Innovation Insight for Insurance CIOs Analyzing the Digital Maturity of Insurtechs

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Insurance startups are often considered juggernauts that are disrupting an antiquated insurance industry. Insurance CIOs from incumbent players need to better understand the true technology and business focus of these companies, assessing both risks and opportunities.

Key Findings

- The bulk of insurtechs is focusing on only seven technology categories, including digital customer engagement, mobile insurance management and digital distribution.

- Insurance IT leaders need to be aware of regional differences between the technology focus of insurtechs, such as a stronger emphasis on digital channel technologies in the Asia/Pacific region.

- Nearly half of insurtechs have been founded since 2014 and gained only limited experience with emerging technologies, such as machine learning or the Internet of Things.

- In the past few years, more than two-thirds of the overall funding from venture capital companies and other investors went into the health and personal lines of property and casualty (P&C) insurance segments, while life insurance is under-represented because of a lack of client interactions and more complex products or customer journeys.

Recommendations

Insurance CIOs transforming insurance in an era of disruption:

- Review your current business ecosystem strategy by analyzing its scope and identifying potential white spaces where insurtechs could accelerate implementation, and generate value for your customers and ecosystem partners.

- Create a portfolio of potential insurtechs with which to prioritize collaboration options by analyzing the business and technology focus of these startups, and evaluating which white spaces or gaps in the insurance value chain they could cover.

- Map the available technology skills within your IT organization against the technology maturity of potential insurtech partners with which you plan to collaborate by assessing their market presence, the quality of their IT resources, the maturity of their IT governance and other technical due diligence information.

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Strategic Planning Assumption

By year-end 2018, more than 50% of life and P&C insurers worldwide will partner with or acquire insurance technology startups to secure their competitive positions.

Analysis

Industry players' interest in insurtechs has accelerated during the past three years. According to Google Trends, the search term "insurtech" has seen a compound annual growth rate of 68% since 2014. And the funding volume of investors in the first half of 2017 is $1.2 billion, which is 7.3% higher than the prior year.[1] According to the Gartner's 2017 CIO Survey,[2] 66% of insurance CIOs engage insurtechs with startups, and 29% of respondents invest or acquire them.

In many conversations with our clients, we find that insurance business and IT leaders are still uncertain about the role insurtechs can play in their business ecosystems. Over the past 12 months, we have built a database comprising more than 800 startups from the financial services and insurance industries to analyze the business and technology focus of these companies. This research provides insurance CIOs with insight into this dynamic market segment to better assess the IT and market implications of insurtechs.

Definition

Insurtechs are technology companies in their early stages of operation that drive specific innovation across the insurance value chain — both as technology and insurance providers — by leveraging new technologies, user interfaces, business processes or business models, and that leverage different forms of funding — including, but not limited to, venture capital (see also "Innovation Insight for Technology Startups in the Insurance Industry").

Description

Technology Focus

Insurtechs can be analyzed by various aspects, including funding year, line-of-business (LOB) focus or insurance value chain coverage. Although startups are looking for an innovative use of new technologies, we have found that the majority of them are actually embracing only seven technology areas (see Note 1):

- Analytics
- Digital customer engagement
- Mobile insurance management
- Digital distribution
- Brokerage
- Internet of Things (IoT)
- Machine learning/artificial intelligence (AI)

Insurance CIOs need to recognize that insurtechs are not a panacea that would be able to address all their technology issues. We have, for instance, received a number of inquiries from clients

looking for insurtechs to be alternative providers of core insurance systems, such as policy administration or claims management. Our analysis clearly shows that the vast majority of insurtechs will be unable to meet such expectations because they do not cover the entire insurance value chain. However, they may complement the core insurance applications of incumbent software vendors (such as Guidewire, Oracle or Sapiens International) by adding functions that these packages don't provide, including analytical or mobile capabilities.

