Ovum
TMT intelligence | informa

IoT Disruption Creates New Opportunities and Challenges for Insurance Providers

Charles Juniper

Principal Analyst
Enterprise Verticals

charles.juniper@ovum.com

Charles Juniper is a principal analyst in Ovum's Global Financial Services Technology team. He specializes in the impact of new technology on the global insurance industry.

The insurance sector is often highlighted as one of the industries likeliest to see significant disruption from the IoT. But growth and take-up has been patchy. The number of telematics-linked auto insurance policies issued globally will grow at a solid 36% CAGR over 2015–20, while IoT-linked home insurance is showing only very modest growth so far.

Ovum's view is that the prospects for IoT-enabled insurance prospects are still excellent, but a clear understanding of the industry itself is needed in order to inform a successful strategy.

To understand how IoT will impact the insurance industry, it is useful to first paint a vision of today's insurance proposition and how it will change over the next few years.

For the vast majority of insurance carriers today, personal lines insurance offerings share a number of common characteristics. To arrive at a premium to charge a customer, most insurers use a number of fairly static indicators such as previous claim history, credit ratings, and zip or postcodes. These are used to assess how likely someone is to make a claim. From the customer's perspective, this is a very opaque process, with the average policyholder having very little idea why their premiums are as they are. This approach does not allow an insurer to price risk down to the level of an individual policyholder; it only allows a policyholder to be placed in a broad risk category

Today, most insurers remain completely disconnected from the asset they are insuring. Most auto insurers, for example, have only a very limited idea of how many miles a policyholder drives in any year, despite the fact that this is the single most important determinant of how likely a customer is to make a claim. Equally, most insurers have no idea what risks a customer is taking while they are driving. For example, behavior such as using a mobile phone while driving significantly increases the risk of accidents.

To make a claim, the policyholder themselves must initiate the process. This 'first notice of loss' can sometimes be some time after the incident has occurred, which can complicate the task of gaining an accurate picture of the incident.

The claims process is then often time-consuming, needing assessors or loss adjusters to carry out an inspection and produce a report. All of this can take days (or weeks) to resolve, costing the insurance carrier money and further frustrating the customer.

