a positive impact in the social insurance ecosystem.

Milestones



Health Insurance

Industry

Marketing & Distribution

Value Chain

Health

Line of Business

B2C B2B

Type of client

Year 2016

Foundation date

USD 24K in 2015

(Seed)

USD 750K in 2016

(Series A)

First Round of investment

USD 145M in 2019

(Ventures Round)

Last Round of investment

Boyu Capital, China Capital Investment Group, Gaorong Capital, Tencent Holdings

Lead Investors

Ping An

Insurer Investor

USD 220M

Total funding amount

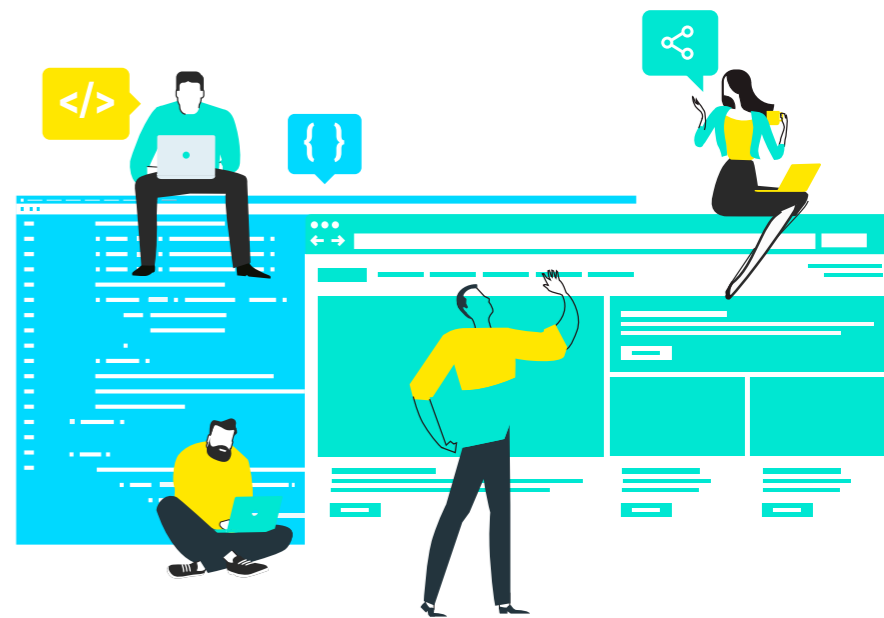
RELATED STARTUPS:

Naked / Zhong An



COVER GENIUS

Country: Australia **Headquarters:** Sydney
Employees: 101-250 **Founders:** Angus McDonald & Chris Bayley



Cross

Industry

Policy and Claims Management

Value Chain

Cross

Line of Business

B2C B2B

Type of client

Year 2014

Foundation date

USD 800K in 2015

(Seed)

First Round of investment

USD 10M in 2019

(Series B)

Last Round of investment

King River Capital

Lead Investor

USD 11.6M

Total funding amount

RELATED STARTUPS:

Qover

Cover Genius is a global insurance company driven by technology, offering a vast number insurance options due to its unique and ambitious vision statement to protect all customers of the largest online companies worldwide. All Cover Genius products can be added in its clients platforms through Cover Genius' API and are designed to use Data driven to build personalized insurance for the end user.

Business model

Cover Genius products embrace from personal cyber security to pets insurance, but does not includes life or health

The company has 4 main products: ⁽¹⁾ X Cover, ⁽²⁾ Rental Cover, ⁽³⁾ X Claim and ⁽⁴⁾ Brightwrite that forms CoverGenius digital engine, which is provided to partners that can optimize pricing and delivers a highly personalized experience to end customers.

In addition to that, CoverGenius partners create synergy within the platform by offering different parts of customers insurance needs using Artificial Intelligence to identify the most relevant insurance co-created with its Insurer partners.

Market

The company is present in several countries and follows the trend of insurance personalization.

The intrinsic business model potential allows any large ecommerce brands to provide insurance for their customers, consequently Cover Genius has access to a large amount of data improving the design of products, recommendation system and risk management.

Milestones





2019 Key Findings related to Claims Management



The mobile application to accelerate estimates of repairs to vehicles that are victims of road accidents, raised \$29M E Series round with Liberty Mutual.



a (SaaS) platform boosts a proprietary dataset comprised of tens of millions of claims, helping customers' claims and underwriting teams make better decisions more efficiently, raised \$6M A Series led by GV. In January, Gradient AI joined DuckCreek offering measurable results in underwriting and claim operations.

Yuandudu

Is dedicated to analyze a large number of risk fraud scenarios and introduce risk management tools accordingly, so as to help insurance companies accurately identify auto insurance fraud cases raised \$3M.

► CLAIMS MANAGEMENT SPEAKS AUTO

In 2019 most of the investments related to claims management went to the Auto line of business.

Big data and Deep learning seem to be two technology solutions that are going to change the auto claims process for the intelligent claims management. Insurtechs based on these technologies are receiving investments mainly from Insurance companies.



The virtual nurse chatbot that improves patient engagement, increases voluntary disclosure of information and is able to recommend partners network services and products, raised \$15M series B led by Aflac and Nippon Life.



The platform connects consumers with agents and leverages AI to answer customer queries and for customized solutions through a public WeChat accounts, raised \$10M from Sequoia.



BlockClaim's AI-driven claims triage & fraud filtering solution has been specifically designed for commercial insurers to streamline claims processes and minimize leakage, raised \$1,2M from Techstars.



A subscription service that provides care and repair for home, announced it has completed a \$20M Series B. Liberty Mutual and MunichRe participated in this round.



Is an online platform that offers a new and fully digital way to handle car damage claims for insurance and fleet companies raised \$7M from Lyft-backer. In 2018 Fixico made a partnership with AXA Belgium for being its digital claim handling solution.



Is a digital platform that allows you to find professionals in the home service sector to perform home repairs raised \$1M led by industry player Multiasistencia.

► ROBO ADVISORS FOR COST-SAVING AREAS

Out-of-the-box tech models are transforming claims processes through AI and machine learning providing simple, transparent, self-service and fast processes.

Operational activities driven by cost-saving strategies may be a real opportunity to start in the digitalization process of claims management process through robo-advisors.

► THIRD PARTY INTEGRATION FOR AN END2END DIGITALIZATION

For an end 2 end digital transformation of the claims management Insurers are investing and collaborating with startups related to the road assistance management or repair-shop networks.

This type of digital integration allows Insurance companies keeping the sole ownership on its customers while increasing its competitive differentiation.