Insurtechs are a global phenomenon, although 75% are still located in North America. We found a number of regional differences when we analyzed technology focus areas (see Table 1). All seven technology areas are relevant in the Americas, EMEA and Asia/Pacific regions, but a smaller percentage of insurtechs in the EMEA region (8% of all startups) focus, for instance, on analytics, compared with the Americas (13% of all startups). One potential explanation is that there are more skilled resources available, or that startups perceive this technology domain as less attractive, and they prioritize other areas. In the Asia/Pacific region, these digital channel technologies dominate the technology focus of local startups even more, which can be explained by the strong digital distribution focus of the local insurance industry.

Table 1. Technology Focus Areas by Region

Ranking	Americas	EMEA	Asia/Pacific
1	▪ Analytics	▪ Digital customer engagement	▪ Digital customer engagement ▪ Digital distribution ▪ Price comparison/aggregator
2	▪ Digital customer engagement	▪ Mobile insurance management	▪ Analytics
3	▪ Mobile insurance management	▪ Analytics ▪ Machine learning/AI	▪ Mobile insurance management ▪ Brokerage ▪ IoT

Source: Gartner (October 2017)

Insurance CIOs should be aware of more than just regional differences. Forty-eight percent of all insurtechs in our database were founded in the past three years (since 2014). As a consequence, most of those new industry players do not have a lot of experience with emerging technologies, such as machine learning, drones, or other IoT technologies such as connected homes. We calculated the median age of insurtechs by technology focus area and found that the majority gained their technology experience over a time frame of one to five years (see Figure 1).