The emerging IoT insurance proposition

Figure 1: Evolution of the insurance proposition using IoT
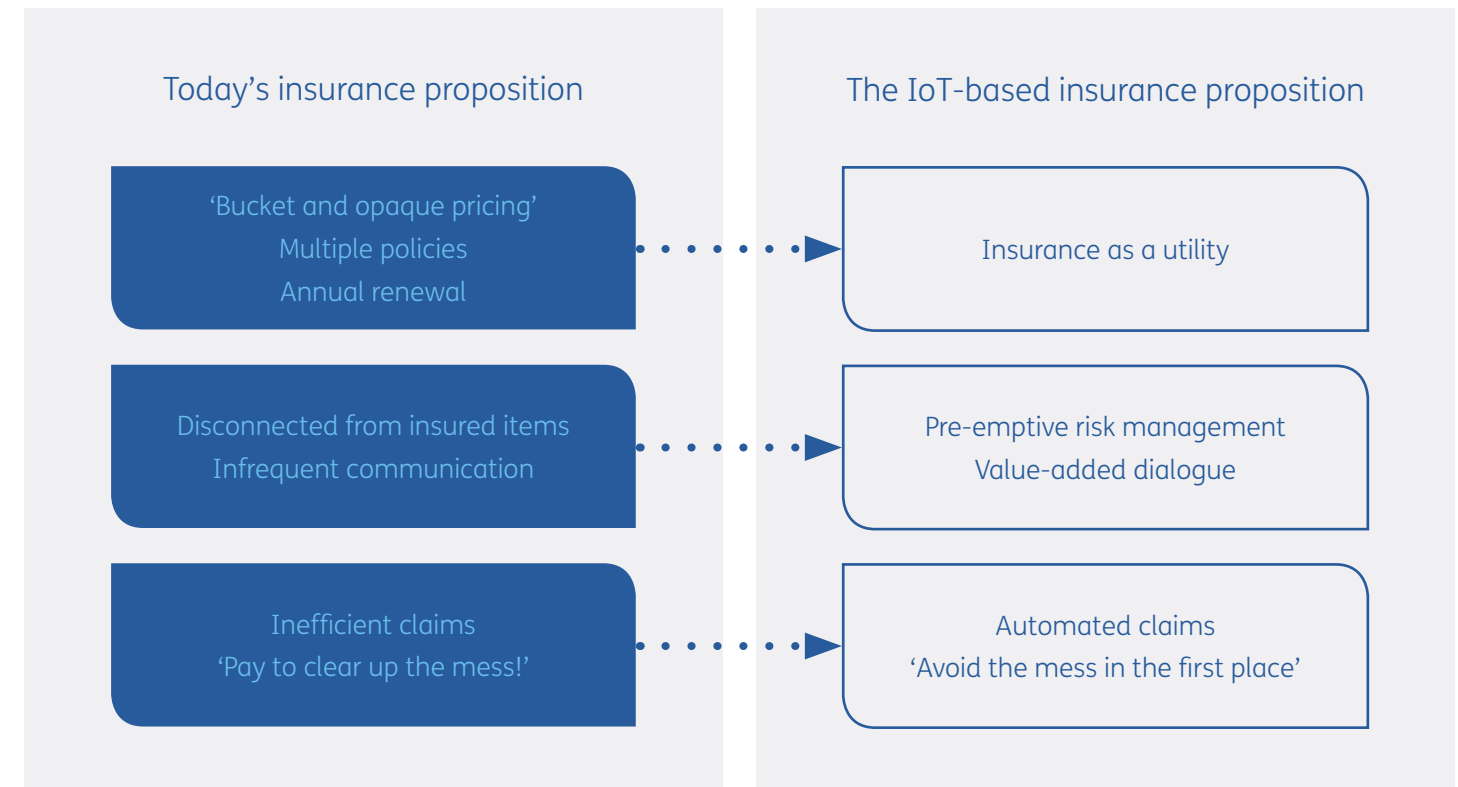
Source: Ovum

As summarized in Figure 1, the use of IoT and telematics technology can improve both the customer's and the insurer's experiences.

IoT allows the insurer to actually be connected to the items being insured. For example, we have seen the emergence of vehicle telematics over the last few years that provide insurers with information about time and duration of journeys and, in some cases, location data and how safely a driver is driving. The implication is that an insurer is now in a position to assess the risk posed by a specific policyholder. This offers the possibility for dynamically-priced insurance that reflects both the true risk posed and the amount of insurance a policyholder is actually consuming – in other words, usage-based insurance (UBI).

Beyond providing a better understanding of the true risks being faced by an insurer, IoT technology can enable insurers to manage and mitigate some risks. Driving apps that provide feedback about driving habits and how driving can be improved are a good example, with growing evidence that such apps can reduce the number of accidents by as much as 40%. Providers include Aviva (AvivaDrive), Allstate (Drivewise), and Nationwide (SmartRide).