Country: USA **Headquarters:** Chicago
Employees: 251-500 **Founders:** Brad Weisberg & CJ Przybyl



Snapsheet is a tech driven company that offers solutions to insurance to manage claims, automating the whole claim process. Heavily invested in Artificial Intelligence and machine learning, Snapsheet's software is flexible to adapt to specific workflows and operational needs, creating a powerful engine to Insurers transform the management and settlements of their client's claims.

Business model

Snapsheet is a B2B SaaS company focused on making claims more consistent and efficient. The company offers solutions mainly to auto insurance companies, allowing them to decrease operational costs through automation, image recognition and bionic technology.

Clients can enhance its customers experience using Snapsheet's online platform, in which claims are filled, analyzed and settled automatically.

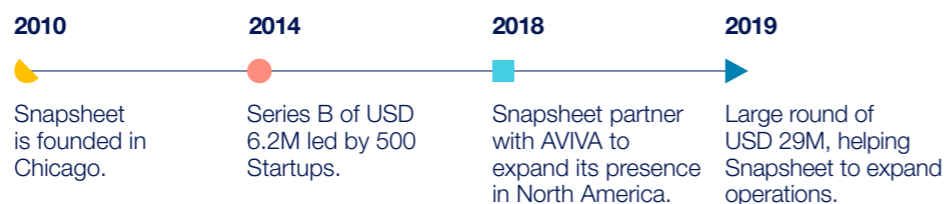
Due to the integrated and consistent technology, the software quickly recognizes and prevents fraud, diminishing business' risks.

Market

Operating in the USA the company counts with international clients. Snapsheet solutions give Insurers the ability to integrate its software.

The possibility to integrate Snapsheet's software in different process and workflows, allows clients to quickly respond to customer data in order to scale and diversify products portfolios.

Milestones



Auto Insurance

Industry

Policy & Claims Management

Value Chain

Auto

Line of Business

B2B

Type of client

Year 2010

Foundation date

USD 230K in 2011
(Series A)

First Round of investment

USD 29M in 2019
(Series E)

Last Round of investment

Tola Capital

Lead Investor

USAA

Insurer investor

USD 67M

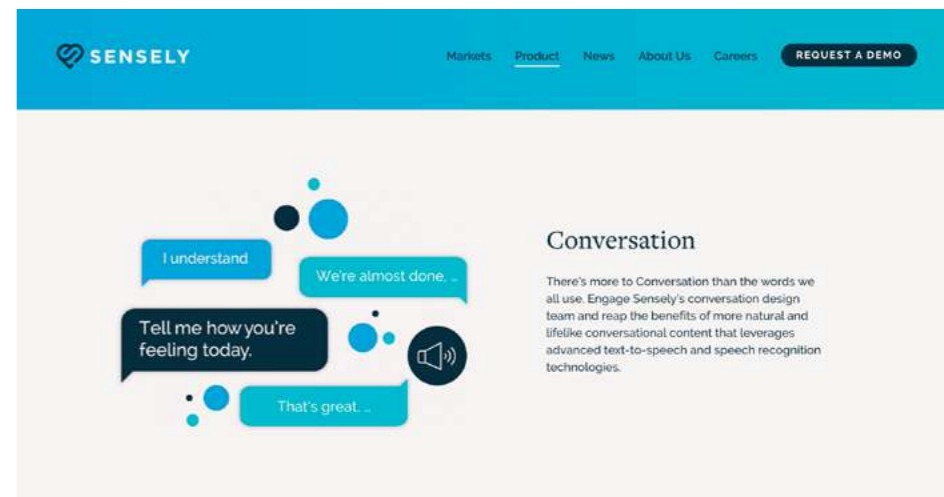
Total funding amount

RELATED STARTUPS:

Shift Technology / Duck Creek



Country: USA **Headquarters:** San Francisco
Employees: 11-50 **Founders:** Adam Odessky & Ivana Schnur



Health and Life

Industry

Product Design & Development

Value Chain

Health and Life

Line of Business

B2B

Type of client

Year 2013

Foundation date

USD 28K in 2013
(Seed)

First Round of investment

USD 15M in 2019
(Venture Round)

Last Round of investment

Aflac Corporate Ventures

Lead Investor

Nippon Life Insurance Company of Japan

Insurer investor

USD 26.8M

Total funding amount

RELATED STARTUPS:

CoverHealth

Based in San Francisco, California, Sensely provides software enterprise services to Insurers, employers and Pharmaceutical companies. Sensely focus on technological products with Artificial Intelligence with a human touch, that help its clients to engage with customers through natural language processing and human like chatbots. The company's technology can be integrated in client's digital platforms to provide customer service, claims and underwritten processes.

Business model

Sensly is a B2B SaaS technology driven company centered on wellness and healthcare. The company's software allows clients to improve their end users experience with personal services that includes instant access to chatbot customer service, remote healthcare monitoring and claims Artificial Intelligence assistance, creating a more transparent and close relationship with the customer. Sensely technology products are integrated directly in its clients apps or websites, permitting better patient illness prevention, operational costs reduction and customers risk assessment through Sensely's human-like chatbot that improves patient engagement, increases voluntary disclosure of information and is able to recommend partners network services and products.

Market

Sensly's services can improve the insurance and healthcare customer journey through automation. The value proposition allows its clients to deliver a digitalized and personalized user experience that is necessity in this industry to compete and scale consistently. Moreover, Sensely addresses to a significant pain points of healthcare, that are prevention of illness through trustful and human touch joined with data driven and powerful Artificial Intelligence.

Milestones



Fragmentation of the Insurance Value Chain.