Figure 1. Median Age of Insurtechs by Technology Focus Area
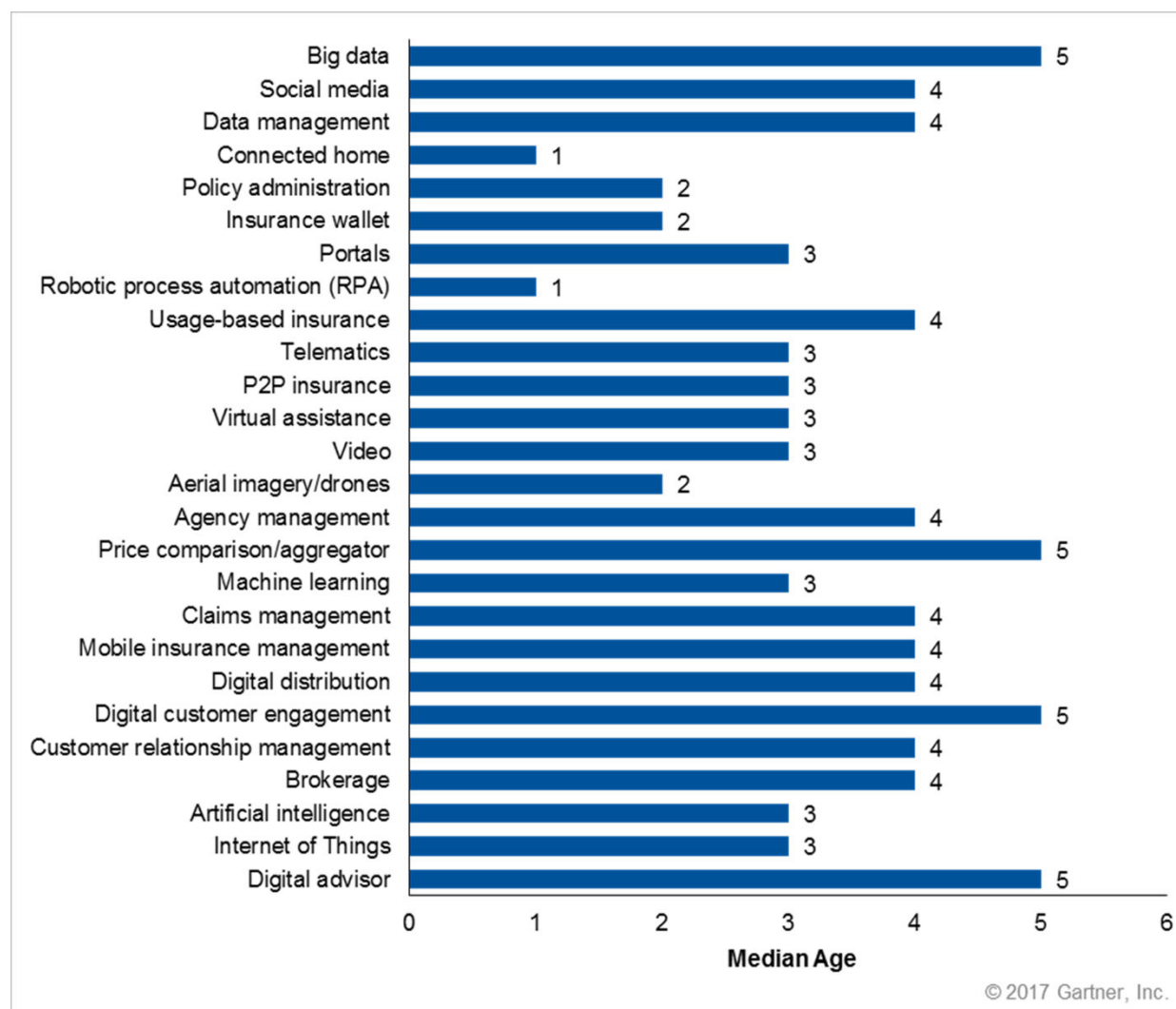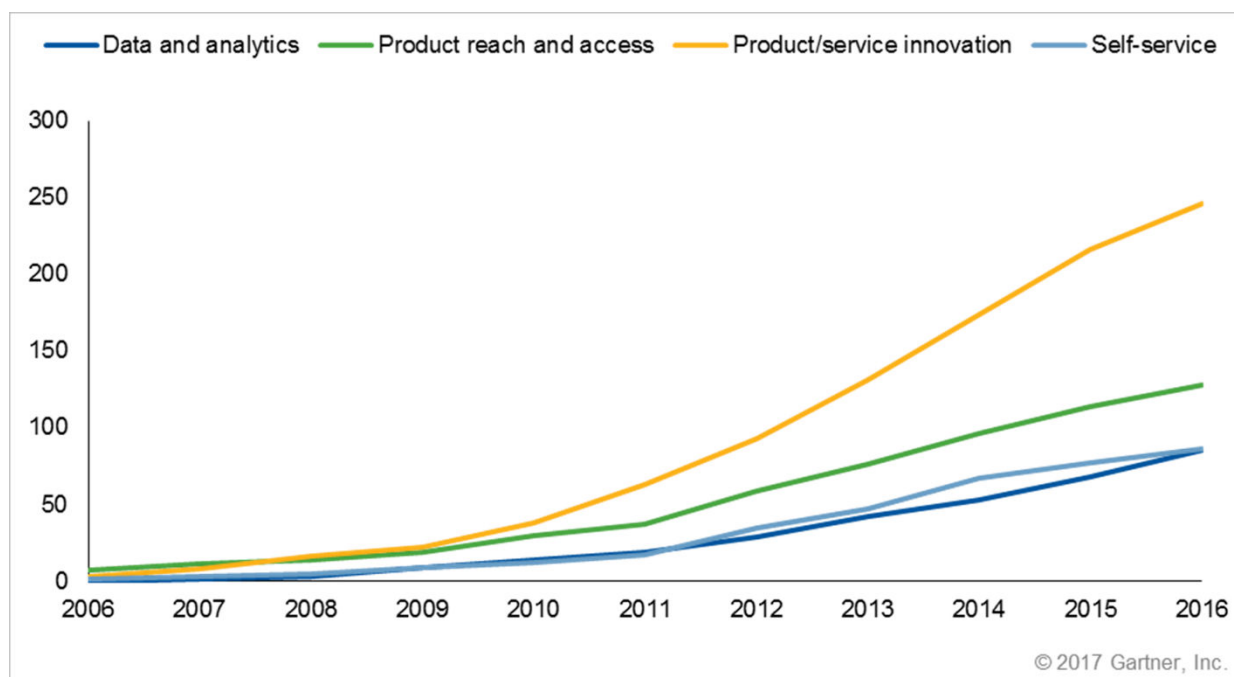

Source: Gartner (October 2017)

The low level of maturity could have a number of potentially negative implications for insurance CIOs who are willing to engage with insurtechs, including the stability of the product, access to resources, experience with live deployments at customer locations and availability of industry know-how. According to data from CB Insights, 54% of startups weren't able to manage a second round of funding, and only 1% reached the much-longed-for "unicorn status" being valued at over $1 billion.[3] Insurance CIOs who are keen to collaborate with insurtechs should be aware of these numbers and pay close attention to the median age of companies operating in a certain technology segment, because these could also be indicators of the viability of an insurtech's value proposition and chances of survival.