IoT technology can also have a major impact on today's claim process. There are already a number of examples of insurers using telematics devices within vehicles to automatically detect and report crashes in real time. With the detailed data available, they can instantly assess the likely severity, what sort of response is needed, and likely claims costs. Such data also helps to identify potentially fraudulent claims.
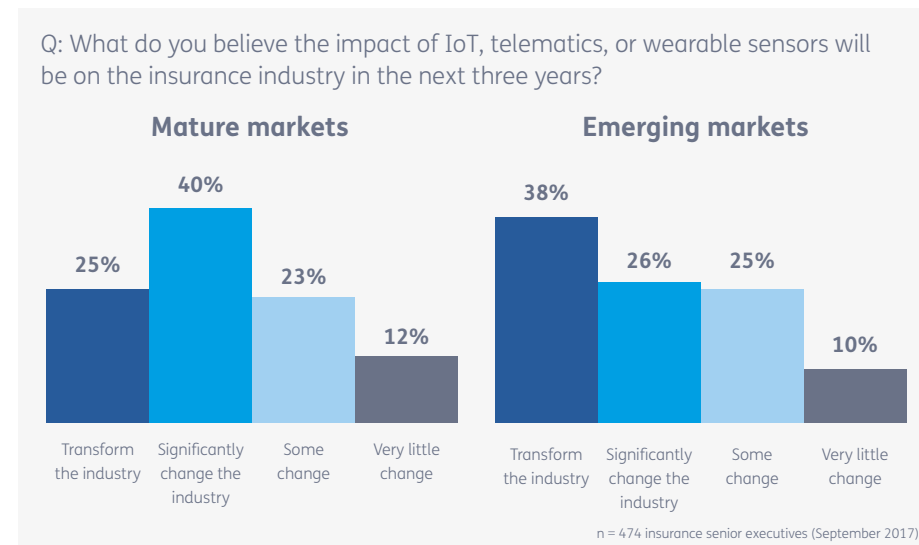
IoT will not solve every insurance problem – a house full of IoT sensors will not stop a hurricane or a major flood. However, integrating IoT technology can help insurers move away from a proposition that is often seen as a paying to clean up a mess after the event, toward a more valued, preemptive risk management service offering.

Most insurers believe IoT will change the industry

As part of our ICT Enterprise Insight survey of 474 insurance CIOs from around the world, Ovum asked respondents what they believed would be the impact of IoT, telematics, and wearable technology on the insurance industry, and by implication on their business, over the next three years.

Overall, some two-thirds of respondents believe IoT will (at least) significantly change the insurance industry, and about one-quarter of respondents believe it will transform the industry, over the next three years. Conversely, only a small minority (approximately 10% of insurers) believe IoT will only have very limited impact on the industry.

Figure 2: Insurers expect significant or even transformational impact from IoT

Q: What do you believe the impact of IoT, telematics, or wearable sensors will be on the insurance industry in the next three years?

Mature markets

- Transform the industry: 25%
- Significantly change the industry: 40%
- Some change: 23%
- Very little change: 12%

Emerging markets

- Transform the industry: 38%
- Significantly change the industry: 26%
- Some change: 25%
- Very little change: 10%

n = 474 insurance senior executives (September 2017)

