

FUTURE OF INSURANCE

03 INSURANCE IS PLAYING CATCH-UP WITH TECH

06 MOVING FROM INSURING TO PROTECTING RISK

12 ACCELERATING ALONG THE ROAD TO AUTONOMY



Legal Insights



Business Know-how

Providing legal services with a fresh attitude and commercial approach for the insurance industry.



EC3Legal
The Insurance Law Firm

+44 (0) 203 553 4888
info@ec3legal.com
ec3legal.com

IN A COMPETITIVE MARKET YOUR AGILITY IS KEY

INSTANDA is a unique agile insurance technology giving you the control to create and manage any type or number of insurance products and serve agents and consumers without limitations.

- > Design and creation of any type or number of insurance products
- > Deploy products through any online channel, trading brand, language and currency
- > Process automation to fully self-manage policies
- > Scale within country or across international borders
- > Real-time insights

LET US SHOW YOU WHAT
YOUR FUTURE COULD BE

FREE DEMO HERE

instanda.com/requestademo

INSTANDA™



instandaF2X



instanda

DIGITAL TRANSFORMATION

FUTURE OF INSURANCE

Distributed in THE TIMES

Published in association with



CONTRIBUTORS

HELEN BECKETT

Writer on information technology, education and business, she specialises in how these intersect in the digital economy.

ANNA CODREA-RADO

Freelance culture and technology journalist, her work has been published in *The New York Times*, *The Guardian* and *WIRED*.

TIM COOPER

Award-winning freelance financial journalist, he writes regularly for publications including *The Spectator*, *London Evening Standard*, *Guardian Weekly* and *Weekly Telegraph*.

NICK EASEN

Award-winning freelance journalist and broadcaster, he produces for *BBC World News* and writes on business, economics, science, technology and travel.

MARK FRARY

Business, technology and science writer with eight published books, he speaks regularly on technology and futurology at conferences.

JOE McGRATH

Freelance financial journalist, he has written for *The Times*, *The Daily Telegraph*, *Financial Times* and *The Wall Street Journal*, among others.

SOORAJ SHAH

Contributing editor at *New Statesman Tech*, he also writes for *Computing*, *IT Pro* and a number of other business technology publications.

FINBARR TOESLAND

Freelance journalist, he specialises in technology, business and economic issues, and contributes to a wide range of publications.

Raconteur reports

Publishing manager
Sophie Kavanagh

Production editor
Benjamin Chiou

Managing editor
Peter Archer

Head of production
Justyna O'Connell

Digital content executive
Elise Ngobi

Design
Samuele Motta
Grant Chapman
Kellie Jerrard

Head of design
Tim Whitlock

Although this publication is funded through advertising and sponsorship, all editorial is without bias and sponsored features are clearly labelled. For an upcoming schedule, partnership inquiries or feedback, please call +44 (0)20 3877 3800 or email info@raconteur.net

Raconteur is a leading publisher of special-interest content and research. Its publications and articles cover a wide range of topics, including business, finance, sustainability, healthcare, lifestyle and technology. Raconteur special reports are published exclusively in *The Times* and *The Sunday Times* as well as online at raconteur.net. The information contained in this publication has been obtained from sources the Proprietors believe to be correct. However, no legal liability can be accepted for any errors. No part of this publication may be reproduced without the prior consent of the Publisher. © Raconteur Media

[@raconteur](https://twitter.com/raconteur) [/raconteur.net](https://www.facebook.com/raconteur.net) [@raconteur_london](https://www.instagram.com/raconteur_london)

raconteur.net /future-insurance-2018

Insurance is playing catch-up with technology

The insurance industry stands accused of being slow to adopt digital technologies which will introduce innovative new products for customers

TIM COOPER

Personal insurance companies are behind the curve of digital transformation, according to consultancy Altus. A typical consequence is that customers are still met with “bloated” question sets, often asking for unnecessary information, which puts them off.

Altus says some insurers are making rapid technological progress, spurred on by comparison sites and other disruptors. Others are not and there is a huge divide between the two.

For example, Aviva has digital solutions to support quotes, claims, renewals, adjustments, documentation, long-distance information, webchat and mobile apps. In contrast, NFU Mutual prefers traditional face-to-face customer relations and has no such solutions.

One reason that insurance lags other industries is its heavy reliance of legacy systems for existing business. According to consultants KPMG, these systems block transformation as they cannot provide the rich functionality that consumers now demand or harness the full value of data so essential to modern business.

Will Pritchett, head of technology, insurance and investment management at KPMG, says: “Insurance organisations want to transform, digitise and become customer centric. They have started by removing much of the physical data that used up office space. The most progressive are also now looking to move off legacy mainframes to the cloud.”

“The challenge is they have so much history and such complexity in some products that they cannot move as quickly as startups or banks, for example.”

Mark Andrews, domain director at Altus, says large commercial insurers are even further behind; they are still heavily reliant on face-to-face and paper documents. But the personal sector is changing faster.

“Price-comparison websites have forced personal insurers towards online and digital solutions, and most of the top 20 insurers have implemented big legacy transformation projects on claims platforms and administration and billing systems,” he says. “But they tend to keep the old systems and build a layer on top, which is what holds them back, far behind other industries.”

Also insurers operate tiny margins, so not all have large budgets for new technology. And continued



profits from existing business on legacy systems means they do not want to disturb those customers.

Furthermore, complex technology projects can be risky, says Mr Andrews. “Pitfalls include trying to do too much too quickly, changing senior management who have different ideas and lack of clarity about what the software houses offer.”

Many therefore opt for compromise measures such as application programming interfaces (APIs) that link old and new systems, and cause less disruption.

But transformation is increasingly pivotal in defending against disruption. According to a report from Altus, a compromise strategy such as APIs can mask the complexity of legacy technology from the consumer. “But such systems become more bloated over time creating layers of complexity that mask horrors underneath, and the long-term economics will not add up,” it says.

“These challenges manifest in expense ratios [expenses divided by net premiums]. For most established insurers, this is between 25 and 35 per cent. New players, like Admiral

and Tryg, operate at around 15 per cent, and new US insurer Lemonade aims for under 10 per cent.”

Billions of pounds are being invested worldwide in insurtech by companies new and old. Examples include Vitality Insurance, which uses long-distance data to reward customers for good health, for example by measuring physical activity on wearables rather than penalising ill health.

Startup Trov partnered with AXA to provide item-specific cover for flexible periods. Cuvva offers pay-per-use insurance for customers who drive infrequently. Sure offers artificial intelligence-driven, personalised flight insurance.

Legal & General’s SmartQuote and Aviva’s “get a quote, not a quiz” campaign are examples of large insurers using insurtech to simplify the quote process.

“These all follow the lead of banking tech in simplifying customer journeys and improving choice,” says Mr Andrews. “But for big companies, it involves in-depth analysis of complicated existing systems, whether they are fit for purpose or

not, and how to transform them to enable these exciting new things. More top 20 companies will therefore partner with startups rather than do it themselves.”

Mr Pritchett says leading insurers are now getting serious about innovations such as big data, artificial intelligence and blockchain, a system that allows information to be distributed but not copied. But this requires transforming into technology organisations that deliver insurance solutions, with different operating models and different talent.

“They have also learnt, from banking tech, the value of adopting app-based technology and interacting with customers in different ways, such as through Alexa, and long-distance information that monitors driving behaviours,” he says. “The next challenge will be combining multiple products – insurance, banking and asset management – digitally, accessing customer data across applications and keeping it in one place.”

Tom Crawford, chief executive of Aptitude Software, says another reason for slow transformation in insurance has been the many large mergers and acquisitions between companies, which has distracted them from implementing new systems.

“Also the industry is heavily regulated, which means many insurers can’t just toss aside legacy processes,” he says. “But new technologies can extend the capabilities of current systems. Our insurance customers want to control data, and gain the flexibility to create new products and pricing, while maintaining their current systems.”

Adrian Coupland, customer director of technology firm SSP, agrees that transformation is pivotal in enabling speedy development of innovative products. He points out that the regulator introduced transparency rules on insurance renewals a year ago and since then 1.4 million more home and motor insurance customers have shopped around. But legacy systems cannot support the necessary speed of response.

“The more data volumes soar, the more important it is to have systems that can consume and integrate the data to achieve these goals,” he says.

Larger insurers have the advantage of scale, however. As the Altus report says: “Firms like Aviva have developed internal digital capabilities, while others have sought partnerships with startups, such as between Munich Re and Wrisk. Such partnerships will keep growing.” ♦

Insurance in transition

Survey of insurance chief executives about the future of the sector

61% see technological disruption as an opportunity rather than a threat

69% plan to invest in digital infrastructure over the next three years

59% say the primary objective of their investment is to transform their business and operating models

KPMG 2017

Chatbots are coming to get customers

Insurance companies are set to launch a new wave of chatbot virtual assistants targeting the social-media generation at ease with technology

MARK FRARY

In the future, it may be what you tell your friends when you land a job with one of the world's biggest blue-chip companies: "A robot chose me."

Perhaps it's still some way off, but insurer Allianz is moving in that direction. Go to its careers page on Facebook, send the company a message and you will instantly get a reply from Allie.

Allie is not a person, but a chatbot who deals with inquiries about job vacancies. "She" will ask you a series of questions about where you want to work, in what area of business and at what level, and then point you in the right direction.

Dominik Hahn of Allianz's global People Attraction team says the reason for using a chatbot is simple. "Younger generations now gather information about and approach Allianz through social media platforms, rather than the internet site or traditional means," he says.

A survey by market research company ORC International of more than a thousand Americans found a significant generational gap when it came to the understanding and acceptance of chatbots.

The 2016 survey found that nearly half of millennials (47 per cent) had heard of the term chatbot, against only 22 per cent of older generations. While just over a fifth of millennials (21 per cent) knew what it means, only 8 per cent of older generations said they knew.

Yet perhaps the most significant finding of the research is that 27 per cent of millennials felt more favourable about

chatbots, compared with just 8 per cent of older generations.

What may be driving this is greater penetration among younger generations of the messaging applications such as Facebook's Messenger or WhatsApp, which are a natural fit for chatbot technology. Ofcom says that in the UK, 60 per cent of 18 to 24 year olds use WhatsApp, against 28 per cent of people aged over 55.

The greater usage of these apps for everyday life may explain another of the findings of the ORC survey that two out of five millennials believed chatbots give better service than humans, double the number of older people who do.

There are two key drivers to explain growing chatbot adoption, according to Max Richter, who leads Accenture's insurance analytics practice across Europe.

37%

of millennials would prefer to communicate with a business via messaging or chatbot, compared with 26 per cent of all ages

Pingup 2016

15%

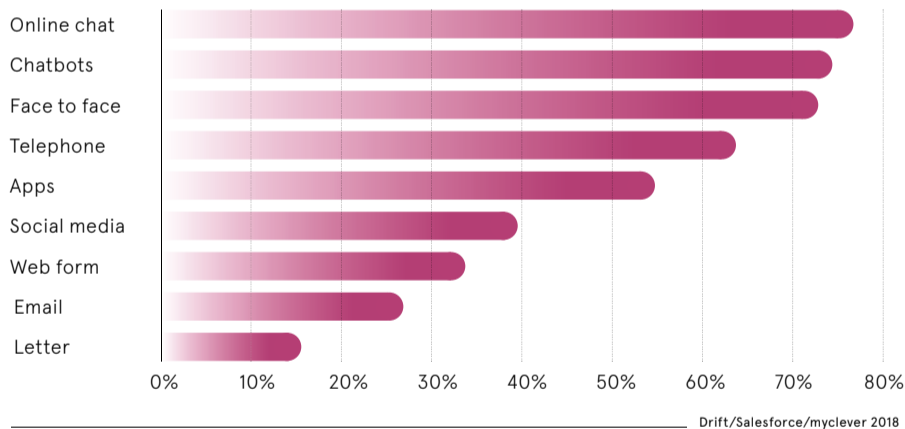
of all consumers have used chatbots to communicate with businesses in the past 12 months

Drift/Salesforce/myclever 2018



Instant gratification

Percentage of consumers expecting an instant response from the following channels



"Text messaging and voice are becoming major interaction channels that consumers want to use," he says. "Some of the more forward-thinking insurance companies are using that as a key part of their interaction strategy with customers."

The other driver is cost-efficiency. "Chatbots are a way of servicing a channel in a more consistent and scalable way while at the same time being relatively cost effective," says Mr Richter.

Although cost-savings are important, reducing headcount is not necessarily the outcome. "Where insurers are deploying chatbots, it is often to create capacity for employees to work on higher-value activities," he says.