Business Focus

Another important aspect for insurance CIOs is the business focus that insurtechs have. This will not only determine whether CIOs will perceive insurtechs as competitive or complementary, but also help to determine which startups would actually help CIOs in their efforts to digitally transform their organizations. In our analysis, we found that 75% of insurtechs focus on four business areas (see cumulative numbers in Figure 2):

1. Product and/or service innovation (31%)

2. Product reach and access (17%)

3. Data and analytics (14%)

4. Self-service (13%)

Figure 2. Cumulative Founding Numbers of Insurtechs by Business Focus Area

Source: Gartner (October 2017)

These business focus areas of insurtechs will often match the business priorities of insurance CIOs (see Table 2 for the top four business objectives for the next two years, according to our 2018 CIO Survey).

Table 2. Mapping of CIOs' Top Business Priorities With Business Focus Areas

| CIO Business Objectives Reported by CIOs (Based on n = 130 Insurance CIOs; Multiple Choices Allowed)	Insurtech Business Focus Areas			
	Data & Analytics	Product Reach & Access	Product/Service Innovation	Self-Service
Growth/market share (42%)	✓	✓	✓	
Digital business/transformation (22%)	✓		✓	✓
Customer focus (19%)	✓	✓	✓	✓
Profit improvement/profitability/ asset monetization (19%)	✓			✓
Thinking about your organization as a whole, what would you say are its top business objectives for the next two years (2017-2018)?				

Source: Gartner (October 2017)

Insurance CIOs should meet with their business peers, analyze the value proposition of insurtechs and determine which ones could complement their digital strategies. According to our research, less than 5% of startups will truly compete with incumbent players (meaning that they act as complete insurance providers), so business and IT leaders have little reason to be afraid of insurtechs. On the other hand, these business and IT leaders can integrate insurtechs into their business ecosystem and bimodal IT strategies and create a win-win situation (see "Why Most Insurtechs Will Fail and How Insurance CIOs Can Take Advantage of That").

Benefits and Uses

Identifying the right insurtech to collaborate with will be significantly more difficult for CIOs from life insurance companies because they have fewer choices, and there are fewer startups that address core business issues in this segment. We analyzed the amount of funding during the past 17 years by LOB and found that 34% of the overall funding goes into the health insurance segment, followed by various property and casualty (P&C) insurance product lines (23%) and cross-LOB insurance (23%). Only about 6% of the overall funding flows into the life insurance segment (see Figure 3 for a more detailed breakdown by subline of business).