Source: Ovum ICT Enterprise Insight Survey

Results differed somewhat between mature markets – principally North America, Japan, and Western Europe – and emerging markets such as India, China, and Indonesia. The latter group are more likely to see the IoT as transformational for the insurance sector. This likely reflects the lower overall level of maturity of the sector in these markets – in some ways they present more of a 'greenfield' for IoT-based insurance, and so the pace of adoption and product innovation may be faster.
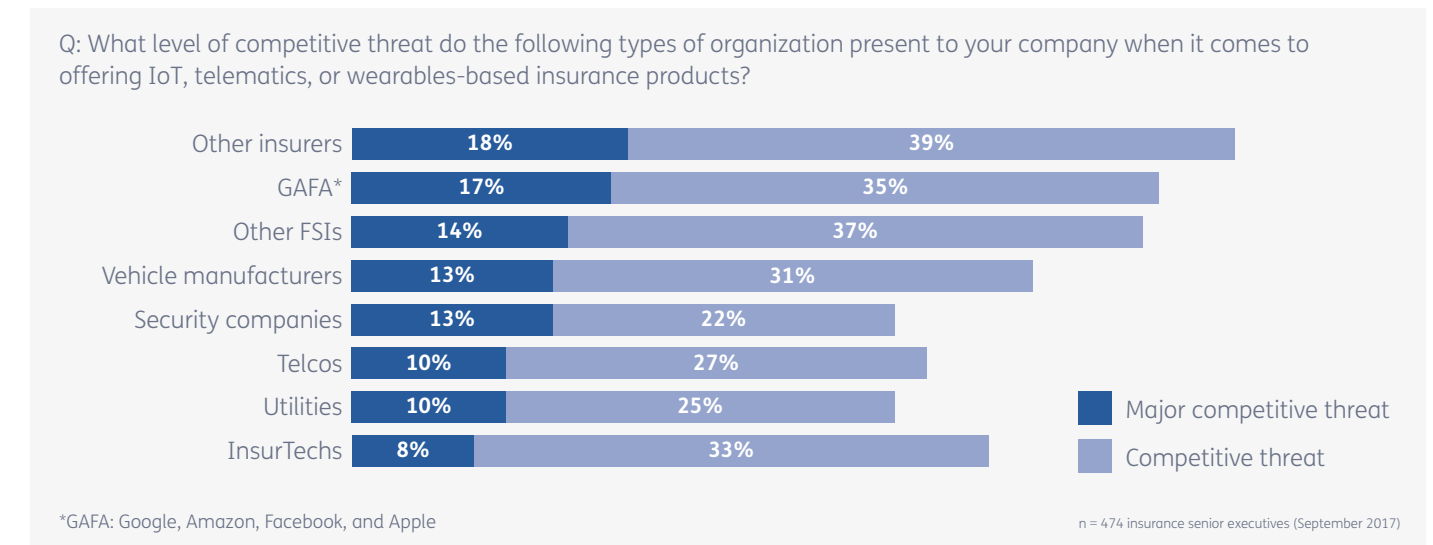
Although full-scale IoT-based insurance offerings at scale may be some years away from being fully realized, IoT's impact will begin to be felt by many insurers much sooner. While many insurers have already been looking seriously at the role IoT-based insurance could

play in their product offerings, three years is not a long time to prepare and implement those plans. To deliver new IoT-based insurance propositions will inevitably mean significant restructuring and realignment for many of today's insurers.

IoT will change the competitive dynamics

Another question posed in the Ovum survey was what about the level of competitive threat posed by various players when it comes to offering IoT-based insurance products.

Figure 3: Perceived level of competitive threat for IoT-based insurance provision

Q: What level of competitive threat do the following types of organization present to your company when it comes to offering IoT, telematics, or wearables-based insurance products?

	Major competitive threat	Competitive threat
Other insurers	18%	39%
GAFA*	17%	35%
Other FSIs	14%	37%
Vehicle manufacturers	13%	31%
Security companies	13%	22%
Telcos	10%	27%
Utilities	10%	25%
InsurTechs	8%	33%

*GAFA: Google, Amazon, Facebook, and Apple

n = 474 insurance senior executives (September 2017)

Source: Ovum ICT Enterprise Insight Survey

The results show that the GAFA group, consisting of Google, Amazon, Facebook, and Apple, are seen by insurers as major threats. This group is dynamic and could also include other players such as Tencent, Baidu, and Alibaba, depending on the specific market.