There are a growing number of insurance companies that want to tap into this millennial trend. Dutch insurer Nationale-Nederlanden has used a virtual assistant called Nienke to answer customer questions on its website since 2011.

More recently, US insurer Liberty Mutual has launched a skill for Amazon's Alexa which lets users obtain a car insurance quote as well as getting advice on common home and car insurance concerns.

Nor are the uses of chatbots in the insurance sector just consumer-facing. Co-operative Bank in the UK implemented a chatbot called Mia to help its call centre staff answer consumer queries more quickly. In the United States, Allstate launched a chatbot called Able that helped its agents sell commercial insurance products by taking them through the process and allowing easier access to relevant documentation.

Insurers are using chatbots to handle quotes rather than web-based forms, which are often lengthy and difficult to navigate, to improve conversion rates. "I have seen customers who have used chatbots and there has been an increase of up to 30 per cent in conversion rate," says Mr Richter.

Insurers are using chatbots to handle quotes rather than web-based forms, which are often lengthy and difficult to navigate, to improve conversion rates

Chatbots are finally gaining traction in the sector. Mr Richter says that most insurance companies are in the early stages of implementing chatbots, running internal pilots or limited client-facing campaigns to show there is real business value from using this technology before deploying it on a larger scale.

Often these trials are run internally to prove the technology and often in non-insurance related areas, such as booking internal meeting rooms, employee holidays or interacting with business partners.

But there are still some barriers to growing chatbot adoption in the insurance sector. The ORC survey showed there was some reluctance to use the technology for what could be seen as "more serious" applications. Some 74 per cent of millennials said they would be happy to use a chatbot in a drive-through fast-food restaurant, for example. However, just 34 per cent said they would use one to talk to an insurance company.

However, we are only just scratching the surface of what chatbots can do. Allianz thinks its virtual job assistant Allie has potential to do



Kevin Gleave/Unsplash

even more. The company's Nadja Gruber says: "She could answer questions about the status of an application. Integrating other technologies, such as machine-learning and artificial intelligence, could mean Allie could even become 'smart' enough to match CVs to suitable job offers."

It is easy to see how chatbots can help make the life of brokers easier too, for example in handling inquiries about the status of claims.

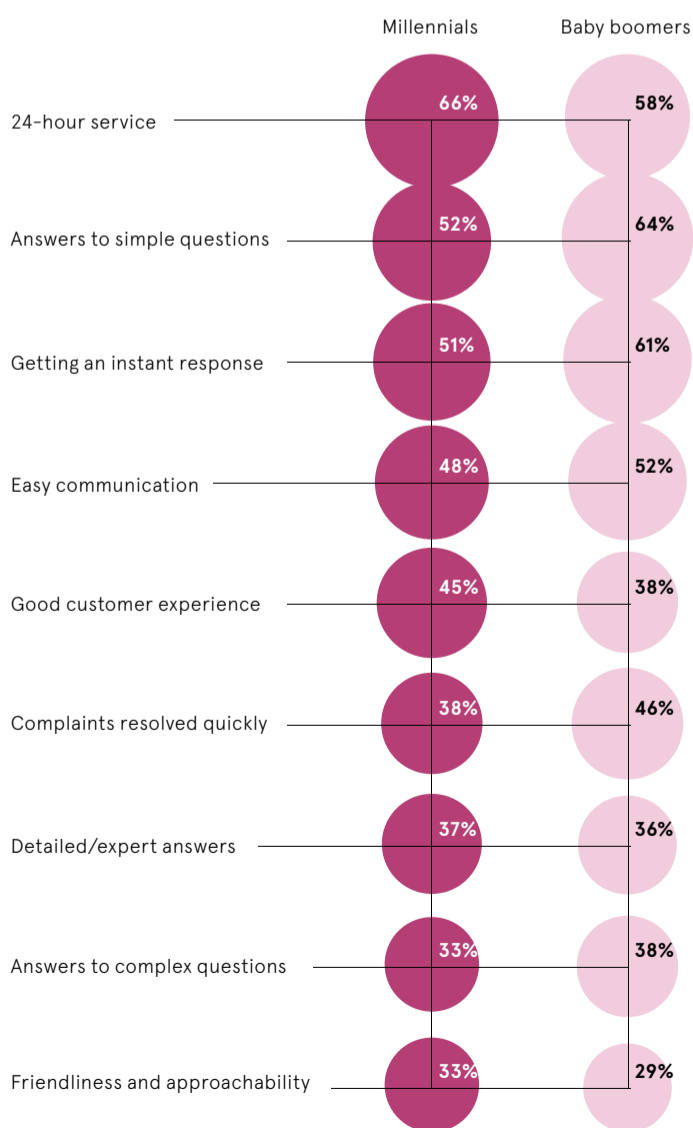
While millennials seem ready to welcome chatbots with open arms, it is just the start for wider adoption. "I think age is one factor, but it is not the only factor," says Mr Richter. He sees acceptance of technologies such as chatbots differ between countries and socio-economic groups. "In some countries, you see much older age groups say this is their preferred interaction channel," he points out.

Yet the younger demographic is driving adoption and Mr Richter believes that within the next five years most insurers will be using chatbots for communicating with customers and winning new business, but also for interaction with suppliers and enabling internal communication among employees.

"The chatbot is not going to become as ubiquitous as the call centre in that period, but it is going to be a standard part of the mix," he concludes. ♦

Top perceived benefits of using chatbots

Comparing millennials and baby boomers



Drift/Salesforce/myclever 2018

2018 is the year of reckoning for insurance

For years insurers have underinvested in back-office systems. But things are changing as they roll out new and innovative offerings, and address impending regulations

Over the last 20 years and more, chief financial officers (CFOs) in industry after industry have taken the plunge and embraced innovation. From banks to technology companies and, more recently, telecommunications, global organisations have realised that modern finance architectures can deliver better insights and cut cost and resource requirements.

Now, 2018 is the year of reckoning for insurance. With growing demands from customers, the emergence of disruptive technologies and significant regulatory changes, like International Financial Reporting Standards (IFRS) 17 and 9, it's little wonder CFOs of many insurance firms have been left reeling.

How prepared they are for these changes varies considerably, according to Tom Crawford, Chief Executive of Aptitude Software. The firm, which has offices across the globe, has been equipping CFOs and helping firms compete by providing the data foundations and accounting capabilities needed to drive business forward.

For years, Mr Crawford points out, insurers have underinvested in back-office systems, thereby limiting their ability to provide insight into their businesses. M&A activity has added to the complexity as a variety of very different systems have, in effect, been bolted onto each other.

"Most insurers have older financial architectures with many different actuarial systems providing various levels of detail. One client of

ours had over 140 source systems, for instance," he says. "These older systems restricted transparency and led to a constant worry about how to survive audits. We were able to help them bring all that data together to deliver global financial reporting and enable the CFO to provide sharp financial insights back to the business."

In these times of complex challenges, many CFOs want to play a greater role and to add value to the business. "If I had more time, I would spend it on forward-looking, 'What if?' type analysis for the company at large," Anna Miskin, CFO of VitalityLife, said at a roundtable event organised by Insurance ERM, the online resource for enterprise risk management, last summer.

"For example, the focus of product development in the actuarial function is on the profitability and value generation of the product itself. However, I also want to know what it is likely to do to my business mix, acquisition costs, liquidity, capital, competitive position and so on."

Despite their best intentions, only 6 per cent of CFOs and senior finance executives feel certain that they understand the current suite of technologies, and only 31 per cent know what is available to them, according to a 2017 survey by FSN, a business systems and news analysis provider.

Mr Crawford says: "Any time spent 'bean counting' or dealing with backwards-looking reporting limits the ability of CFOs to be more proactive and to take a more strategic view of the business. We know more and more CFOs are being tasked with managing company-wide data, data analytics initiatives and technology in general, so this puts them in a good position to make data-driven decisions and recommendations to the board."

"To ensure they really are valued business partners, CFOs must have credible, readily available data that's easy to analyse. We think FWD Group, one of our customers, is a great example to the industry. They are focused on creating fresh customer experiences, with easy-to-understand products, supported by digital technologies. They were one of the first global insurers to take action on IFRS 17, embracing the regulation to support innovation with back-office excellence."

“We were able to help them bring all that data together to deliver global financial reporting and enable the CFO to provide sharp financial insights back to the business”

2018 is shaping up to be a critical year for insurers' IFRS 17 compliance efforts

IFRS 17 is one of the top market pressures driving insurers to update their finance architectures and our recent surveys show 2018 is the year to take action

78%

of companies we've spoken to about IFRS 17 projects have completed an impact analysis or are in the process

12 to 30 months

IFRS 17 implementation estimates vary

88%

of respondents are looking for better processes to provide acceptable disclosures

The statistics above were highlighted in our *Global IFRS 17 Readiness Assessment* released earlier this year. For the full report please visit www.aptitudesoftware.com/global-ifrs-17-readiness-assessment-report



Moving from insuring to protecting risk

The role of insurance is set to change as companies embrace a new approach using predictive analytics to monitor risks around the clock

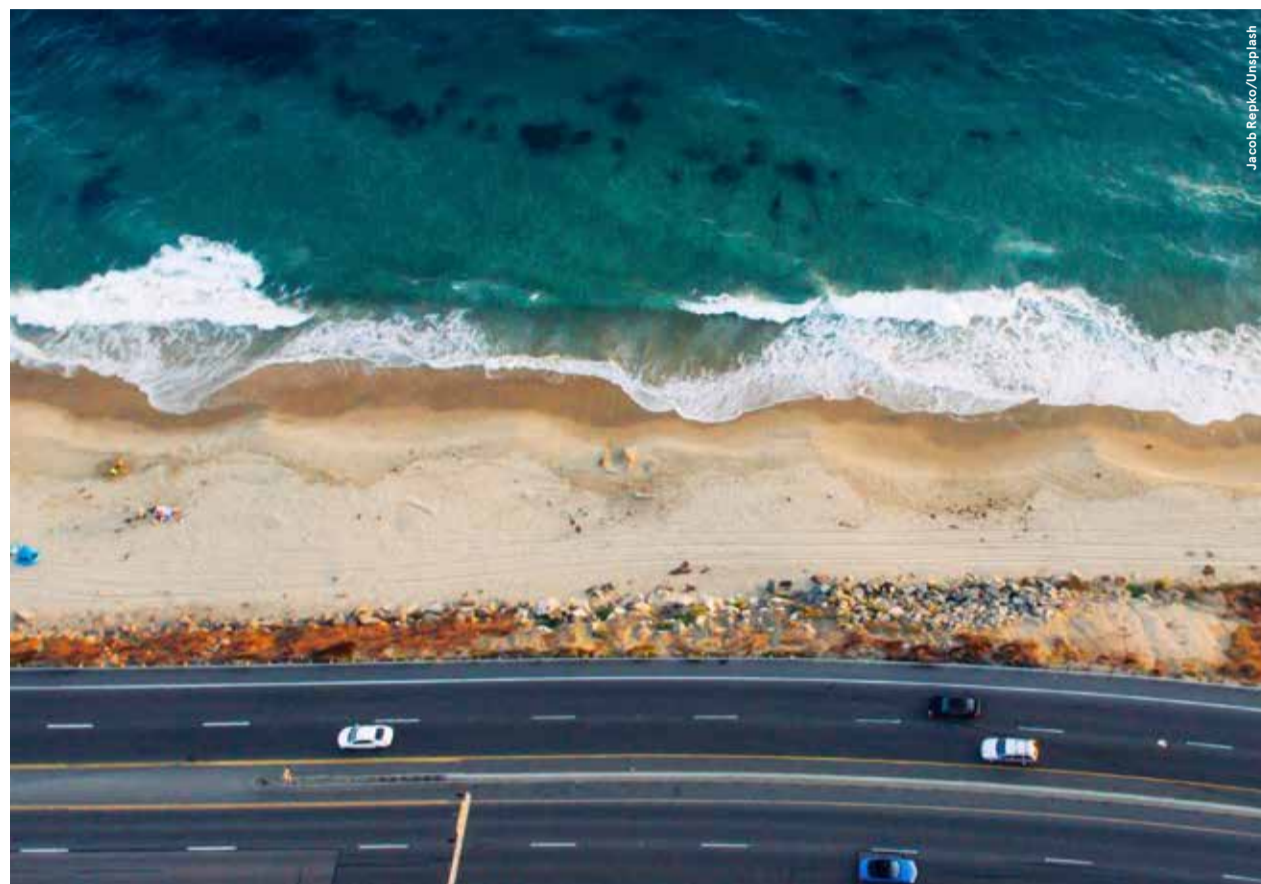
FINBARR TOESLAND

Conventional business models and traditional ways of doing business are under constant threat in the current age of technological disruption. Few insurers will remain unaffected by determined new firms that are harnessing the power of innovative technologies to uproot longstanding market leaders.