• PRODUCT DESIGN

The insurers Spectrum	Startups	New players

▲ MARKETING & DISTRIBUTION

The insurers Spectrum	Startups	New players

■ UNDERWRITING

The insurers Spectrum	Startups	New players

▶ POLICY ADMIN, COLLECTION & DISBURSEMENT

The insurers Spectrum	Startups	New players

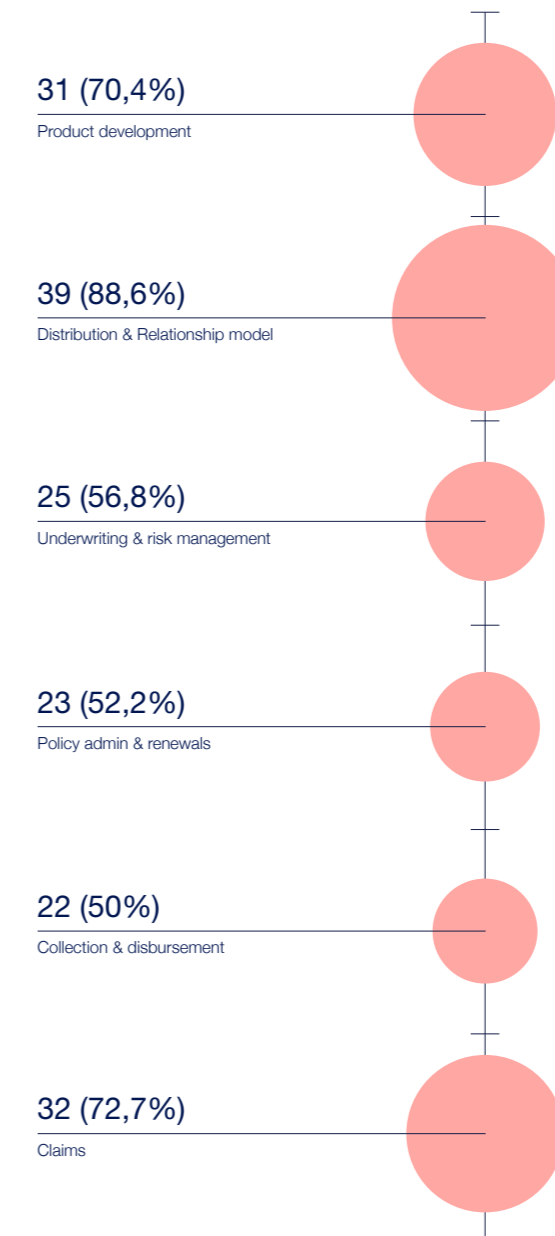
▶ CLAIMS MANAGEMENT & COLLECTION

The insurers Spectrum	Startups	New players

Survey results.

Value chain impact

Select those areas of the value chain you think will be impacted.

**Insights:**

Distribution & Relationship is the value chain perceived as more impacted by the digital transformation. This is natural also across other industries due to intrinsic digital world capabilities to reach wider audiences with efficiency.

Collection Policy shows the least impact. Since respondents have solid inside knowledge, this could be indication of the strongest areas for traditional insurance or with more dependence on external variables such as regulatory rules.

Claims are indeed a trend to disruptions. There are relevant players already deeply disrupting this value chain with automation, image recognition and Artificial Intelligence.

Survey results.

Conclusions.

Data Disrupting Auto.



TELECOM COMPANIES are mostly buying Data from Auto. The highly saturated Smartphone market forces these companies to expand through other devices such as connected cars. These new technologies support predictive models, allowing companies to create cross selling activities around the ecosystems (for instance new mobility models). INSURANCE COMPANIES are investing in insurtech companies based on pay-per-mile or usage plans. The world is changing, car ownership is contracting in response to new mobility options. New business models, car sharing and fleet management edge technologies (Uber, Lyft...) are enabling alternative models for the Auto Insurance products.

Next Generation Brokers Lands in Europe.



Insurtech companies are radically improving the way Insurance companies build and distribute products. With data leading the transformation of the value chain, Artificial Intelligence is transforming the distribution in ways never seen before. AI chatbots to answer customer questions, machine learning for eliminating paperwork and optimizing the process for customers, and behavioural economics for Insurance personalization have been proved to be useful not only for the US markets, but also for the European. In 2019, Insurance companies performed the most important investments, acquisitions and partnerships related to Insurtechs operating in Marketing and Distribution activity.

Proactive Pricing Boosts Health Leadership.



Improvements on data collection allow the implementation of behavioural analysis in all types of products in the Insurance industry. Insurtech companies found a huge opportunity in the Health activity. The largest venture funding rounds in 2019 -and in the whole period- have been raised by two healthcare companies focused on improving Insurance health plans with affordable pricing and enhanced medical services. In the specific context of Public Healthcare in the US market, Insurtechs are using technology to improve the domestic healthcare processes and model accurate pricing segmentation. This sector has gained traction rapidly with support from VCs firms that are investing large amounts of money behind these models.

On Demand & P2P Models for Uncovereds.



The Gig and Sharing economy keeps pushing new add-on services for those uncovered products and services. New businesses providing services related to travel delays and cancellations and shared economy are completing the current surge for on demand products. Smart Contracts for new parametric insurance policies -in supply chain or in assets that origin digital records- start to receive important investments and partnerships, especially if they are applied in cargo marine or rural businesses. Likewise, P2P models seem to be the new way, in Asia, to cover unattended patients that are uncovered because of critical illnesses or due to disease-stricken.



05

Predicting Successful Startups.

Predicting Successful startups.

The world of startups are a very important part of the world's economy. An increasing number of big companies such as Amazon, Google or Facebook have more and more weight in the economy worldwide or in other social aspects. In recent years the number of small businesses is growing at an exponential rate, so it is a challenge to know how this new sector works. Having an advanced knowledge about the world of startups is a requirement for those individuals or companies that make strong investments in them. For our work, successful companies have been defined as those that have been acquired by an investor at some moment. This does not mean that there are no other patterns that indicate that a startup has been successful, such as, for example, reaching a very high amount of revenue. For investors, having an estimate of whether or not a startup will be successful is a very competitive advantage that would put them ahead of their competitors.

In this work we propose to carry out a small investigation and experiments for the prediction of successful companies within the insurance field. It has dealt with different sets of data that have been extracted from the website CrunchBase.com. Secondly, the different experiments with the Insurtech dataset are tested to see which companies in our sample can be potentially successful. We are not only looking for a simple prediction, but also to extract all the information that indicates which factors have influenced the decisions of the predictions.

Data selection

The data used for this paper have been collected from webpage CrunchBase. comand extracted on the date 01-12-2019. There are different datasets that have been created and structured by the Insurance sector staff. A total of four datasets are available, with two of them containing information related to successful and unsuccessful startups and the last dataset contains data from the main investors. The first dataset consists of companies from all sectors:

Variables	Selected
uuid	
name	
type	
permalink	
cb_url	
rank	•
created_at	•
updated_at	•
country_code	
state_code	
region	
city	
investment_type	•
announced_on	•
raised_amount_usd	•
raised_amount	
raised_amount_currency_code	
post_money_valuation_usd	•
post_money_valuation	
post_money_valuation_currency_code	
investor_count	•
org_uuid	
org_name	
lead_investor_uuids	•

The second dataset contains only the startups that are in the BFSI sector (73,000 companies). All the companies in this set are those that will be kept in the first set of data described. Those columns that provide important information about the company are selected, such as the categories or their role. The columns are in the following table:

Variables	Selected
uuid	
name	
type	•
permalink	
cb_url	
rank	
created_at	
updated_at	
legal_name	
roles	•
domain	
homepage_url	
country_code	
state_code	
region	
city	
address	
postal_code	
status	•
short_description	
category_list	
category_groups_list	•
num_funding_rounds	•
total_funding_usd	•
total_funding	
total_funding_currency_code	
founded_on	
last_funding_on	
closed_on	
employee_count	•
email	
phone	
facebook_url	
linkedin_url	
twitter_url	
logo_url	
alias1	
alias2	
alias3	
primary_role	•
num_exits	•

For the third set of data, we have information about investors. This table can be related to the lead investors in the first dataset. Columns that provide important investor information such as number of investments, type of investor or country code are selected. The variables in the dataset are listed below:

Variables	Selected
uuid	
name	
type	•
permalink	
cb_url	
rank	•
created_at	
updated_at	
roles	•
domain	
country_code	•
state_code	
region	
city	
investor_types	•
investment_count	•
total_funding_usd	•
total_funding	
total_funding_currency_code	
founded_on	
closed_on	
facebook_url	
linkedin_url	
twitter_url	
logo_url	

Finally, we have a last set of data with the companies that have been acquired at some moment (a total of 5,000). Of this set, only the identifier of the acquired company is needed to relate it to the companies in the first set of data. Those companies that have been acquired at some moment will be set as successful.