Figure 3. Funding of Insurtechs by Selected Subline of Business
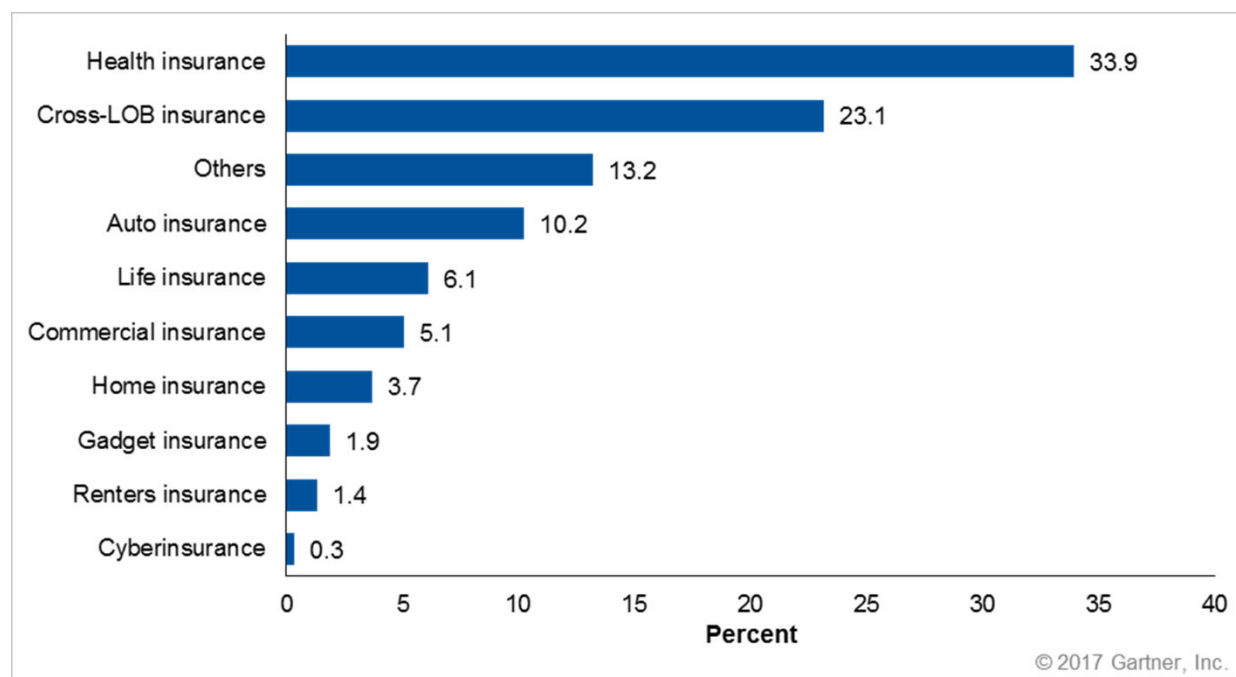
Total funding for insurtechs between 2000 and 2017 across selected LOBs

Source: Gartner (October 2017)

We think there are several reasons why insurtechs have little interest in engaging in the life insurance segment, including the low frequency of interactions, the smaller likelihood of clients switching their insurance provider, and the more complex customer journeys and products. Since venture capital companies and other investors want the companies they invest in to quickly gain a significant amount of market share, it is obvious that they will invest primarily in LOBs that are characterized by more customer interactions and a higher degree of competitiveness.

This funding pattern becomes even more obvious when we analyze funding patterns by insurance value chain area (see Figure 4). Front-office-related value chain activities such as assistance and additional services (we summarize a whole range of capabilities under this category, including business interruption services or education for policyholders), marketing and sales, or claims management and loss prevention again dominate investors' funding decisions. Back-office-focused activities such as policy administration or collections and disbursements draw a significantly lower level of interest.