“Modern insurers are increasingly leveraging data from internet of things sensors and applying powerful artificial intelligence (AI) algorithms to deliver just-in-time risk warnings through true omnichannel interactions on an unprecedented scale,” says Tony Tarquini, European insurance director at software company Pegasystems.

“The quality of protection delivered through risk-warning services and suggested solutions to the risk will be the most important differentiating factor for any insurer and therefore be the key to business success.”

Advanced AI, machine-learning tools and big data analytics are giving insurers the power to move into the predictive cover. As the amount of customer data available to insurers increases, they will be able to



Jacob Repko/Unsplash

exploit this high-quality information to forecast consumer behaviour accurately and provide personalised feedback to reduce claims.

Multinational insurance firm Aviva is using predictive analytics to help policyholders minimise their risk of getting into road accidents through unsafe driving. Through the Aviva Drive app and advanced vehicle telematics technology, drivers will have their driving style assessed with safer drivers saving an average of £170 on their car insurance premiums. Providing a financial incentive for consumers to focus on better driving practices will alter their behaviour and, in turn, become lower risk for insurers.

“By utilising these techniques,

insurers will be able to better understand customers and the risks and uncertainties they face. And with this enhanced understanding, insurers will have the opportunity to provide more tailored products and services, and help customers to understand, manage and reduce their own risk,” says Owen Morris, managing director of Aviva Quantum, Aviva’s data science practice.

The full potential of predictive analytics in insurance extends far beyond just any single industry or customer segment with the relationship between insurer and customer set to shift fundamentally. Not only will leading insurers interact more often with policyholders, to share ways to reduce risk, but they will

also become adept at deploying innovative monitoring technologies to consumers, leading to lower costs for both parties.

“Better risk prevention through predictive analytics has a direct impact on claims expenses – those who are fastest and best in leveraging predictive analytics can realise superior returns, as in the long run better risk prevention also means the prices will come down. This is a very important capability for insurers to develop and those that don’t figure out how to leverage predictive analytics risk falling behind,” says Henrik Naujoks, partner and financial services practice leader for Europe, the Middle East and Africa at consultancy Bain & Company.

American insurance company Esurance is already using predictive analytics to speed up the processing of urgent claims after natural disasters. After Hurricane Harvey caused massive flooding damage in Texas, Esurance used predictive analytics to study aerial images of impacted areas captured from planes, so adjusters didn’t have to inspect vehicles physically.

Insurers may be well aware of the benefits afforded by new technologies, but effectively implementing these tools can be a complex process. According to KPMG, 91 per cent of insurance company chief

From personalised car insurance to predicting the impact of floods, predictive analytics is helping insurers move from insuring to protecting risk

Factfile

Four forms of data analytics

- 01 **REPORTING**
Reports on the current situation
- 02 **DESCRIPTIVE**
Provides actionable insights on the current situation
- 03 **PREDICTIVE**
Predicts probable outcomes
- 04 **PRESCRIPTIVE**
Prescribes actions required to deal with future events

executives say they are worried about how to introduce automation, AI and cognitive robotics to their business models, with Mr Naujoks believing the challenges facing executives looking to embrace predictive analytics to be varied.

“Perhaps they have a sense of urgency but no strategic direction, or in some cases many potential applications but no systematic approach, and in other cases an ambitious agenda but little real progress,” he says.

“We have identified three critical components: insurers need to define a clear analytics strategy, make sure to set up an operating model to deliver business value with AI, and really make a commitment to invest in the build-up of data and analytics capabilities.”

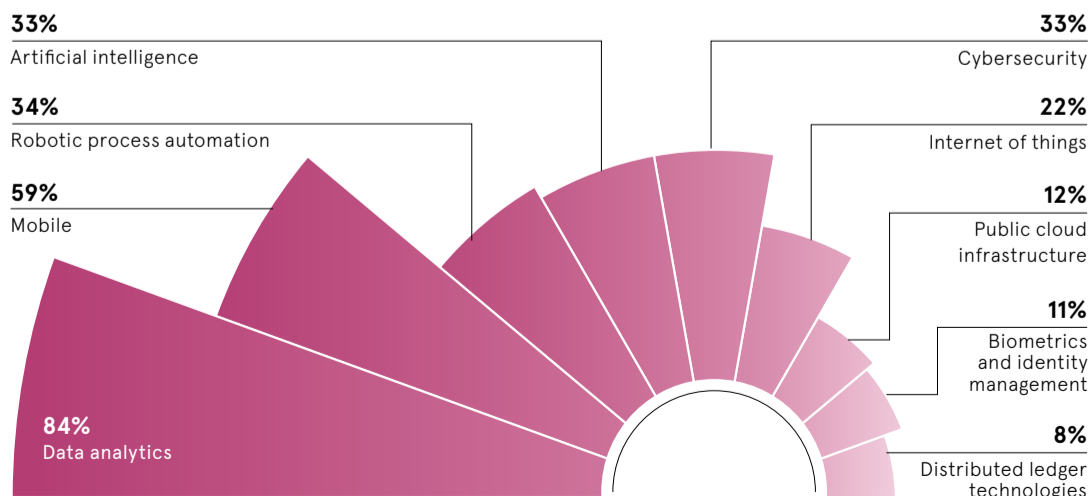
Real-time data collection from the billions upon billions of sensors and connected devices gives insurers huge amounts of data that can be used to make strong forecasts and predictions of future consumer behaviour. From wearable sensors, supplying insight into health for life insurers, to smart sensors in the home, predicting when devices need repairing, the opportunities for insurers that make the most of the next generation of technological innovation are immense.

The established business model that the vast majority of insurers still use today, which bases insurance premiums on simplistic questions around age, profession and gender, is unlikely to survive the widespread adoption of predictive analytics solutions.

“Tomorrow the model will be active, real-time risk management with 24/7 service interaction. If insurers don’t provide these services, they will be relegated to back-end claims payers, with tech companies stepping in to own the customer relationship and forever steal their distribution channels. This applies to virtually every line of business,” Pegasystems’ Mr Tarquini concludes. ♦

Data analytics at the top of the shopping list for insurers

Global insurers were asked what technologies they are planning to invest in within the next 12 months



Drift/Salesforce/myclever 2018

Those who are fastest and best in leveraging predictive analytics can realise superior returns

How startup Wrisk is rethinking insurance for the connected generation

Wrisk hopes to change the way we think about personal insurance. Can it really change an entire industry? Co-founder **Niall Barton** answers the important questions

What is Wrisk?

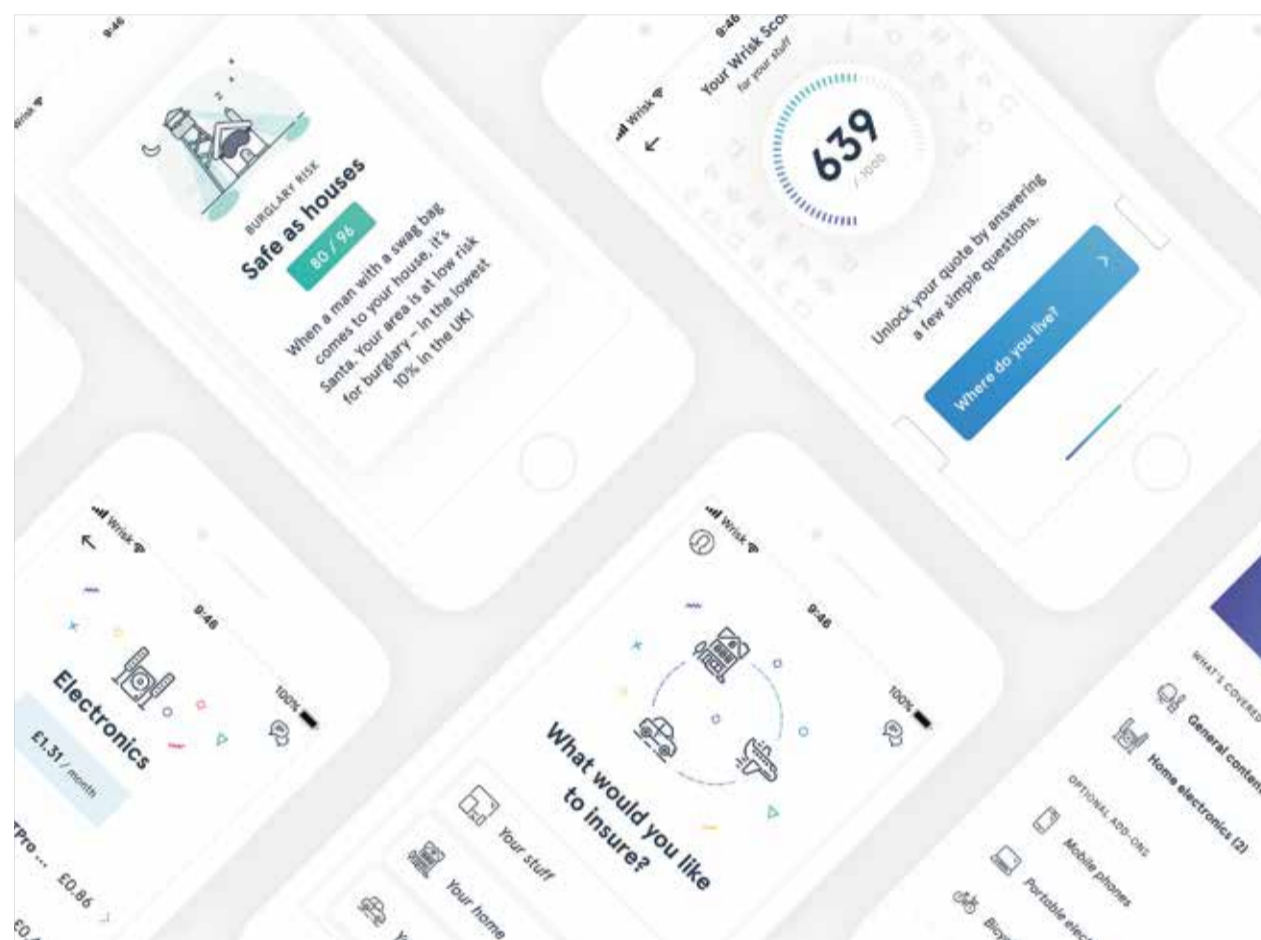
The quick answer is that it's a smartphone app for insurance. A few taps and you are covered immediately. We are starting with contents insurance, for goods such as your iPhone and laptop, and will soon add cover for your car, health, home and more. The fuller answer is that we want to reinvent insurance for the mobile age. Spotify changed music. Uber changed the taxi industry. We want Wrisk to do the same for personal insurance.

Bold claim. How can you do that?

Insurance is a conservative industry. As a result it has been in the slow lane compared to the rest of the fintech revolution. Banking has challengers like Monzo and Atom; share trading has disrupters like eToro. But there's very little of a similar profile in insurance. We want to push change. We are working with the biggest names in insurance, such as Munich Re and Hiscox, to rethink, redesign and re-engineer the entire insurance experience from the ground up.

What are your innovations?

Let me give you three. First, we offer transparency to users. Today, when you get an insurance quote, you are pretty much in the dark as to what actually influences the price. To change this, we have what we call our Wrisk Score, which helps customers understand the different factors that affect their risk, how these impact their price and what they can do to improve things. Second, we bill consumers differently. Traditional insurance is renewed annually. Some people might choose to pay monthly, but they are more often than not charged extra for the privilege. But why? Wrisk's insurance is ongoing, with monthly payments and no



extra charges, either for cancellation or flexible payments. It is more like a subscription model for something like Netflix. Our third innovation is to end the hassle of multiple providers and disconnected policies. We are creating something that brings together protection for the different risks people care about. Wrisk is creating a single seamless experience where "the whole is more than the sum of its parts". We are building a single plan that adapts to fit your life, rather than forcing you into the traditional industry's ideas of what should be different products. Eventually this means you'll never need to purchase separate home, contents, motor, travel or any other kind of insurance. It all works together with the customer at the heart of it. We call this Macroinsurance.

Is Wrisk insurance cheaper than normal?

Our research shows we are competitive. You start with a rough quote, but as you progressively share more information, you'll see your price go down as your Wrisk Score improves. We help you better understand your risk, and also

we help identify things you can do to improve your situation and reduce your premium. Unlike a traditional insurer, we are a digital-first company which means our overheads are lower. Better efficiency through technology means we can pass on lower premiums while still offering great service to customers.