Data Pre-processing

Data pre-processing is one of the main tasks to be applied when using a machine learning model. A good pre-processing can have a great impact on the results of the models that are implemented. In order to solve the problem, a pre-processing is required for each company:

- ▶ Keep the relevant information and remove that which may be noisy.
- ▶ Keep existing correlations in the data or minimize them as little as possible.

A methodology consisting of three main steps has been followed for the pre-processing of the data:



For the first two steps, the datasets have been cleaned, the samples in which the columns are empty and there is no possibility to replace this value are deleted. Samples with inconsistent values (outliers) are also deleted. Finally, as a context, we only work with insurance companies and with those countries that have the most samples and which have successful companies.

For the last step referring to data transformation, section 2.1.1 explains in detail the steps followed and the results obtained.

Due to the lack of a large dataset, it has not been possible to establish a clearer context. In the case of having a lot of data, for example, one could work with data only from one country, data from a specific year, from a specific category, etc.

Example of general dataset.

Example of investors dataset.

Example of investor dataset transformation.

Data transformations

Data transformation consists of the creation of new variables that can provide relevant information to the models. Adding new variables from external sources is also a common practice in this step. The objective in this task is to add new variables to the general sample that provide relevant information for each of the organizations. For this task a specific order has been followed:

- ▶ Work begins on the investor dataset. The created variables are added to the general organization dataset.
- ▶ The data of the acquired companies is then matched up with data of the startups. As before, the created variables are added to the startup dataset.
- ▶ New variables from existing data are added in the startup dataset.

A methodology consisting of three main steps has been followed for the pre-processing of the data:

Investors data

It is mainly based on the external dataset referring to investors. Each of the startups of the general sample can have 0 or more lead investors. It consists of the columns described in section 2. Each of the rows relates to the corresponding startup in the general sample. The following tables show how each of the samples is related:

Organization Name	Lead Investors ID
Startup_1	Investor_1_ID ●
	Investor_4_ID ●

Lead Investors ID	Type	Investment Count	Investors types
Investor_1_ID	● Investor	15	Angel
Investor_2_ID	Company	1	Venture_capital
Investor_3_ID	Investor	150	Investment_partner, angel
Investor_4_ID	● Investor, Company	1	private_equity_firm

In the investor dataset there are columns that have more than one value (type, investor_types). To correctly represent this type of variables, a one-hot encoding is performed. The result obtained is shown in the following figure:

Lead Investors ID	Investor	Company	Investment _count	angel	Venture _count	Investment _partner	Private_ equity_firm
Inv_1_ID	1	0	0	1	0	0	0
Inv_2_ID	0	1	1	0	1	0	0
Inv_3_ID	1	0	0	1	0	1	0

For the rest of the columns, it has not been necessary to apply any type of transformations. Now the total number of columns for the set of investors is 30.

BFSI startups

In the second dataset we have the information of all the companies (73.000) that belong to the BFSI sector. The columns forming the dataset are those selected in section 2. As in Figure 1, the startups are related to the samples of the general dataset.

Each of the startups can have 1 or more different activities. There are a total of 46 different types of activities. To do this, one-hot encoding is applied, obtaining the following result:

Organization ID	Financial Services	Lending & Investments	Apps	Real Estate	Ecommerce & Shopping	AI	Technology
Inv_1_ID	1	0	0	1	0	0	0
Inv_2_ID	0	1	1	0	1	1	1
Inv_3_ID	1	0	0	1	1	1	0
Inv_4_ID	1	0	0	0	0	0	1

Example of BFSI transformations

Acquired startups

In this transformation, the target variable will be created and will be used for the startup prediction of success or lack of success. It is a simple transformation because only the ID of the organizations must be related for the creation of the variable.

Organization_ID	Round
Startup_1	Series_A ●
Startup_25	Series_B
Startup_10	Series_C
Startup_35	Series_D ●

Example of general dataset.

Organization_ID	Announced Date	Round	Acquired Date
Startup_1	● 25-10-2017	Series_A	26-07-2018
Startup_25	12-05-2018	Series_B	26-07-2018
Startup_10	02-11-2014	Series_C	26-07-2018
Startup_35	● 11-09-2016	Series_D	11-02-2018

Example of acquisitions dataset.

If an organization in the general sample appears in the set of successful ones, it is established as a successful organization. The date on which the organization was acquired is not taken into account and it is established that it is successful regardless of the series in which it is found. Only one variable is created:

► **Successful:** binary variable with 0 values for unsuccessful organizations and 1 for successful companies.

Startups funding rounds data

Finally, different variables have been created for the original dataset of organizations. It should be noted that this now has new variables that have been created from external data (investors, BFSI startups).

For each of the organizations, it can have more than one record. Each one of the records is associated with the round in which it is located. New variables are added to each record that refers to data from previous rounds:

- **diff_rank:** difference in CB rank position between the current round and the previous round.
- **diff_time:** time difference between the current round and the previous round.
- **diff_raised_money:** difference in money received between the current round and the previous round.

To maintain temporary information for each of the rounds, new variables are created from the previous ones. Information is maintained on the first 5 rounds of each of the companies. In case of not having 5 rounds, then these values will be kept at -1. A total of 15 new variables are created:

- **rank_round_[0...4]:** the rank position of the organization in each round is established.
- **time_round_[0...4]:** how long an organization has been on each of the rounds.
- **money_round_[0..4]:** how much money an organization has raised in each of the rounds.