Figure 4. Funding of Insurtechs by Insurance Value Chain Area
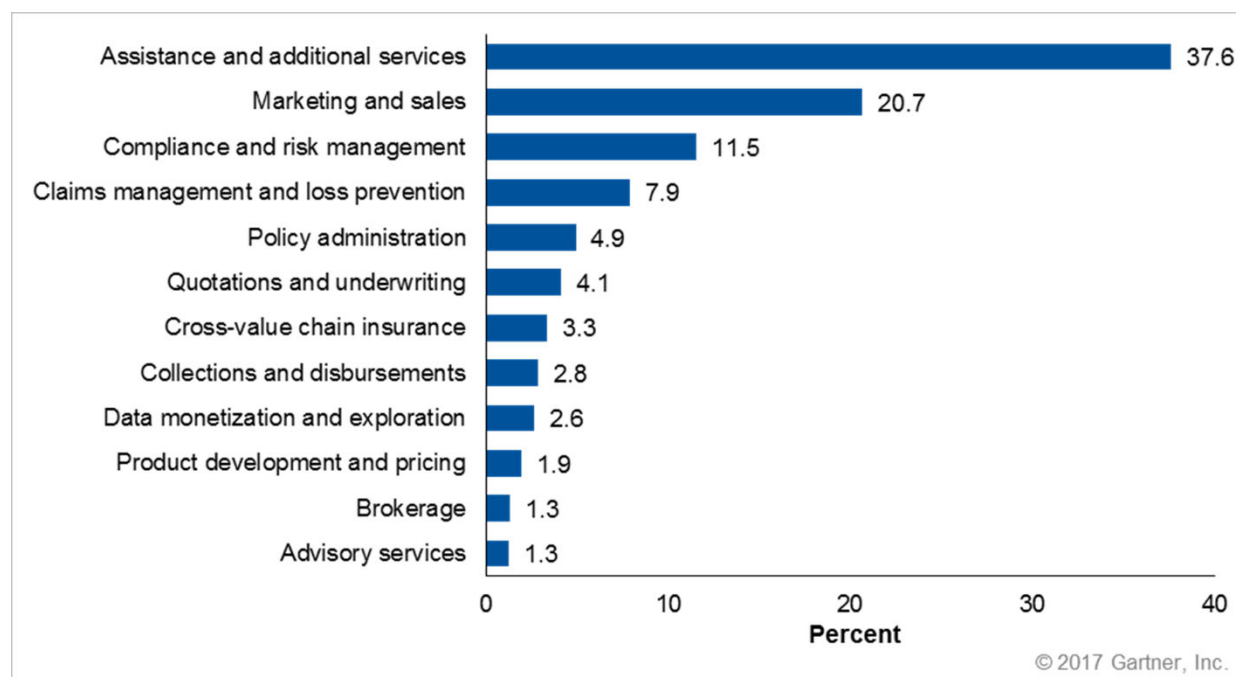
Total funding for insurtechs between 2000 and 2017 across insurance value chain segments

Source: Gartner (October 2017)

Insurance CIOs need to carefully analyze which areas of the insurance value chain insurtechs are focused on in order to identify partners that could help generate value. According to Gartner's 2018 CIO Survey,[4] BI/analytics and digitalization are the most common areas for new tech spending among insurance CIOs, so there could be collaboration options with a number of insurtechs. It is interesting that cybersecurity and information security — the third most common technology areas for new investment among insurance CIOs — are also a funding focus of venture capital companies and other investors. In fact, we have already seen the first announcements from insurance companies partnering with insurtechs in this space. Allianz Global Corporate & Specialty (AGCS) has, for instance, formed an alliance with the cyber-risk analytics and modeling firm Cyence in order to improve its cyber-risk analysis and capabilities.

Risks

Devoting efforts and resources in partnerships with insurtechs will depend on several internal and external factors, including corporate culture, available skills and the overall risk appetite within an insurance company. Gartner's insurance Hype Cycles will help insurance CIOs to structure the priority of their investment decisions. Also, the "Toolkit: Map Technologies to Insurance Business Priorities With Gartner's Value-Maturity-Velocity Model" analyzes how quickly certain technologies and technology areas have moved across our insurance Hype Cycles in the past. Combining the time for technologies to reach the Plateau of Productivity with the median age of insurtechs that are

active in that technology domain will be useful for insurance CIOs in assessing maturity and risk of failure for both a technology domain as well as the insurtechs operating in that segment (see Figure 5). The size of the bubbles in Figure 5 illustrates how many insurtechs are active in a certain technology domain, while the color represents the degree of velocity of a certain technology or technology area (that is, how quickly it has moved across our Hype Cycles).