Might consumers be nervous about buying insurance from a newcomer?

I mentioned we are working with Munich Re and Hiscox. We operate on the basis of formal pre-approval from them to allow us to issue insurance. The app is innovative and fresh, but our insurance model is proven and trusted.

Can Wrisk customers talk to humans when needed?

Absolutely. Customers want their claims handled in the most efficient and caring manner possible. We are committed to making Wrisk feel both human and personal. Technology might allow us to process some of our simpler claims automatically. However, we also have dedicated teams of people ready to provide customer support and service more complex claims with a human

touch. We have in-app messaging built into our platform, so contacting us is quick, easy and painless. We believe Wrisk will exceed the performance of traditional insurance by using modern communication channels around both claims handling and customer support.

Who is the team behind Wrisk?

I've been in insurance for 40 years, both as a broker and underwriter. I have founded new companies, worked to scale up existing business, as well as working in one of the largest global players. A common theme has probably been that I like to push change wherever possible. My co-founder, Darius Kumana, is a product genius. He was head of user experience at ThoughtWorks, a highly regarded technical agency, and also head of digital at specialist insurer Markel International, so he has deep industry knowledge. Our advisory board is composed of 14 entrepreneurs, investors and insurance luminaries, including Bindi Karia, former vice president at Silicon Valley Bank, and Justin Balcombe, managing director at Boston Consulting Group.

BMW are involved too. How?

BMW appreciate that the whole field of "mobility" is changing and need their customers to have flexible insurance for that changing landscape. We learnt BMW was going to run an Innovation Lab, the first fintech incubator in the UK automotive sector. We applied and found we'd beaten more than 100 other startups to become one of the five startups working with them. We now have a distribution deal to offer our insurance to BMW customers, which we'll be launching later this year. It's a fabulous endorsement of our model.

Are you regulated?

We are regulated and approved by the Financial Conduct Authority. The regulators have been fantastic. HM Treasury too. They want the UK to be a world leader in insurtech. London is the home of the world insurance industry, and Wrisk combines the financial and digital know-how of the capital.

How are you funded?

We have institutional investors, including Oxford Capital, Qatar Insurance Group and Hiscox. We also raised £600,000 on the crowdfunding platform Seedrs. A pleasant surprise was we hit our target in six days and choose to overfund due to incredible support from 500 investors from 27 different countries.

Is Wrisk in the UK only?

We are starting in the UK, then will expand to the United States and Europe. The model works well across global markets, so that's a big factor in our business plan. It's a reason our investors are so enthusiastic.

What's your mission with Wrisk?

Insurance at its core is truly purposeful. It's about being there to help people recover when they are at their most vulnerable, just after some kind of disaster has struck. While this ideal is at the heart of insurance, it doesn't always feel like this is what the industry currently does - mistrust is everywhere. Wrisk is going to change this by putting customers back in control and making insurance so simple it's almost unrecognisable.



Niall Barton
Co-founder, Wrisk



Visit Wrisk.co to be an early adopter or become an investor via Seedrs.com

‘Insurers understand they need to build stronger relationships with their customers’

We often hear two different stories about insurance, both of which are supported by detailed evidence.

First, we hear a story about how the public does not trust insurers. For example, last August a survey of 1,000 customers for the ratings site Claims Rated showed that half of all consumers do not trust insurance companies to pay out on a claim.

The second story talks about how the industry is steadily increasing standards of customer service. For example, in January the Institute of Customer Service’s UK Customer Satisfaction Index showed that insurers’ average score of 78.7 was slightly higher than the average for all sectors across the UK, which stood at 78.1.

So which story is true? Can they both be right? I think they both have an important message to tell and they point to how insurers can adapt to be more successful in future.

The evidence shows that insurers are good at the basics. Generally speaking, they pay claims and administer business fairly and efficiently. People who have made a claim often have a higher opinion of the profession than people who have not.

However, people do not always have a strong relationship with their insurer. As the sector has made it easier for consumers to buy insurance, it has also become more distant from them. Pricing practices that encourage people to switch provider every year have made it difficult for people to remember even the name of their current home or car insurer.

This distance between insurers and their customers is significant because people will only truly trust an organisation if they believe it has the moral stamina to carry on acting in their interests, even when doing so cuts across its own short-term interests.

Doing business in an efficient and convenient way doesn’t always give customers the evidence they need that this is the case. For example, people might know that insurers pay out on a large number of claims now, but that doesn’t always reassure them that their claim will be paid at some point in the future.

One way to achieve a higher level of trust is to deliver a high standard of service to people who have previously been excluded from insurance. For example, some travel insurers employ trained cancer nurses to talk to people who have not been able to get affordable cover for trips overseas. The service they provide adds a more human and compassionate dimension to a process that most of us would find challenging and stressful.

Another way in which insurers are building trust with consumers is with the use of telematics. In the past, most young drivers were treated as a high risk and faced high car insurance premiums. The use of telematics not only helps younger drivers to reduce the cost of their insurance by proving they are responsible drivers, it also enables insurers to give feedback to customers about the quality of their driving, and helps them reduce the risk of accident and serious injury, laying the basis for a much stronger ongoing relationship.

If insurers stick to simply processing applications and claims efficiently, consumers will continue to buy their products. However, to make the profession thrive and grow, insurers increasingly understand they need to build stronger relationships with their customers. This means finding ways to help consumers who would normally be refused insurance or giving customers the kind of help that enables them to manage risk in their lives more effectively.



Sian Fisher
Chief executive
Chartered Insurance
Institute

Insuretech is rising in the East

Already a major new player, the potential for growth in China’s online insurance market is vast – with lessons for UK insurers to learn

NICK EASEN

China is trailblazing when it comes to insurance. This underdeveloped market has been posting nearly 20 per cent growth. Its billion-plus population are leapfrogging paper policies and embracing digital commerce with eye-popping vigour.

The world’s second-largest economy already has one of the highest adoption rates for fintech products. This is now cascading into insuretech.

Take ZhongAn, the company launched four years ago with off-beat, online, micro-policies including one insuring against self-inflicted liver damage for Chinese football fans. Another policy reimbursed people when temperatures hit 37C. One even paid out for flight delays while customers were reportedly still at the airport.

So far the Shanghai firm has sold nearly six billion policies to 460 million people. Valued at \$10 billion, the company’s tech platform can process 13,000 policies a second. Yet it still has less than 1 per cent of the market. Its rival PingAn is the world’s largest insurer by market capitalisation; its shares have more than doubled in a year. Ignore this Asian market at your peril.

“Insuretech, messaging platforms and online are disrupting the landscape at incredible speed,” says David Wu, insurance sector leader for Deloitte China.

“China’s three giant tech companies have aggressively expanded the reach, scale and accessibility of their digital platforms into the financial services space. The speed and scale of investment has also made China one of the fastest growing insuretech leaders in the world.”

Alibaba, Tencent and Baidu are the heavyweights pumping money and joint ventures into this sector, creating an ecommerce eco-sys-

“The speed and scale of investment has made China one of the fastest growing insuretech leaders in the world”

tem that has no parallel globally, in terms of user numbers or money spent via mobiles; it’s now 50 times larger than the United States. Before going online, China had a relatively small and immature system of agents and brokers compared to other countries.

Cliff Sheng, partner at Oliver Wyman, says: “Since each province in China has different regulations, each insurance provider faced more

complexity; therefore, digital products are taking over a space that was untapped. Digital distribution is now becoming increasingly important to standard personal products such as car and simple health insurance.”

China’s insurance market has doubled over the past six years. Yet compared with developed markets, penetration is lagging, with a rate less than 4 per cent. Contrast this with America where it’s 7.3 per cent and 10 per cent in the UK. No wonder the value of insuretech premiums is predicted to reach more than \$174 billion by 2020, according to research by Mr Sheng and his company.

“Consumer data is widely and cheaply available. Underwriting and claims can also be fully automated. Chinese insurance companies are successfully leveraging referrals on social media and paid clicks on digital platforms to penetrate more income segments in society and second-tier cities,” explains John Ott, partner at Bain & Company in Shanghai.

This is not to say that traditional channels are evaporating. In some categories, such as life insurance, which is a complex sell, they still dominate, especially in China’s relationship-based culture where people tend to do business with people they know. It is also a big country with many remote areas. Many consumers are still asking basic questions about the need for insurance at all.

What’s changing fast though is the ease and ability of consumers, especially the growing middle classes, to access simple and small policies, mainly via smartphones and platforms such as WeChat. It also helps that these services are supported by brand names people trust. This is beneficial in convincing users to subscribe. China’s Insurance Regulatory Commission has also been more focused on traditional



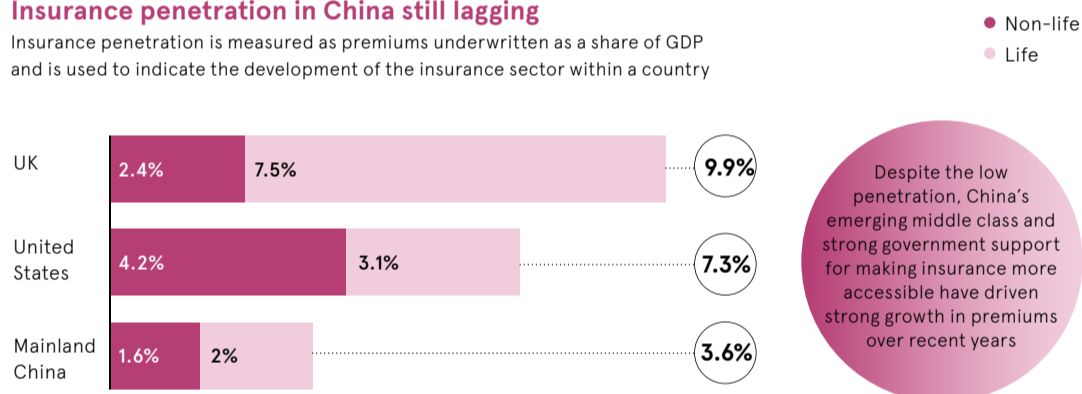


Ollai Shen/Bloomberg via Getty Images

The growth of China's insurtech market has been propelled by the adoption of platforms such as WeChat, which have enabled consumers to access simple micro-policies

Insurance penetration in China still lagging

Insurance penetration is measured as premiums underwritten as a share of GDP and is used to indicate the development of the insurance sector within a country



Oliver Wyman 2016

products and has yet to scrutinise specialised micro-policies from insurtech companies.

"Companies such as Alibaba and Tencent are extensively using big data to track users and behaviour across all touch points. Most of the insurance subscriptions are happening during life events such as births, big purchases or travelling. It's quite easy for players at all points along the consumer journey to track and trigger purchasing," says Thomas Guillemaud, chief operating officer of China-based IT Consultis.

For example, take a consumer on Tmall, Alibaba's online consumer marketplace, it spots changing purchasing patterns such as buying a cot, a pushchair or imported infant formula. It knows this person is expecting a child and therefore Tmall proposes insurance for the new born and for goods purchased.

"The consumer can be tracked on all channels, which can bring about personalised products. Ultimately, insurtech companies are in a very good position, since they're moving towards full control of the digital market," says Mr Guillemaud.

With internet purchases and split-testing, insurtech companies

can also optimise products, where 50 per cent will be offered one policy, the other half another. The one that converts better will then be offered to all customers in the future. This enables insurtech companies to deliver new products faster.

"This is certainly fostering product innovation that's aligned to real customer needs, as well as shortening the product development cycle," explains Joanna Wong, partner for consulting at Deloitte China.

In terms of policies, shipping return insurance for goods purchased online, flight delay policies, intelligent health insurance and household property theft are all categories that have thrived in the digital space, although you can get many exotic products, even drone insurance.

What's unique about China is the ability of insurers and insurtech companies to rally around consumer data and create an eco-system to master the marketplace, and transform their business models, as well as use open application programming interfaces to offer new and interesting products.

It's not without issues though. There is still a lack of insurance education, for instance. The Asian

insurtech community also remains relatively small with activity mostly centred on China, Hong Kong and Singapore. "Price sensitivity and high churn rates remain challenges across the Chinese insurance market. Consumers and the government are now increasingly aware of data privacy concerns," says Bain & Company's Mr Ott.

The rise of digitally driven micro-policies is spreading in Asia. In traditional Japan, DoCoMo has started to integrate services with insurers to pop-up advertisements based on your location; for example, if you're at an airport, your mobile will offer travel insurance. South Korea is moving towards digital with its WeChat equivalent Kakao.

There are also lessons to be learnt in the UK from the rise of China's insurtech market. After all, people in the UK have some of the highest online shopping rates in the world.