The result obtained after making the transformations is the creation of 15 new variables. The following table shows the variables that have the highest correlation with the target:

Successful	Successful
Investor_count	0.074982
Num_funding_rounds	0.055192
Private_equity	0.067037
Series_a	0.031686
Series_b	0.052218
Series_c	0.045652
Series_d	0.051740
Series_e	0.041591
Series_unknown	0.062405
Commerce and shopping	0.030029
Hardware	0.027971
Internet services	0.026285
Messaging and Telecommunications	0.034295
Mobile	0.033775
Privacy and Security	0.047403
Software	0.025546
Diff_time	0.070448
Time_round_1	0.038857
Time_round_2	0.058586
Time_round_3	0.026996
Time_round_4	0.028138
Rank_round_0	0.062831
Rank_round_1	0.072695
Rank_round_2	0.063560
Rank_round_3	0.046272
Rank_round_4	0.037359

With the final dataset obtained, the next step is to apply the different machine learning algorithms to estimate which companies will or will not be successful.

Predicting successful organizations

This section explains the evaluation metrics used for this type of task. It explains the problem with the imbalance of training data and the solution provided. The results obtained for each of the machine learning algorithms used are provided. Finally, an analysis is made of the feature importance for the model with which the best results are obtained.

Imbalanced data

In classification problems, data balancing is a very important aspect. A dataset is imbalanced if most of the data (~80%) belongs to a single class. If you work with these data, the classifier can be biased and will always make predictions in favor of the majority class. This would give excellent overall classifier results but would not solve the problem.

In this transformation, the target variable will be created and will be used for the startup prediction of success or lack of success. It is a simple transformation because only the ID of the organizations must be related for the creation of the variable.

In the dataset with which we work in this task, we suffer an imbalance of classes, where we have 90% of data for unsuccessful companies and the rest for successful ones. To mitigate this effect there are different methods:

- ▶ **Oversampling:** to equate the number of samples of the minority class with that of the majority class. Synthetic samples of the minority class are created for this purpose.
- ▶ **Undersampling:** reduce the number of samples of the majority class to match that of the minority class.

In this case, the oversampling option has been used because the number of samples is not large enough. If it is reduced, there may not be enough samples to achieve good results with machine learning models. The technique used for oversampling is SMOTE.^(*)

^(*)
Reshma C. Bhagat, Sachin S. Patil.
2015. Enhanced SMOTE algorithm
for classification of imbalanced
big-data using Random Forest

Evaluation metrics

The evaluation metrics used for the classifiers used are the True Positive Rate (TPR) and False Positive Rate (FPR). These evaluation rates are commonly used for binary classification problems, but they are also used to fairly evaluate problems with class imbalance. In addition, using the same metrics, we can make a statistical comparison between the two approaches for the same problem.

	Predict Unsuccessful	Predict Successful
Unsuccessful	True Negative (TN) Company classified as unsuccessful and it is unsuccessful.	False Positive (FP) Company classified as successful and it is unsuccessful.
Successful	False Negative (FN) Company classified as unsuccessful and it is successful.	True Positive (tP) Company classified as successful and it is successful.

The Positive True Rate or Recall is defined as the percentage of successful companies that have been classified as such.

$$\text{TPR} = \text{TP} / (\text{TP} + \text{FN})$$

The false positive rate is defined as the percentage of companies that are not successful and have been classified as successful.

$$\text{FPR} = \text{FP} / (\text{FP} + \text{FN})$$

The TPR is an indicator of the predictive capacity with the selected variables, on the problem that has been proposed for the classification of successful companies. Precision will be displayed as a support metric and can be defined as the percentage of successful companies ranked correctly.

$$\text{Precision} = (\text{TP} + \text{TN}) / (\text{TP} + \text{FP} + \text{TN} + \text{FN})$$

Experiment results

For the experiments, different machine learning algorithms specific to binary classification problems have been selected. The selected algorithms are Logistic Regression (LR), Support Vector Machines (SVM) and Random Forest (RF). The results have been evaluated with the evaluation metrics presented in previous sections.

The dataset has been split into 70% for the training set and 30% for the test set. The data shown in the following table are those obtained for the test set:

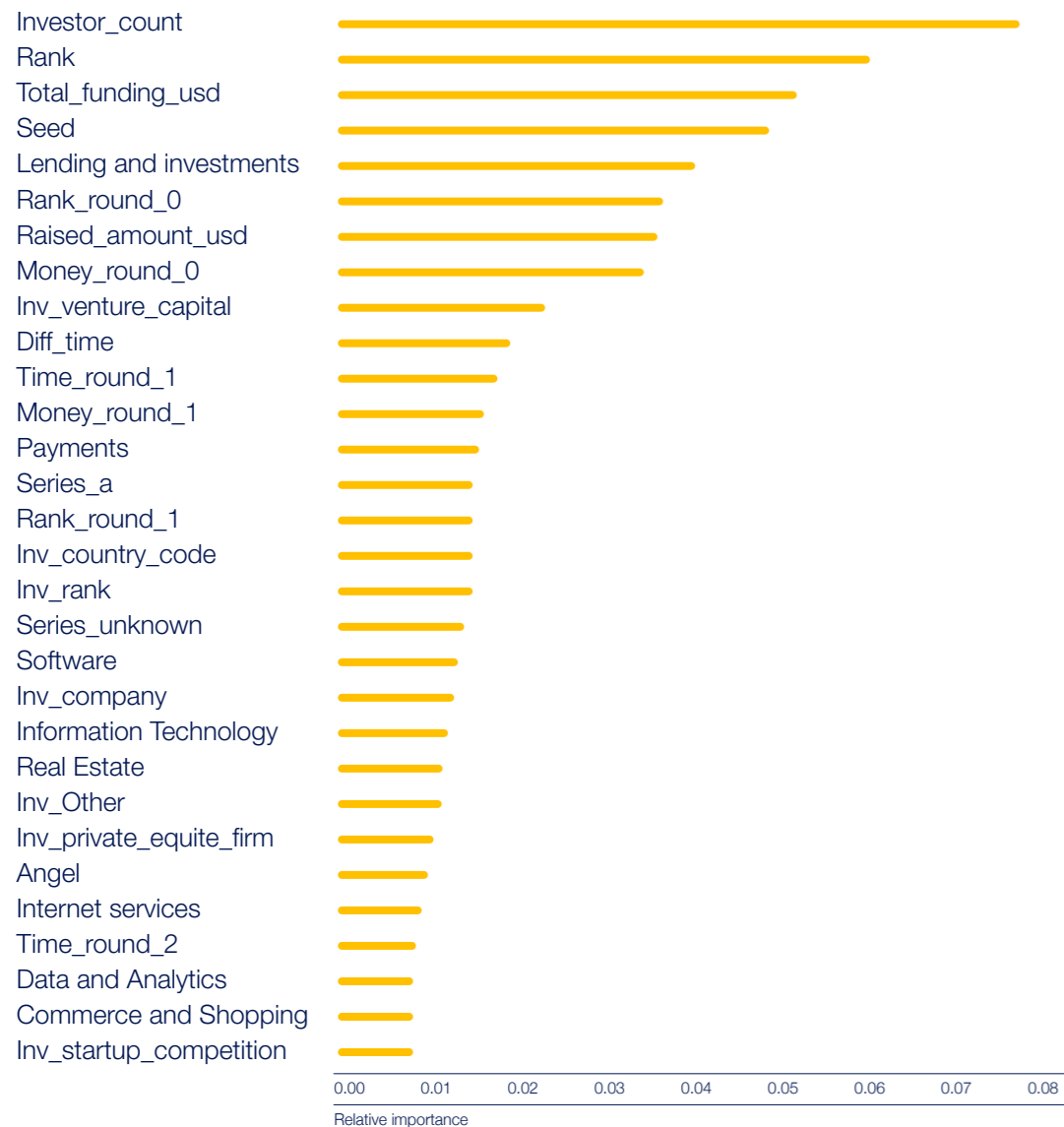
		Precision	Recall	F1-Score
Logistic Regression	Unsuccessful	0.84	0.67	0.75
	Successful	0.52	0.74	0.61
	Avg.	0.68	0.74	0.68
Random Forest	Unsuccessful	0.91	0.95	0.93
	Successful	0.95	0.91	0.93
	Avg.	0.93	0.93	0.93
Support Vector Machines	Unsuccessful	0.79	0.84	0.82
	Successful	0.82	0.78	0.80
	Avg.	0.81	0.81	0.81