Figure 5. Maturity of Technologies and Insurtechs for Selected Technology Areas
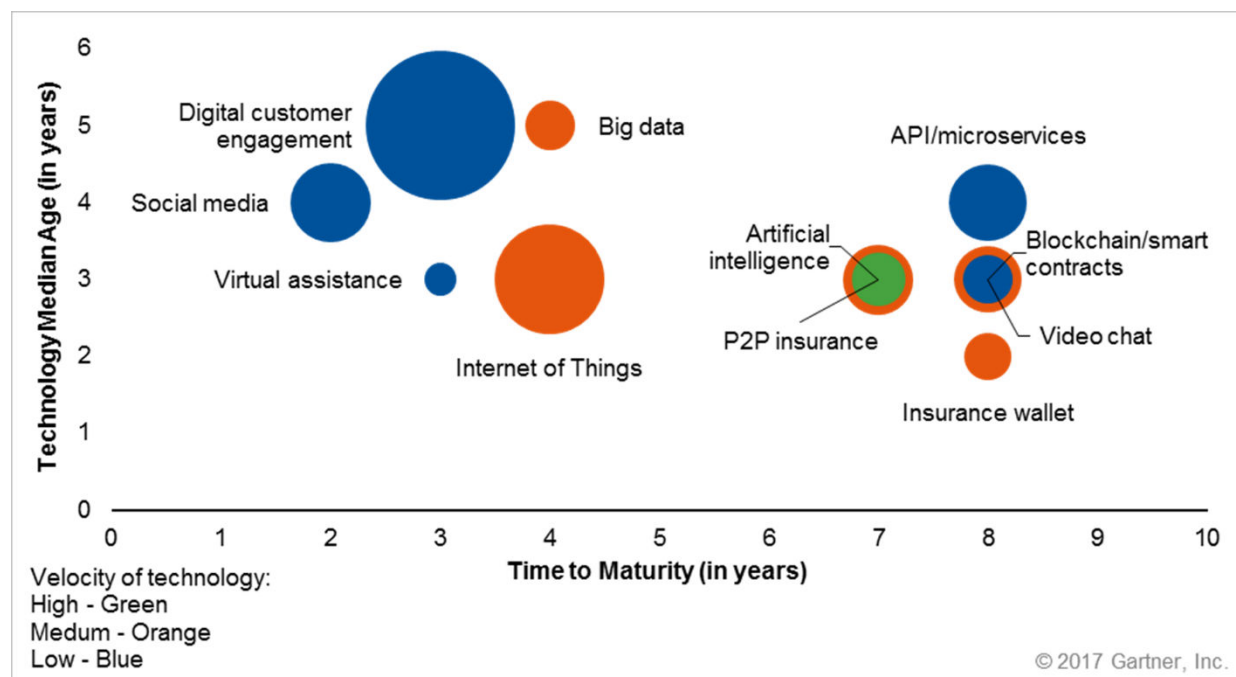
The size of the bubbles represents how many insurtechs are active in a certain technology domain, while the color shows how quickly certain technologies are moving along Gartner's Hype Cycles. The two axes display the time it takes (in years) until a technology reaches the Plateau of Productivity, and the median number of years insurtechs covering a specific technology/technology area are active in the market.

Source: Gartner (October 2017)

How do you need to read Figure 5? Digital customer engagement and the IoT have, for instance, attracted most startups, but the median age of insurtechs covering digital customer engagement is higher than those focusing on IoT. The velocity of digital customer engagement is lower, though, and we believe that the time it will take to reach the Plateau of Productivity will be longer than for IoT. Insurance CIOs who are early adopters of technologies will not hesitate to invest in digital customer engagement technologies, and they will also benefit from a larger set of potential insurtech partners. Insurance CIOs who are late followers may decide to wait until that technology is closer to the Plateau of Productivity and the insurtech market segments have stabilized more.

Another factor that can help insurance CIOs in their risk assessment of the insurtech market is analyzing how many value chain segments are covered by a specific startup. We found that 73% of insurtechs in our database cover only one or two value chain segments. We believe that the degree of value chain coverage is not only an indicator of how competitive and potentially disruptive an insurtech could be (see "Use the Disruption Index to Evaluate Financial Services Startups"), but also

a metric for assessing how likely it is that insurtechs will succeed in the market. Startups that are focusing on only one specific segment of the insurance value chain are likely more open to an attack from other startups or insurtechs, and less indispensable than other companies covering several sections of the value chain.

Recommendations

- Review your current business ecosystem strategy by analyzing its scope and identifying potential white spaces where insurtechs could accelerate implementation, and generate value for your customers and ecosystem partners.