"Many consumers are already overinsured. The UK could benefit from switching from insurance of goods to insurance of lifestyle by offering smaller products that are more specialised rather than super contracts insuring everything," says Mr Guillemaud. ♦

TIN tech

5th June 2018 London

The UK's leading insurance technology event

Panels & workshops include:

- AI & machine learning
- Digital transformation
- Legacy modernisation
- RPA
- Blockchain



BOOK ONLINE
www.TINtech.co.uk

PRESENTED BY

TIN THE INSURANCE NETWORK

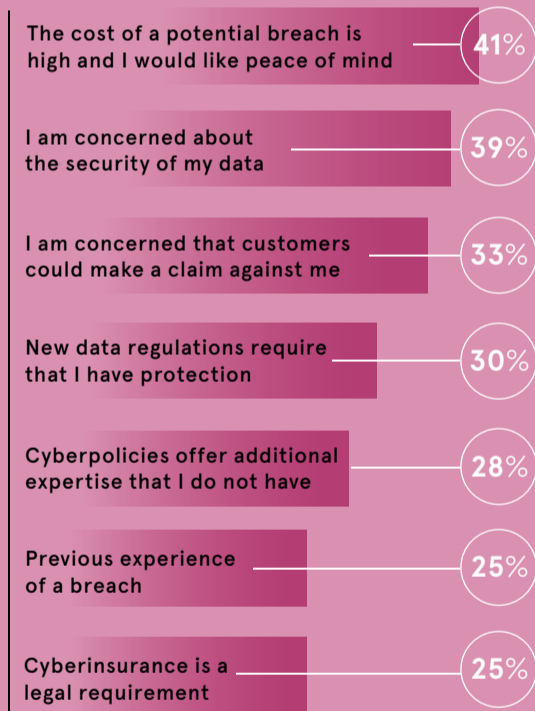
CYBER INSURANCE

Understanding an increasingly complex risk

Getting to grips with insuring your business is a daunting task for any business leader; understanding your exposure to cyberattacks can be even more intimidating. Industry surveys show a major lack of understanding when it comes to determining the adequacy of cybercover, while a large share of firms still do not have any sort of cyberinsurance at all

Top reasons for taking out cyberinsurance

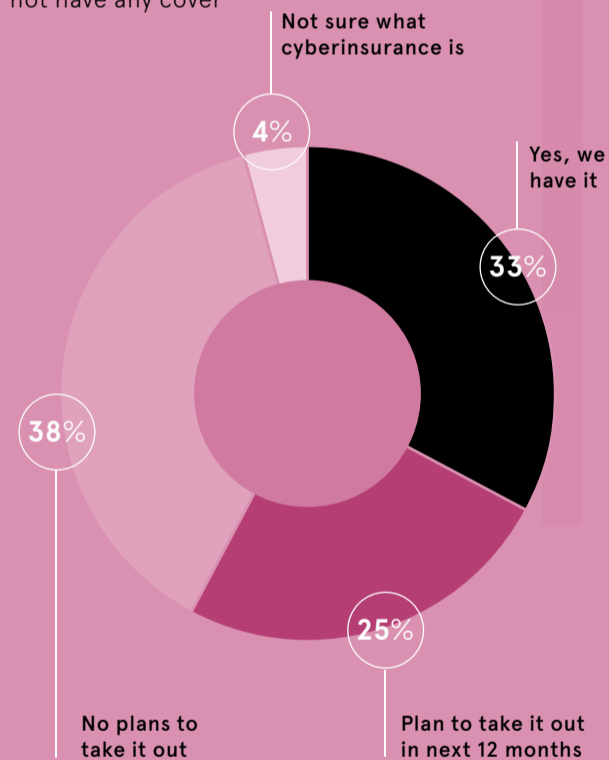
Average share of firms from Germany, the UK and United States that have cybercover



Hiscox/Forrester Consulting 2017

Percentage of firms with cyberinsurance

An astonishing two thirds of companies still do not have any cover



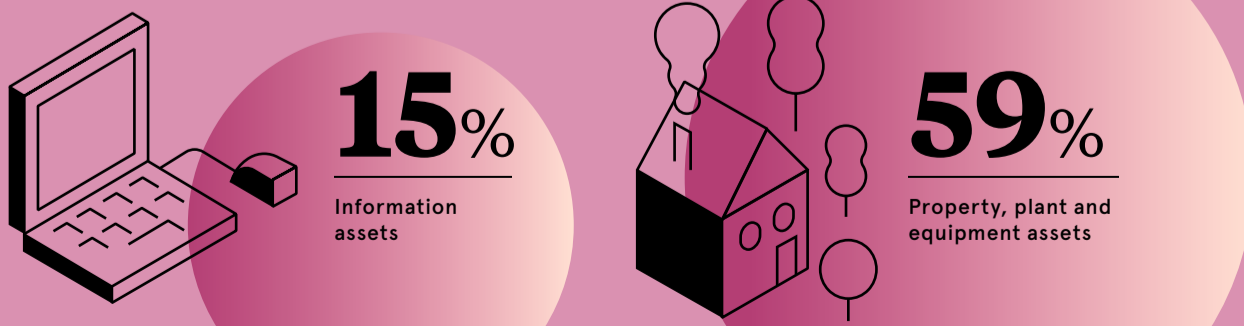
Hiscox/Forrester Consulting 2018

Top reasons why some firms don't purchase cyberinsurance

- 01 Premiums are too expensive
- 02 Coverage is inadequate based on our exposure
- 03 Property/casualty policies are sufficient
- 04 Too many exclusions, restrictions and uninsurable risks
- 05 Executive management does not see the value

Percentage of potential loss to assets covered by insurance

Companies still underinsured for cyber-risks

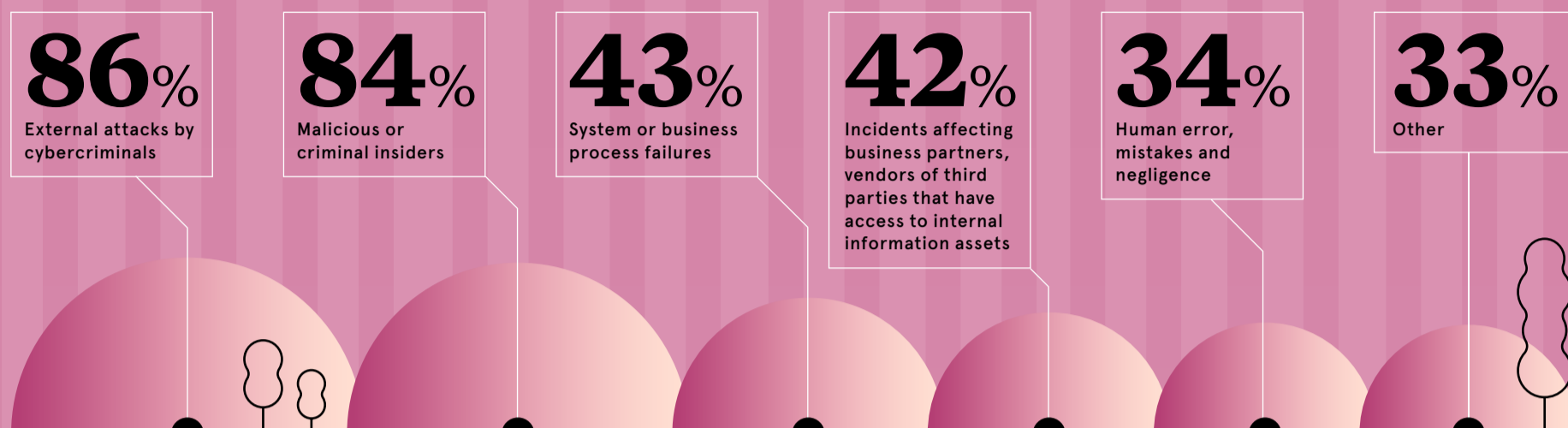


Aon/Ponemon Institute 2017

Aon/Ponemon Institute 2017

Types of incidents covered by cyberinsurance

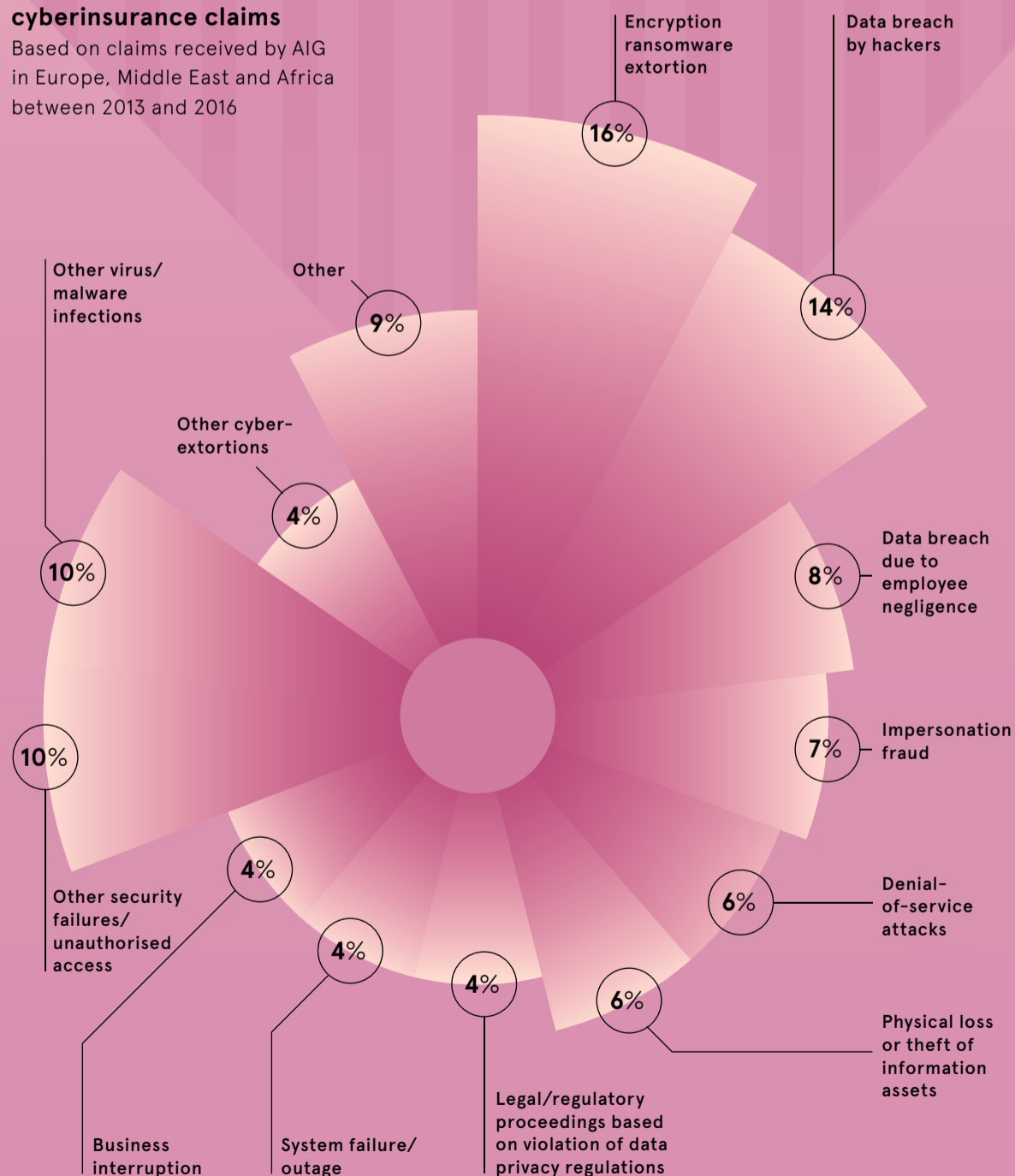
Percentage of companies with the following coverage