With Random Forest algorithm we achieved the best results. The highest TPR has been achieved with RF with a rate of about 91%. For the FPR a percentage of 4% has been obtained, which is not high but which will allow studies to be carried out to interpret these results. In the case of FPR it is important because it can be about companies where patterns have been found that relate to successful companies. Therefore, these companies can have a great potential for success in the future.

The results obtained with SVM are not bad in general terms but the classifier has more difficulties in detecting which of the samples are successful organizations. In the case of Logistic Regression results, the worst results have been obtained, indicating in some way that our data does not have a linearity that helps predict successful organizations.

Feature importance

The main objective of this work is to estimate the companies that are going to be successful. Once the estimate has been made, it is also important to see why our model has behaved in one way or another. To do this, the importance for each of the variables in the data set used has been calculated. In the following figure we see the result obtained for the RF classifier:



As can be seen in the figure, the variables have been ordered from highest to lowest importance. These results are really good to know which factors are influencing the success of an organization in a specific insurance context. Another positive finding is that the variables created to add temporal information from the first 5 rounds have had a great impact on the model.

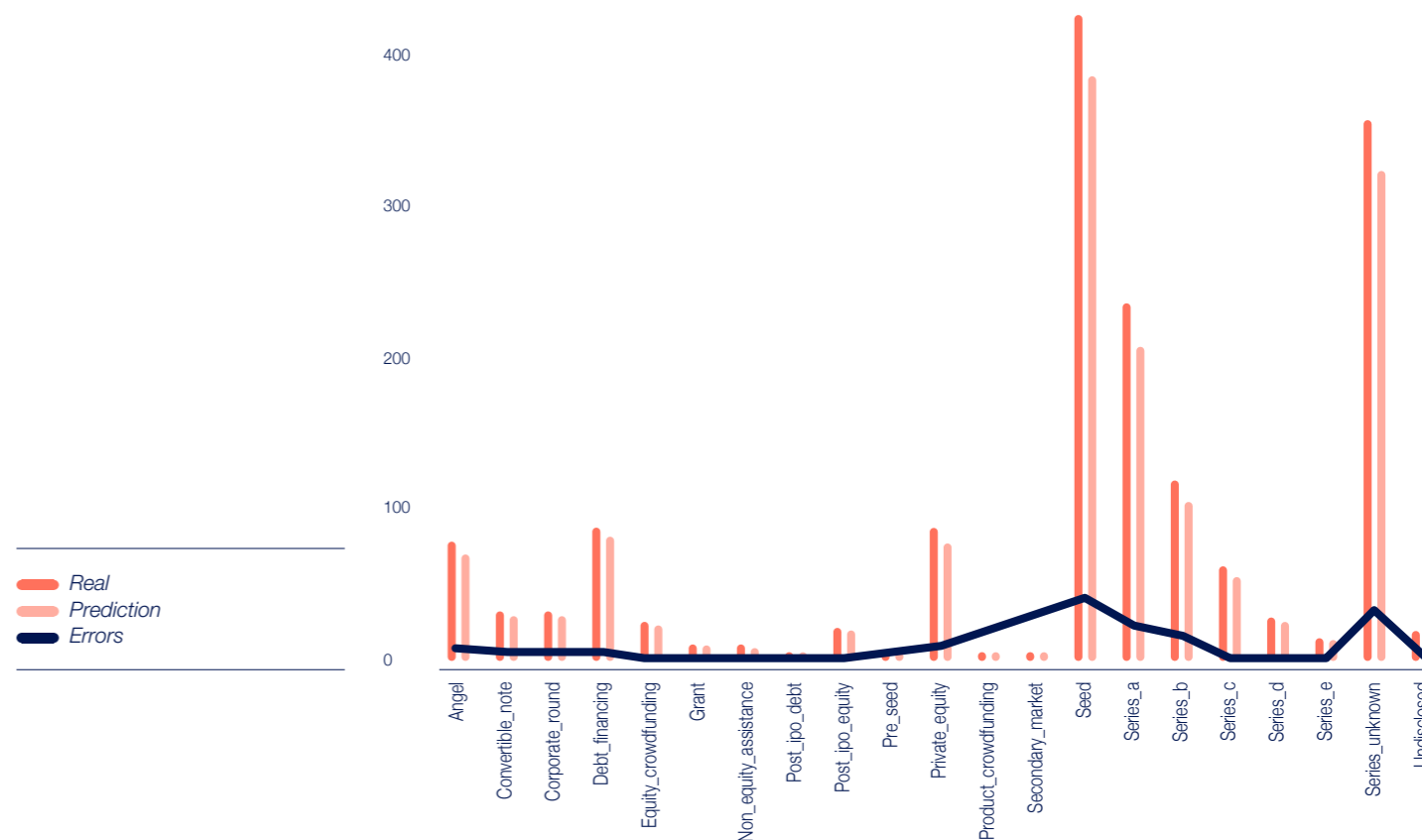
The results obtained allow more emphasis to be placed on investor data for future studies in the same context. For this purpose, it would be interesting to carry out an in-depth study on investors and to search for more relevant data on the investments they have made in order to be able to add it to our dataset.