The most striking point to emerge is that the GAFA group were not on insurers' collective radar as a
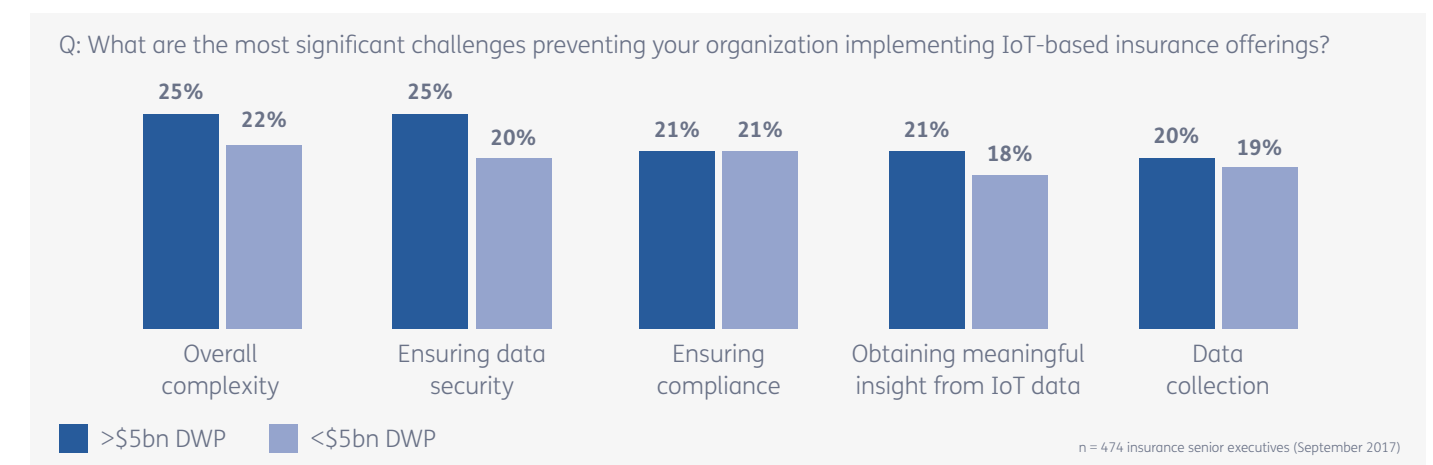
competitive threat when Ovum conducted this survey three years ago, reinforcing the profound impact IoT is having on the insurance industry.

Data management is the key challenge

The survey also examined the key challenges faced by insurers in

responding to IoT. Figure 4 shows the highest-scoring challenges, split by size of insurer in terms of direct written premium (DWP) value.

Figure 4: Data and complexity challenges are key barriers for insurers

Q: What are the most significant challenges preventing your organization implementing IoT-based insurance offerings?

	>$5bn DWP	<$5bn DWP
Overall complexity	25%	22%
Ensuring data security	25%	20%
Ensuring compliance	21%	21%
Obtaining meaningful insight from IoT data	21%	18%
Data collection	20%	19%

n = 474 insurance senior executives (September 2017)

Source: Ovum ICT Enterprise Insight Survey

Ovum
TMT intelligence | informa

The key benefit of IoT-based insurance is providing an insurer with data that can be used to derive accurate pricing, support customers better, and manage risk more effectively. However, as the survey shows, IoT data generates its own issues: How do insurers ensure that the vast amount of personal data acquired through IoT remains secure and compliant; how can they collect that data effectively; and more importantly, how can they obtain meaningful insight from that data that they can act on?

The key point that emerges is that data management is a critical factor for the successful implementation of IoT insurance products, and insurers need help overcoming these challenges. Would-be technology enablers should take note and ensure that support is offered to insurance sector customers to address this.

Conclusions

It is clear that insurance executives expect their industry to be profoundly affected by the emergence of IoT technology over the next few years.

The industry has already begun to respond, with most major North American and European auto insurers now offering a telematics or smartphone-based UBI product, as well as newer start-ups such as MetroMile, Insurify, and InsureTheBox. However, while there are clear opportunities, adjusting to the changes brought about by IoT will present significant challenges for many insurers. Some of these challenges are internally- and operationally-focused, as insurers realign their ICT infrastructure and in-house skill sets or supporting partnerships to address the complex data management issues presented by IoT.

Perhaps the most profound changes will be those brought about by the shift in competitive dynamics unleashed as a result of IoT. The insurance industry, while competitive, has always presented significant barriers to potential new entrants. However, insurers will need to rapidly adjust to powerful, more agile new competitors, such as Amazon or Google, that often lead technology change, have a detailed understanding of their customers, and a culture of

moving rapidly to disrupt market sectors. Start-ups will also be important in driving disruption, and investment or M&A will be an important strategy to consider for traditional insurers. Insurers need to ensure they stay relevant for their customers, as consumers are increasingly offered more options and greater personalization when purchasing insurance.

CONTACT US