Aon/Ponemon Institute 2017

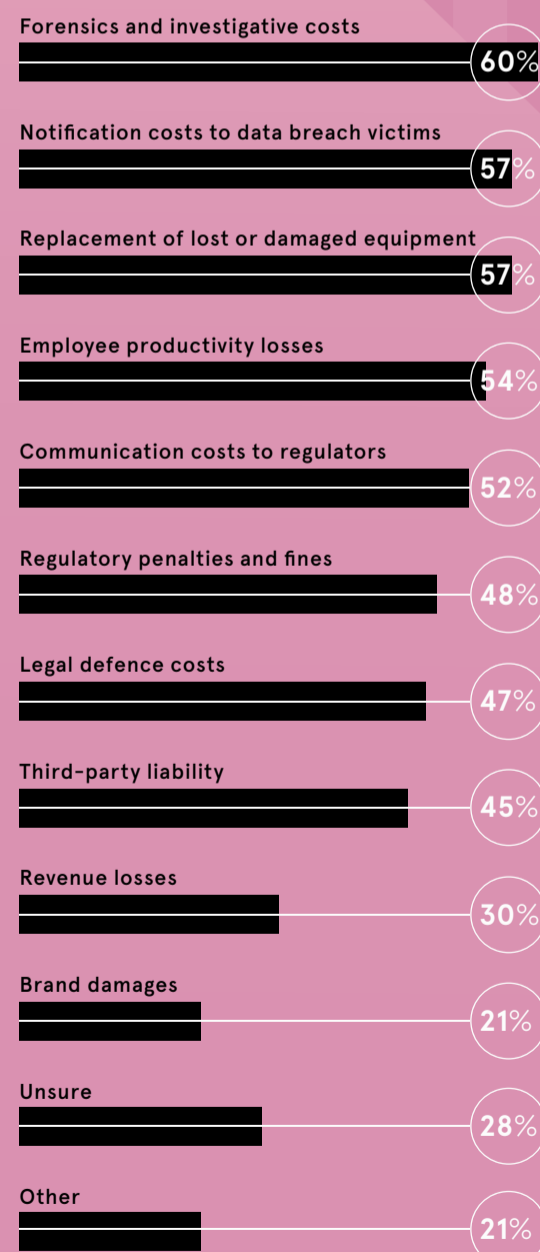
Source of most common cyberinsurance claims

Based on claims received by AIG in Europe, Middle East and Africa between 2013 and 2016



Cyber coverage provided by insurers

Percentage of companies receiving the following services



Accelerating along the road to autonomy

A new era of autonomous vehicles is coming, signalling a different approach to insurance

ANNA CODREA-RADO

Cars of the future are just around the corner. In the last Budget, chancellor Philip Hammond announced that fully driverless cars, with no one behind the wheel, could be on UK roads as early as 2021. The government also forecast that the industry will bring in 27,000 jobs and be worth £28 billion to the UK economy.

The biggest appeal of driverless cars is undoubtedly safety. A 2008 survey by the US National Highway Traffic Safety Administration found that 93 per cent of crashes were caused by human error. The automated vehicle revolution is signalled to improve road safety drastically for all users.

One bump in the road to this future, however, is insurance. What will car insurance look like in a world where accidents have been greatly reduced?

"The insurance industry fully supports the development of automated vehicles," says Rob Cummings, head of motor and liability at the Association of British Insurers (ABI). "This technology has the potential to dramatically improve road safety, revolutionise our transport systems and make it easier for people who cannot drive to get around."

As the insurance industry gears up for the automated vehicle revolution, it's not the distant future when all cars are driverless that's the main concern, rather the transition phase. According to estimates by Thatcham Research, a motoring body funded by the insurance industry, it will take at least 25 years before the majority of cars on our roads will be fully autonomous and in the interim there will be a mixed fleet.

43%

believe their insurance premiums could sky-rocket when insuring a driverless car

Comparethemarket/University of Southampton 2017



Daniel Acker/Bloomberg via Getty Images

01

"Even when autonomous vehicles are mainstream, the actual penetration into the market is likely to take 15 years," says Simon Walker, group chief executive of the motor insurance provider First Central Group. "This will result in a continual, though diminishing, pool of non-autonomous vehicles continuing to carry the full risks of the current fleet of vehicles in the UK."

The government has already stepped in with a solution to plug this gap, with the introduction of the Automated and Electric Vehicles Bill. Existing law requires that all vehicle owners using public roads are required to hold a valid insurance policy to cover any liability which the owner incurs in an accident. The new Bill, introduced in October, proposes to extend compulsory motor insurance to include the use of autonomous vehicles.

When the legislation was introduced, transport secretary Chris Grayling said: "We are creating a new compulsory insurance framework that covers the use of automated vehicles and when the driver has legitimately handed control to the vehicle. This will ensure that victims have quick and easy access to compensation."

The move was welcomed by the ABI, which would like to see insurance kept "as straightforward as possible", Mr Cummings says. In response to the Bill, Thatcham Research set out a ten-point list of criteria to assess whether a vehicle is autonomous or not. "It is crucial that there is a clear definition of exactly what constitutes an automated vehicle," says Matthew Avery, director of research. "Regulators and insurers require this to classify and insure vehicles appropriately,

Rates will be weighted more to the risk profile of the vehicle than the risk profile of the driver, which is the reverse of what we see today

while consumers need to understand the functionality and capability of the vehicle, and their own responsibilities."

Experts agree that insurance will still be needed for automated vehicles. "Insurance will still be required, but it is likely to change fundamentally, both in terms of the way premiums are set and in the way in which liability is established," says Mr Walker. "In relation to premiums, rates will be weighted more to the risk profile of the vehicle than the risk profile of the driver, which is the reverse of what we see today."

According to Stuart Rye, director of business development at Fujitsu, it will be personalised services that

01 Ford Fusion self-driving car on display at this year's Detroit North American International Auto Show

02 Hyundai engineer trialling a Nexo autonomous vehicle during a test drive in Pyeongchang, South Korea

set insurance companies apart from their competitors in this evolving market. "Technologies such as artificial intelligence and automation could enable insurers to offer a more tailored product and smarter targeting when it comes to customer interaction," he says. "What we're already seeing is an attempt to integrate new technologies across three key areas of customer experience, better assessments and adding value by mitigating risk."

This is happening in the insurance industry through the use of telematics. Often known as black-box car insurance, some insurance providers offer customers the option to install a device in their

Case study

Will a fatal crash halt driverless cars?

In March, 49-year-old Elaine Herzberg was killed in a road accident involving a driverless car, while she was crossing a six-lane highway in Arizona. It was the first reported death involving an autonomous vehicle and a pedestrian in the United States. The investigation into what happened is ongoing, but in response Uber suspended further testing of its driverless fleet.

The death drew more attention to the hotly debated topic of self-driving cars. Industry experts, however, do not think the development of automated vehicles will come to a halt.

"The competition both between manufacturers and between countries to be first will only serve to make it



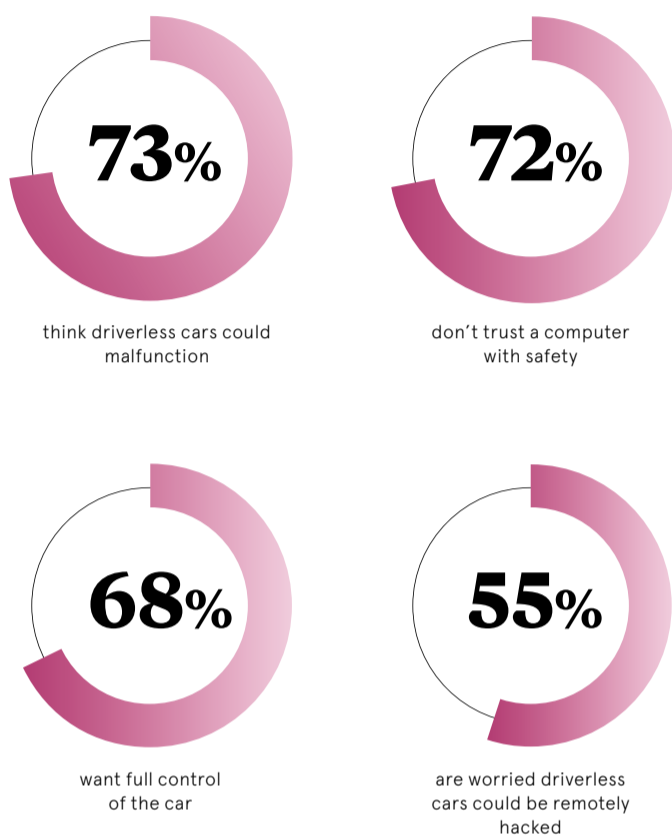
ANGELÓ MERENDINO/AF/Photo Images

likely that this incident prompts a pause as opposed to a cessation of efforts," says Simon Walker, group chief executive of the motor insurance provider First Central Group.

With more than 30,000 people killed on America's roads each year, proponents of automated vehicles maintain that cars driven by

computers rather than people will be safer in the long run. Currently, over 90 per cent of accidents are due to human error. Mr Walker says: "Despite not knowing with clarity exactly when society will feel prepared to allow such technology on public roads, the insurance industry should continue to prepare for that future."

UK drivers are still uncertain about autonomous vehicles
 Top reasons chosen by the 44 per cent of UK respondents who oppose driverless cars



Comparethemarket/University of Southampton 2017

vehicles which monitors their driving. Premiums are then based on the driver's personal safety record, making this an attractive option for younger drivers, who may otherwise face steep premiums.

"While driverless cars are often the focus of many discussions surrounding the future of insurance, current technologies such as telematics have the potential to make huge differences in the industry," says Adam Gooch, commercial director at Insure Telematics Solutions, a telematics company that uses artificial intelligence and

machine-learning to develop black-box software.

Advanced telematics will enable insurers to build sophisticated risk profiles that take on board driver data such as location, acceleration, cornering and braking to determine the individual driver's risk. Using these models, insurers will be able to make real-time risk judgments in specific locations. Mr Gooch concludes: "This could open the door to a new generation of insurance products, including on-demand services that could minimise risk for insurers and costs for drivers." ♦



Customer engagement is key to better driving and smarter insurance

New research shows that engaging drivers in using products that analyse and score their driving, has a strong positive effect on changing the driving behaviour

The insurance industry is being transformed through new technologies that are enabling more customer engagement by powering a new generation of products built on usage and behaviour-based insurance (UBI) data.

The digitisation of insurance, particularly in motoring, radically changes the relationship between insurance companies and their customers. Such products include pay-as-you-drive (PAYD) and pay-how-you-drive (PHYD).

This new wave of products not only allows insurance companies to measure and gain detailed insights into customer behaviour, but also to influence driving behaviour by using advanced engagement mechanisms from companies such as Amodo, whose mobility platform solutions are leading the UBI charge.

To test the link between customer engagement and driving behaviour, Amodo analysed the behaviour of a range of drivers over a 12-month period. Participants installed a UBI smartphone app that generated a driving safety score based on factors such as speeding time and harshness of braking, acceleration and cornering. An optional recording function was stimulated by gamification mechanisms such as individual and group challenges, competitions and reward contests.

The most frequent users of the app, who on average recorded 34 per cent of their journeys, increased their driving safety score by almost 40 per cent over the 12 months. Drivers classified as "regular" users of the app, using it on 16 per cent of their trips, increased their score by 15 per cent, while those who only used it occasionally, on 8.5 per cent of their trips, improved their score by 14 per cent.

"This confirms the positive link between customer engagement and driving behaviour," says Marijan Mumdziev, Amodo's chief executive. "The UBI product offered to the drivers used balanced distribution of mechanics for short-term, mid-term and long-term engagement, all of which are essential in engaging drivers over a longer period of time and effectively changing their driving style."

Through the results of the research, it's clear that driving behaviour data can become a powerful tool for achieving the business goals of insurance companies, which are uniquely aligned with customer goals in terms of focusing on safety.

Amodo's research also reinforces the assumptions about engagement indicated by other studies, such as a 2013 survey by Tower Watsons in which 60 per cent of customers interested in UBI programmes said they would be willing to change their driving behaviour.

When asked how they might change if a UBI device was installed in their car, respondents listed sticking to the speed limit (71 per cent), keeping a safer distance from other vehicles (52 per cent) and driving more considerably (49 per cent) as the leading adjustments.

Technology is enabling insurance companies to improve many aspects of their business

Technology is enabling insurance companies to improve many aspects of their business. Amodo's research demonstrates how telematics technology can prevent risk by encouraging safer driving, benefiting both insurers and their customers.

"The key to successful risk prevention programmes in motor and other insurance products is customer

engagement," Mr Mumdziev says. "This doesn't happen just by installing a smartphone app; it needs to be carefully designed, planned and then automated with the appropriate engagement platforms such as Amodo.