Evaluation by features

In this section the results are evaluated on the basis of different features. The results shown are those obtained for the test set. The following table shows the results obtained for different rounds:

	TPR	FPR	Sample
Seed	90%	5%	868
Series_a	89%	4%	438
Series_b	88%	6%	258
Series_c	91%	7%	126
Series_unknown	90%	4%	678

In general, good results have been obtained for all the evaluation rounds evaluated. It is observed that as fewer samples are taken, the FPR increases, which indicates that this is a significant factor. The following figure shows these results including the rest of the funding rounds:



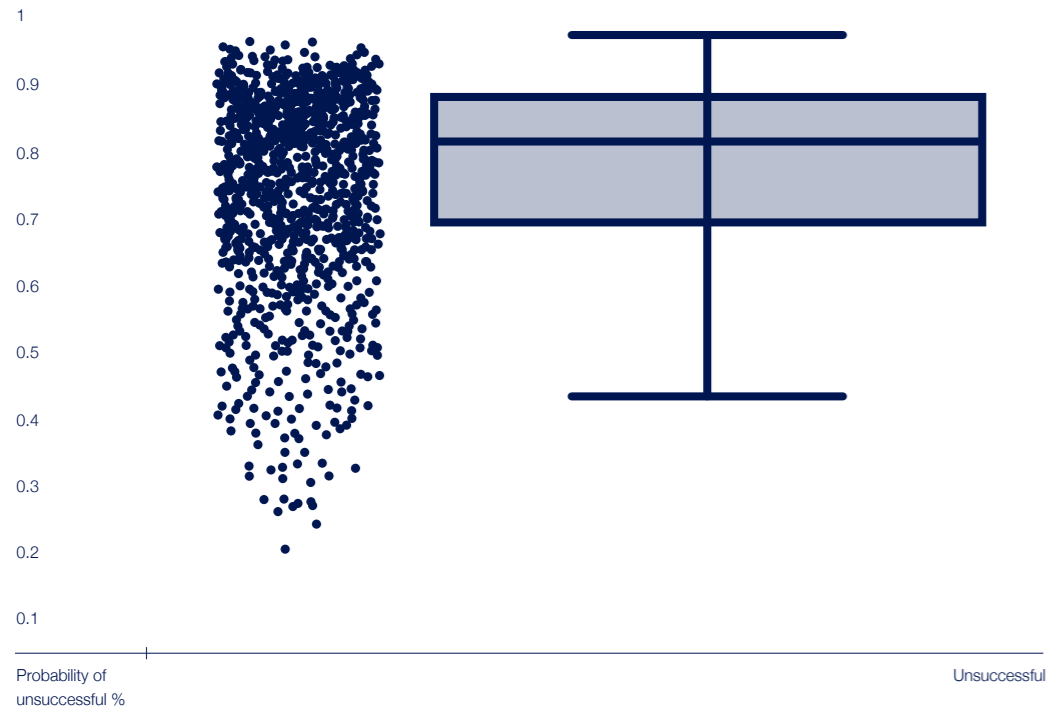
The figure shows the number of successful companies for each round of funding. In pink, we can see the number of companies that have been predicted as successful. Finally, in dark blue, the errors obtained in each of the samples are shown. The highest number of errors are obtained in the first rounds of financing (seed).

Insurtech Samples

Using the previously trained models, this section describes the results obtained for the classification of the Insurtech dataset. There are a total of 1800 samples from different companies and their financing rounds. The samples have been adapted to those described in the first sections, thus maintaining the same characteristics. The following table shows the results obtained for this sample:

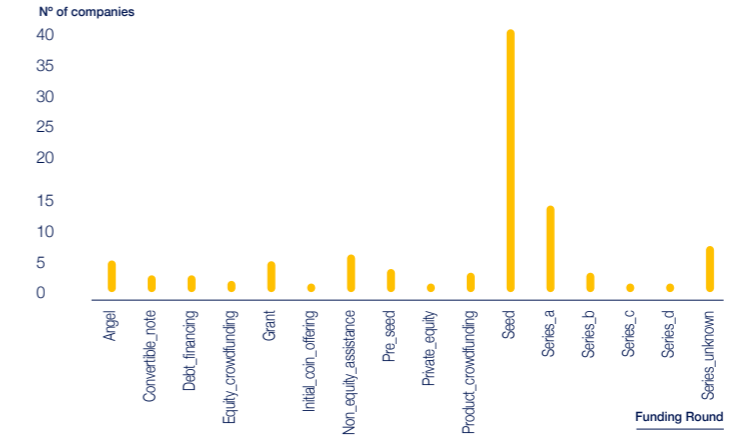
	TPR	FPR	Sample
Insurtech	70%	6%	100

For this sample, the number of successful companies was out of a total of 100. It is possible that many of the successful samples evaluated were never seen by the model that classified the CrunchBase samples, yet the TPR rate is considered positive. What is most interesting in this case are those companies that were not successful and have been classified as successful. The following graph shows this result:

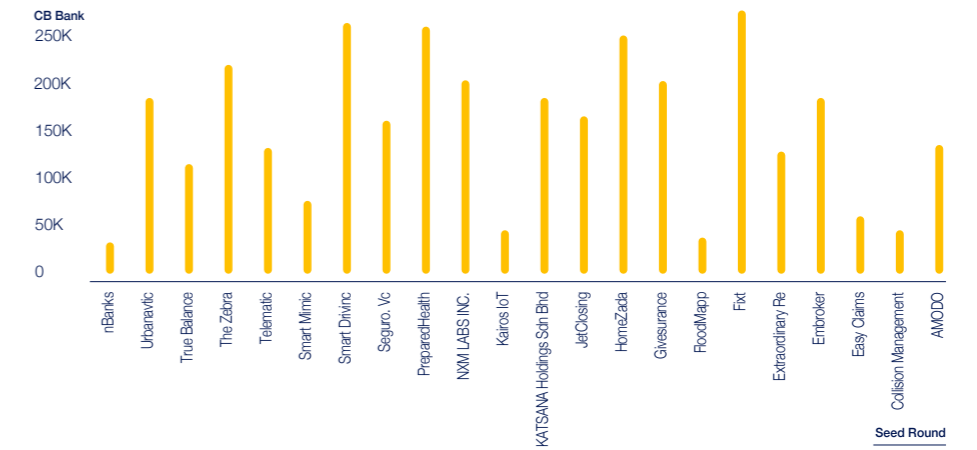


It is important to remember that in the study, successful companies are those that have been acquired, so there may be companies that we know are successful in reality (but have not been acquired) classified as unsuccessful. The above figure shows the results for unsuccessful companies. The Y-axis shows the probability (out of 1) that a sample is unsuccessful. The interesting companies to investigate in this case are those that are outliers with a probability of less than 0.45. With this information, it is possible to carry out different, more extensive studies to find out which patterns of the general classifier