- Create a portfolio of potential insurtechs with which to prioritize collaboration options by analyzing the business and technology focus of these startups, and evaluating which white spaces or gaps in the insurance value chain they could cover. Those insurtechs that are at the top of your portfolio analysis will be the best candidates for partnership.

- Perform a thorough risk assessment before you enter into a partnership agreement with insurtechs by assessing your own risk appetite and corporate culture in order to increase the chances for a successful win-win situation. If you find a good match between your corporate culture and the focus of the insurtechs you want to engage with, then you will be able to overcome internal obstacles.

- Map the available technology skills within your IT organization against the technology maturity of potential insurtech partners with which you plan to collaborate by assessing their market presence, the quality of their IT resources, the maturity of their IT governance and other technical due diligence information. The partnership will be more fruitful and beneficial for both parties if you can pair good internal skills with mature insurtech capabilities.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Innovation Insight for Technology Startups in the Insurance Industry"

"Toolkit: Map Technologies to Insurance Business Priorities With Gartner's Value-Maturity-Velocity Model"

"Why Most Insurtechs Will Fail and How Insurance CIOs Can Take Advantage of That"

"Use the Disruption Index to Evaluate Financial Services Startups"

"Hype Cycle for P&C Insurance, 2017"

"Hype Cycle for Digital Insurance, 2017"

"Hype Cycle for Life Insurance, 2017"

Evidence

The data in this research is based on Gartner's database of insurtechs and fintechs.

[1] See "Quarterly InsurTech Briefing Q2 2017," Willis Towers Watson.

[2] The 2017 Gartner CIO Survey was conducted during 2016, based on a number of hypotheses developed by the Gartner CIO research community. The sample included 129 P&C and life insurance companies (not including health).

This survey was developed collaboratively by a team of Gartner analysts, and was reviewed, tested and administered by Gartner's Research Data and Analytics team.

[3] See "Venture Capital Funnel Shows Odds of Becoming a Unicorn Are Less Than 1%," CB Insights.

[4] The 2018 Gartner CIO Survey was conducted via an online questionnaire from 20 April through 26 June 2017 among Gartner Executive Program members and other CIOs. Qualified respondents were the most senior IT leader (CIO) for the overall organization or a part of the organization (for example, a business unit or region). The total sample was 3,160, with representation from all geographies and industry sectors (public and private), including 157 from the insurance industry.

This survey was developed collaboratively by a team of Gartner analysts, and was reviewed, tested and administered by Gartner's Research Data and Analytics team.

Note 1 Taxonomy Used in This Research

The seven technology areas are based on the taxonomy we use in our startup database (see Table 3).

Table 3. Technology Taxonomy

Technology Areas	Potential Areas Impacted	Sample Insurtechs
Analytics	▪ Analytics-based recommendations ▪ Fraud detection and prevention ▪ Marketing and loyalty management	▪ EagleView ▪ BrokerLift ▪ Shift Technology
Digital customer engagement	▪ Digital advising and self-servicing ▪ Online and mobile portals ▪ Personalized customer messaging	▪ Accolade ▪ Widmee ▪ Gravie ▪ Bidu
Mobile insurance management	▪ Mobile insurance wallets for users ▪ Mobile agent collaboration ▪ Digital advising and self-servicing	▪ Bauxy ▪ Claim Di ▪ Livegenic
Digital distribution	▪ Aggregation and price comparison ▪ Online marketplaces ▪ Virtual assistance	▪ Bungalow Insurance ▪ Coverfox ▪ Insinno
Brokerage	▪ Analytics-based recommendations ▪ Online and mobile portals ▪ Virtual assistance	▪ EverQuote ▪ Founder Shield ▪ Ping Leads
Internet of Things (IoT)	▪ IoT data collecting devices ▪ Marketing and loyalty solutions ▪ Personalized customer messaging	▪ Cocoon ▪ Human Condition Safety (HCS) ▪ WeSavvy
Machine learning/artificial intelligence (AI)	▪ Cognitive computing ▪ Digital advisor solution ▪ Natural-language processing	▪ Analyze Re ▪ Praedicat ▪ RiskGenius

Source: Gartner (October 2017)

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