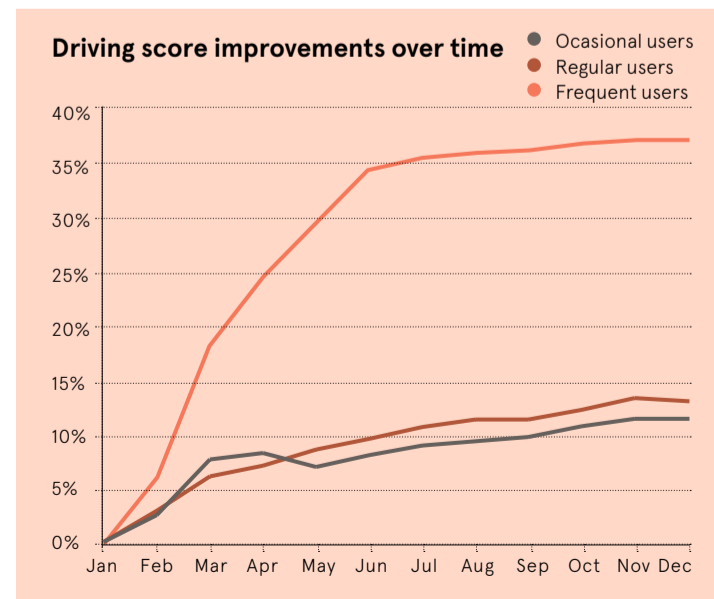
"It is nothing short of a science to build a successful customer engagement programme. Our customer engagement design is built on top of lots of behaviour data insights and patterns that we use in combination with communication strategies, gamification mechanisms, social tools, incentivisation plans and others to measure and change customer behaviour over a longer period."

Insurers can also find significant value in leveraging driving behaviour data not only for risk prevention, but also for product development and marketing, thereby gaining a better understanding on customer needs and respective segmentation.

Consumer interest in UBI and related value-added services presents a great opportunity for insurance companies. By relying on superior solutions and support to implement such products, insurers can gain necessary market advantage, and ensure a profitable and sustainable future.

For more information please visit amodo.eu

AMODO



'Named peril' comes to the fore, transforming liability insurance

Insurtech solutions have generally focused on helping tailor and distribute personal coverage, but commercial liability insurers are deploying smart data analytics to cover named risks previously excluded or undercovered

Liability insurers are highly averse to risks they cannot accurately quantify and that could present major payouts. Insurers' risk aversion can be traced back to their being swamped with claims in the wake of deaths linked to asbestos in the latter half of the last century, a phase that nearly broke the Lloyd's insurance market.

Since those claims, "many insurers routinely insist upon exclusions for various emerging risks in their policies", explains Bob Reville, chief executive at insurtech firm Praedicat. The company found in a recent survey that 83 per cent of underwriters see their job as "protecting their company against the next asbestos", which might be mobile phones, wifi, nanotechnology, 3D printing, fracking or anything else. "When they do that job by adding exclusions, this can leave their clients exposed," says Dr Reville.

While in personal insurance some 98 per cent of tort risk is covered, it is estimated by Towers Watson that covered commercial tort risk has been almost reduced by half since 1973 when asbestos litigation started. This would represent more than \$60 billion in lost revenue opportunity for insurers and a significant danger for clients who want to take calculated risks to drive innovation.

Using smart data modelling, Praedicat is helping insurers tackle coverage gaps, and match products and risk. They can supplement traditional insurance with coverage for named perils, which are specifically selected low-probability, but potentially high-cost, risks.

Algorithmic search, machine-learning and natural language processing enable the company to extract clear analysis from vast amounts of peer-reviewed science so emerging risks can be better quantified and predicted. "Scientists are the world's emerging risk group, trying to find the next asbestos," says Dr Reville. "And we

assimilate the essential information they're finding, helping insurers to see around the corner."

Addressing risk on a named peril basis is aimed at creating transparency, and allowing the risk to be managed and measured. This risk opportunity can then be spread to global reinsurance and capital markets.

"The effect on the industry will be so substantial that it could eventually double in size, given the extent of opportunities currently undercovered or excluded," Dr Reville forecasts. "We estimate that a \$15-billion reinsurance market will emerge to support insurers in this regard."

With the technology and the data, Praedicat can quantify real litigation risk, he says. "When insurers run our models, they can identify a set of 30 or so such large-scale risks driving overall risk in each portfolio. Then they can assess the exposure to each one of them and transfer some risk to reinsurance on a named peril basis," explains Dr Reville. "We can assess the dangers and what the magnitude of litigation could be."

As an example, one chemical used in plastics, called di-(2-ethyl-hexyl) phthalate, or DEHP, is described by some scientists as having a risk of causing autism and other harms. Praedicat estimates that it could result in a one-in-a-hundred-year loss for industry of \$117 billion.

The company's latency risk management programme addresses such downstream risks and myriad others, working with insurers to manage their total aggregate exposure, limit exclusions and steer the portfolio. It also works in emerging risk consulting, to help insurers deliver risk engineering services at scale and assist their own clients in mitigating dangers.

This empowers insurers' clients to innovate. "Companies had faced a big problem when developing products: if they made something that is incredibly useful and ended up included in countless other items, we didn't know the downstream consequences in the wider environment," says Dr Reville. "For insurers, now they can measure and much more accurately anticipate what that risk is. By including these named perils, businesses can innovate fully."

Praedicat's techniques, therefore, begin to enable the liability insurance market to function more like the property catastrophe market, with insurers much better able to account for risks by managing accumulation or the concentration of insured risks.

How Praedicat is advancing liability insurance



Addressing coverage gaps

82%

of surveyed underwriters agree that Praedicat's analytics can support the development of tailored, named peril products for their clients

TechValidate survey of Praedicat users, 2018

Andrea Scascighini, reinsurer Swiss Re's head of casualty treaty underwriting in southern Europe, the Middle East and Africa, says the company is working with clients to manage accumulations. He adds: "Named peril reinsurance provides transparency in coverage, and facilitates innovative and tailor-made solutions."

Meanwhile, XL Catlin's global chief underwriting officer for casualty insurance, Nancy Bewlay, describes modelling of named peril risks as "opening up new coverage possibilities" and a "great opportunity to respond to coverage gaps" that currently exist.

Given the technology's capabilities, there is now the emergence of "named peril clash reinsurance", which helps reinsurers define with much greater precision where specific risks have a common cause. This helps reinsurers become more confident of their own resilience to multiple-risk circumstances.

There is also "excess casualty top-up", which can effectively be used to provide companies with add-on insurance coverage for any one potentially expensive peril. This change in approach empowers insurers to "manage risk rather than avoid it or be unaware of it", Dr Reville says.

Praedicat's data-driven technology equally helps insurers' compliance, specifically with regard to Solvency II regulations. "Our clients are using our product to develop submissions for regulatory and rating reports. It shows they are employing best practices for emerging risk management and thinking about their capital on the casualty side," Dr Reville explains.

"After Solvency II was introduced, the initial focus was entirely on property insurance and now there's an increasing focus on casualty insurance. We are providing a vehicle for how solvency can be measured and managed in a way that also supports growth in the industry."

As insurers and reinsurers are empowered by data analysis and modelling, the industry can confidently cover named peril. This opens up a huge source of revenue. For the businesses they cover, there will be full protection through the truly comprehensive insurance they need for bold innovation.



Robert Reville
Chief executive, Praedicat

Using smart data modelling, Praedicat is helping insurers tackle coverage gaps, and match products and risk

To find out more about how to cover named peril please visit praedicat.com

Praedicat

BLOCKCHAIN

Ledger tech could be insurers' dream

Marine and other insurance policies have a new virtual figurehead to help chart a course through mainly unexplored waters of doing business in an increasingly digital economy

HELEN BECKETT

Blockchain, a distributed ledger that provides an immutable record of transactions, promises to fix the problems of trust and a fragmented value chain that have kept the marine insurance sector moored to antiquated, often paper-based, processes.

Solve these structural issues and you have a marine insurer's dream. "Blockchain connects the shipping industry and brings risk closer to capital," says Sean Crawford, EY global insurance leader. Insurchainconnect, an EY collaboration with shipping giant Maersk, insurers XL Catlin, Willis Towers Watson, MS Amlin, initiated last September, is finalising proof of concept with a commercial announcement imminent.

Blockchain's immutable properties make it a natural partner for insurance, where settlements and reconciliation between multiple parties across the insurance and reinsurance chain can be painful and protracted. The ledger achieves distributed consensus through its continuously growing chain of records, or blocks, with each transaction linked to the previous block, and cryptographically secured and date stamped.

Introducing blockchain to share big data transparently in real time is the game-changer being tested by Insurchainconnect. In the past, marine insurance has basically been a bet, says Mr Crawford. "You don't know whether a ship has left or arrived, if it'll go through war zone, be hit by a hurricane or lose cargo." Maersk's logistical data about ships and on-board internet of things

Blockchain's immutable properties make it a natural partner for insurance

devices collating data such as temperature and swell change that.

The oldest, most inefficient sector is set to transform to a digital leader as blockchain enables automated, real-time claim resolution, smart contracts and even auctions for prices for ships entering war zones. "Any party with the privileges can view relevant data at any point of time through the distributed ledger. Ultimately, it enables insurers to have more certainty about the risk they are putting on the balance sheet," says Mr Crawford.

Insurchainconnect's account supports Gartner Group's forecast of a suite of benefits awaiting the insurance sector, detailed in *Blockchain Use-Cases for Insurance*. These scenarios encompass seven types of benefits, including improved know-your-customer processes, cost and risk reduction, better customer experience and data exchange, new product development, and combating fraud.

A clutch of proof of concepts, including the EY-Maersk initiative and B3i consortium, comprising Allianz, Aegon, Munich Re, Swiss Re and Zurich, aim to deliver all these benefits in end-to-end solutions. But while insurance incumbents wait for a blockchain that connects the entire value chain, a plethora of point solutions servicing the sharing economy and niche verticals are showcasing the technology's potential.

Everledger, for example, uses blockchain to track the provenance of diamonds by establishing ownership, while SafeShare's blockchain enables tenants in office shares and the like to buy insurance cover on demand. Another development is AXA's Fizzy, a blockchain-enabled smart contract product which automatically pays out when a flight is delayed by two hours or more.

Blockchain has introduced transparency, and therefore trust, for underwriters who are automating up to 80 per cent of their work, freeing them up to solve complex cases. "Blockchain creates an element of trust previously unseen in insurance," says Sandeep Kumar, managing director at Synechron and developer of the underwriter accelerator, who maintains transparency improves the entire insurance eco-system.

From fraud detection to health-care and reinsurance, the potential applications are vast. Blockchain is being anticipated as a solution to the industry's big challenges, and will enable insurers to come up with entirely different products and markets, say advocates.

"It will create a virtualised marketplace," says Michael Cook, blockchain insurance lead at consultancy PwC. "Lloyds of London is still a physical market, but creating a virtualised market means risk can be placed globally and need not require geographic proximity to an underwriter." Mr Cook compares it to banking's big bang in 1986 when open outcry on the Stock Exchange trading floors was replaced by electronic trading.

"Blockchain promises to disrupt insurance in the same way, replacing a physical trading floor with virtual, instantaneous trading

87%

of global insurers agree that technology is no longer advancing in a linear fashion, but rather at an exponential rate

86%

believe they must innovate at an increasingly rapid pace simply to retain a competitive edge

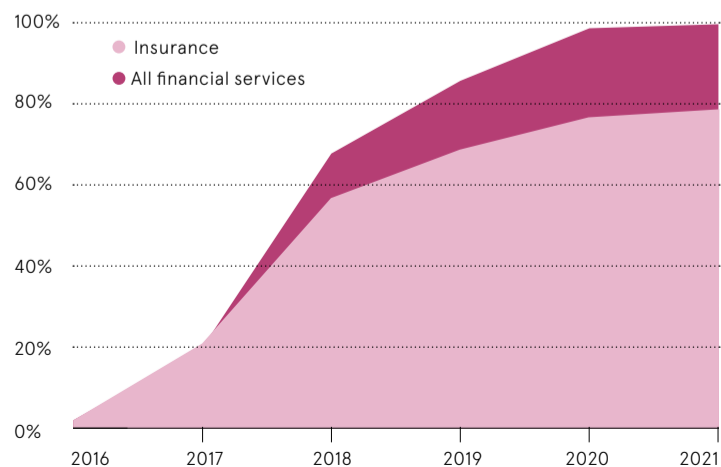
96%

think digital eco-systems are having an impact

Accenture 2017

Adoption timeline for blockchain

What timeframe do you most likely expect for your organisation to adopt blockchain as part of an in-production system or process?



PwC 2017

Year of mega-deals looks set to continue

With an abundance of capital slushing around in the insurance sector, major M&A deals are being done – and analysts forecast there are more to come



MARCO BERTORELLO/AFP/Getty Images

JOE McGRATH

This year has been transformational for the UK insurance industry, with mergers and acquisitions dominating headlines across life and non-life sectors.

Deals have been driven by cheap financing, the growing importance of scale, the need to futureproof against technological advances, regulatory pressures and a desire for larger businesses to have global reach.