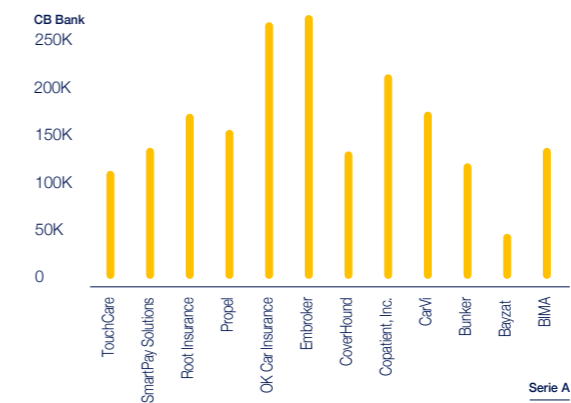
have been relevant for the classification of these samples. The following figures show the rounds and the CB Rank (in the Seed and series A round) of the companies that have been classified as successful:



The first picture shows in each round how many unsuccessful companies have been classified as successful. It can be seen that the highest number occurs in the Seed round. The following image shows those companies that are in the seed round and have been classified as successful:



The above companies are really interesting because they are in one of the first funding rounds. Many of these companies have had more funding rounds after this one. The following picture shows the series A companies:



It is also an accomplishment to predict success for these companies and that some of them have continued with more rounds of investment, increasing the money invested. It means that the classifier is able to recognize patterns of success in the Insurtech samples.

As in the previous images, different studies can be carried out on each of the companies in each of the rounds. In this case, the position in the CB Rank of the companies has been shown, but it would also be interesting to be able to investigate about the money invested in each round or the number of investors, for example.

It can be concluded that the study previously conducted has yielded results for the Insurtech dataset. In this dataset where we only had a total of 1800 companies with 100 successful ones, the results would have been biased and not very useful. By applying the study and the models used for the CrunchBase dataset, an experiment has been carried out that detects companies labelled as successful and unsuccessful with a good success rate. Without a doubt, the interesting part has been to detect those unsuccessful companies that have been classified as successful. Another positive point is that the companies detected are in early funding rounds such as the Seed Round. Finally, conclude that the previously trained classifier is also valid for detecting success patterns in the insurtech sample.

Conclusions

In this investigation, it was raised as goal the prediction of the success or not of the startups. Different steps have been taken to obtain a set of data with general data of the startups along with external data to them. The prediction results have been the most effective with the Random Forest algorithm, both for TPR (91%) and FPR (4%), and Precision (93%) evaluation.

With the results of the classifier, it has been possible to calculate the importance of each of the variables in the model. This provides an added value to the prediction, which can be used by investors to propose or carry out studies to improve their future investments. As mentioned above, the FPR rate should not be considered as a bad result since it may indicate that a startup that has not been catalogued as successful may have the potential to achieve success.

These results have been applied to the insurtech sample, where good results have also been achieved. In this case, greater emphasis was placed on the FPR rate, which indicated companies with a high potential for success. By providing new data, conclusions can be drawn as to why these samples were classified as successful. With more information about the investors it is possible that the results could be improved. It would also be good for the classifier to add features drawn from organizations' social networks. With these features it would be possible to calculate the the level of performance they reach or features related to users interaction.

The results that have been achieved of the specific context of the insurance sector order to improve the results obtained in this work and to be able to evaluate in more detail, it would be necessary to have more data on companies in the insurance sector. With more data for successful and unsuccessful companies, it would be possible to establish additional contexts within the field of the insurance sector and assess the factors affecting each of the contexts.

References

(1) Reshma C. Bhagat, Sachin S. Patil. 2015. Enhanced SMOTE algorithm for classification of imbalanced big-data using Random Forest.

(2) Bento, F. R. D. S. R. (2018). Predicting startup success with machine learning (Doctoral dissertation).



06

Methodology and Team.

Sample.



Insurtech Global Outlook is based on information obtained from different sources of information, both public and private, including Crunchbase, and it was done through intttrend platform (an NTT DATA asset).

3 different sources of information:

- Crunchbase.
- Information obtained from the investment arms of insurance companies.
- ▲ Information based on investment made by public funds.

Regarding the data obtained from Crunchbase, we also have applied the following criteria:

- Startups that obtained financing in investment rounds from 2010 to 2019 (full year) were considered.
- Companies that were still active at the end of 2019 (those that were not active in that period) were discarded.
- ▲ With the search terms “Insurance, Insurtech” in the category / subcategory / full description fields: Insurtech, Insurance, Auto, Health, Life, Property Insurance, Coverage, Policy...
- And a series of terms related to the insurance sector were also searched in the descriptions of the companies to complement and refine the previous query.

To expand the scope, the intttrend team worked on a Query Builder (concept + keyword = equation) so that the logic of keyword searches gave us a more restricted universe. This whole process was carried out with the intttrend platform, which automates the search process and refines it to the maximum to obtain the most accurate and optimal results possible.

This exhaustive exercise has allowed us to select an accurate sample of around 900 companies to analyze the evolution of investment in insurtech companies throughout the 2010-2019 period.

In parallel, a team of specialists in the insurance sector analyzed all the information and complemented it by adding relevant information and categorizing the sample. This work included an exhaustive mapping in which categories of Insurance, scope, Line of Business, Technology, Activity, Business Model, Value Chain, type of commercial transaction (B2B, B2C or B2B2C) and Ecosystem were incorporated.

Survey.

This year, the survey was conducted among 44 insurance companies in 12 countries.

The survey consisted of 5 parts with a total of 34 questions:

- Categorization questions.
- Questions about the digital maturity of the company.
- ▲ Questions about collaboration with insurtechs.
- Questions about the role of TechGiants.
- Questions about new trends and challenges.



The survey was conducted from November 2019 to January 2020.

Belgium
Brazil
Colombia
Germany

Italy
Japan
Mexico
Netherlands

Portugal
Spain
Switzerland
United States

Predicting successful organizations.

53.000 startups from BFSI, the most representative and active industry in the startup practice, were analyzed for this study. It was taken into account that the “exit” is the most objective data to measure the level of success of a startup.

Once those variables were identified, the algorithm was trained and tested in accordance with the 53.000 startups (in early stages) in order to validate the level of accuracy of the algorithm. A 90% of accuracy was obtained, which identifies those that really achieved the exit.

After this, the algorithm was used in the sample and those in seed and Series A were identified as those with the highest probability to achieve the exit. Overall, this represents a completely different way to analyze the startups looking beyond the total amount of them (reactive) and having a look at those key variables (proactive), especially when they are in their earlier stages.

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