Within the sub-sectors of the industry, the picture is far more nuanced, but market analysts are expecting this thirst for deals to persist way into 2019.

“Coming into this calendar year, we have gone off the scale in terms of global deals,” says David Lambert, global insurance transactions leader at professional services group EY. “We don’t think these are one-off deals. This has set off talk in boardrooms. The sector is transforming.”

Established players have been selling off large chunks of their portfolio to reduce risk and free up capital to allow investment in new opportunities

The life market has seen notable activity following the implementation of the Solvency II regulations, which pushed many businesses to rethink the areas in which they operate. Under Solvency II, annuities and products promising guaranteed returns became less palatable for

insurers as the new rules required that they held significant funds to match liability risks.

Many opted to refine their business models, offloading legacy books and reinvesting the proceeds in revised corporate structures and new areas.

In February, the newly merged Standard Life Aberdeen offloaded its entire life assurance business to Phoenix Group for £3.24 billion. The company received £2.3 billion in cash and a 19.9 per cent stake in Phoenix from the transaction. Standard Life Aberdeen said the decision to refocus the business as an asset manager meant it could operate with “significantly lower capital requirements”.

A month later, Prudential announced a similar move, “demerging” M&G Prudential from Prudential plc and offloading its UK annuity book. The company said M&G Prudential would become a

“capital-efficient UK and Europe savings and investment provider” leaving Prudential to focus on international insurance operations.

“Solvency II has caused some of the established players to refocus what they want to do,” says David Petrie, head of corporate finance at the Institute of Chartered Accountants in England and Wales. “Established players have been selling off large chunks of their portfolio to reduce a certain amount of risk and free up capital to allow investment in new opportunities.”

In the non-life arena, international insurers have been looking to secure a presence in the Lloyds of London market because global insurance pricing has been under pressure and volume growth has been sluggish.

The Lloyds market is a global centre for specialist risks in areas such as aviation, marine and terrorism, among others. Global insurers have

Axa’s acquisition of XL Group for \$15.3 billion in March has created the world’s largest commercial property and casualty insurer

recognised the importance of having a presence here.

“You’ve had very large insurers sitting on a lot of capital and struggling to grow themselves organically,” explains David Marock, group chief executive at Charles Taylor. “They are now saying ‘I need to do a large deal where I can drive out cost efficiencies, utilise my capital and enter related areas which I think have greater longevity of prospects.’”

Last October, Axis Capital confirmed its acquisition of Lloyds-quoted insurer Novae, then in January AIG announced it was acquiring Validus, owner of a Lloyds syndicate, in a \$5.56-billion cash transaction. This was followed in March by French insurance giant Axa announcing it was to snap up the XL Group for \$15.3 billion.

Nick Martin, insurance fund manager at Polar Capital, says: “AIG emphasised Validus’ reinsurance presence, data analytics capability and its third-party insurance linked securities (ILS) asset management business as key attractions. Similarly, AXA stressed XL’s agility and innovation, its reinsurance platform and majority-owned ILS manager.”

Mr Martin explains that two longer-term themes in the non-life sector of recent years have been the consolidation of the reinsurance sector, citing Platinum Underwriters, Montpellier Re, Endurance and PartnerRe as examples.

He concludes: “I expect to see a continuation of the recent deal activity with companies with strong analytical foundations and access to a broad range of capital providers being especially in demand. Some of the insurtech startups of recent years could also be acquisition targets, especially those that access new markets or move insurance away from a pure post-loss reimbursement product to one of more value-added risk prevention.” ♦

Insight

Spotting future mergers

Analysts predict further M&A activity in several sub-sectors of the insurance market this year. The European life sector is tipped to be busy, along with further consolidation in the UK broker market. Other areas of interest include the emergence of insurtech providers and personal lines insurers who are eyeing investments in the sector’s many law firms.

“There is a huge amount of capital in the market which has been raised and earmarked for M&A,” says Edward Johns, M&A insurance director at professional services firm PwC. “We have seen an increased focus on insurance from sovereign wealth and pension funds in the past few years, and we have also seen a number of private equity funds operating in the insurance market.”

Market observers looking to spot potential deals should look for a “trail of breadcrumbs”, according to analysts. Indicators of vulnerability may include firms with declining returns, changes to the senior executives and operators in sub-sectors where organic growth has dwindled or activist investor participation has ratcheted up.

In its recent *European Life Book* survey, PwC predicts that much of the European life sector activity will be driven by new entrants to the consolidation market. With M&A activity already rife among larger insurers, it says the German, Italian and Dutch markets are likely to be involved in the next flurry of activity, and European life groups are likely to look to their UK rivals for tips on corporate transformation, following Solvency II.

Notable M&A deals in the past 12 months

Acquirer	Value	Acquired
CVS	\$69bn	Aetna
AXA	\$15.3bn	XL Group
AIG	\$5.6bn	Validus
Phoenix Group	\$3.2bn	Standard Life Aberdeen
Axis Capital	\$0.5bn	Novae

'Is the principle of data privacy enough for insurance?'

In 2017 I wrote in this column how data was becoming the new gold. This year, the pressing issue for insurance is who owns this data gold, what rights they have and what this means for the future. Facebook's problems in this area have rightly already accelerated these issues into the public domain.

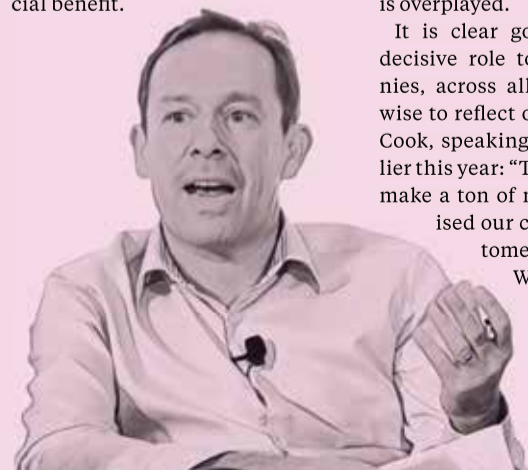
I am going to examine the case from the position that data ownership and privacy are fundamental human rights. This is the position that Apple chief executive Tim Cook has taken and is the thrust of the General Data Protection Regulation (GDPR) that goes live across the European Union in May.

So, is a higher standard of privacy the death of digital marketing and artificial intelligence-led insights for insurers? Of course not, however it does mean that insurers must explain and abide by their own policies.

Impenetrable terms and conditions need to be supplemented with educational statements and corporate promises on how data will be managed. If a board can make a statement on corporate social responsibility, it can also make clear its policy on data privacy.

It is only a matter of time before public ratings on company data policies are required and for those customers that choose to exercise their right to privacy, operational processes are needed to give effect to those wishes. But is the principle of data privacy enough for insurance?

Machine-learning is giving rise to a new source of economic value from the acceleration of insights learnt from bigger datasets. In most cases, few would complain about using these insights for commercial benefit.



Hugh Terry
Founder,
The Digital Insurer

But what about medical insights from health insurance data that allow earlier and lower-cost treatment – who owns those? And what about artificial intelligence-enabled crop insurance using images to predict the extent of drought – do insurance companies have an obligation to share these findings?

This is the classic economic question about public goods and we must ask ourselves how we are going to regulate these "data lighthouses".

In addition, we will need to use distributed ledger technology to provide platforms on which trusted and transparent transactions can be executed using encryption, to provide consumers with the level of privacy and data access they are starting to demand.

But it is because not all countries have enacted legislation that gives individuals power over their own data that I continue to consider this a data "war". China is notable in operating one of the most "open" approaches to data privacy. This has fuelled the rise of Chinese tech giants such as Tencent, and a similar attitude to customer data is now in effect in India and other major emerging economies including Indonesia.

What we are going to see over the next few years is not so much a clash of cultures, but of data standards, as developing economies explore their roles as rising economic powerhouses. Data wars, like artificial intelligence and cyber security, are in their infancy.

I am in favour of the EU's attempt to improve individual rights, as the United States is now more likely to follow. And let's hope that both China and India go down a similar path, and that my fear of a data war is overplayed.

It is clear governments have a decisive role to play, but companies, across all sectors, would be wise to reflect on the words of Tim Cook, speaking at a town hall earlier this year: "The truth is we could make a ton of money if we monetised our customer, if our customer was our product. We've elected not to do that."

New rules for customer growth

Against a sea-change in consumer attitudes and relentless digitalisation, insurers must rethink their capabilities and priorities if they are to survive, says leading business consultancy **Curzon & Company**

The old norms of insurance cause a lot of customer pain: ever-rising premiums, slow and undifferentiated service, complex procedures and poor communications. But big changes are afoot. Customers want better for less as rapid technology advancement continuously raises service expectations – and disruptive new entrants are riding the wave. Inward-looking insurers ignore this at their peril. "We believe the industry has passed the point where it's possible to grow profitably by sticking to the old rules," says Douglas Badham, Curzon & Company partner. Successful net customer growth now depends on embracing a new set of rules.

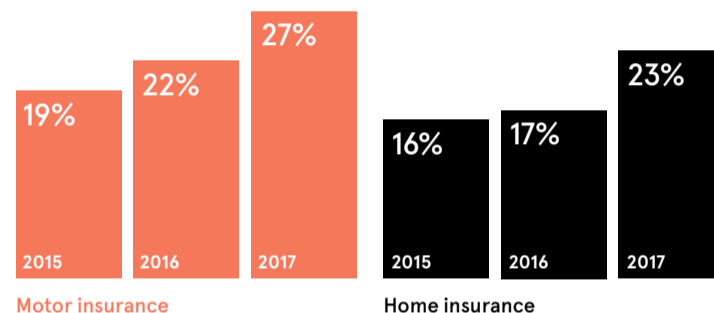
All customer contact is precious and should be as convenient as possible. Policyholders expect to be treated as valued customers, able to interact 24/7 across joined-up access points as they do in other sectors. Seamless access boosts retention and reduces overall cost to serve, and requires digital enablers to be at the heart of the insurer's operating model. "Insurers can no longer hide behind data security and Financial Conduct Authority (FCA) regulation as reasons not to allow multiple channel completion of processes," says Mr Badham.

The focus must be on retention from day one. Keeping customers is harder than ever: switching, reducing or dropping cover has been rising steadily due to household cost-cutting and self-researched offer-hopping, leaving some underinsured. Use of comparison sites also means consumers leave bigger data footprints, which ratchets up competitor targeting of renewal dates. To defend against this, care and consistency must be core to the entire

We believe the industry has passed the point where it's possible to grow profitably by sticking to the old rules

Keeping customers is harder than ever

Percentage of UK adults switching provider



customer journey. The jolt when a frictionless sales process gives way to a clunky claims procedure won't be tolerated. As Mr Badham explains: "Optimising claims experiences and making best use of technology to help customers minimise the cost of a claim, or not have to claim, is how retention battles will be won." Take the LeakBot recently introduced to homecare cover, which alerts customers to first signs of a leak before worse damage ensues. Alongside claims experience, affordability is a prime reason for customer exit and another cornerstone of retention effectiveness will be the increasingly precise, personalised renewal pricing artificial intelligence can deliver.

Have more meaningful customer communication more of the time.

Too often insurers' attempts to communicate have an adverse rather than positive impact. Providers need to treat every customer touchpoint as an opportunity to demonstrate the value of their cover, particularly since April 2017's FCA renewals regulation, which requires every renewal notice to encourage customers to shop around. The best will use analytics to provide genuinely beneficial, timely insight that allows customers to understand and minimise their risk, for example: "You are regularly braking sharply and exceeding speed limits." According to Mr Badham: "What's happening in health insurance, where providers are transforming from benign payers to lifelong wellbeing partners, is likely to be followed in motor, home and other lines."

Rebuild or build a brand based on trust and followership. Insurance has become something of a dirty word in recent years, with many incumbents losing customer trust.

Restoring it is partly about making the move from a back-office-centric operating model to one that delivers digitally driven customer management and contact excellence. On top of this, compelling brand proof points are crucial to fend off powerful non-insurance brands that have taken a foothold, such as John Lewis, and to combat price erosion from online distribution challengers. It won't be a case of outspending them. The insurers who cut through the noise of comparison tables and "expert" web articles will be those earning and sustaining customer advocacy through trusted recommender communities and app-based insurance aggregators such as Boughtbymany and Brolly.

There's no hiding place from the disruption. Shedding the old rules and becoming a genuinely customer-driven insurer – in the customer's eyes – is what it will take to thrive in the new environment.



Douglas Badham
Partner, Curzon

R

raconteur reports

Are you reaching business decision-makers?

C-suite executives spend only 2 per cent of their time with vendors, according to a recent *Harvard Business Review* study. Raconteur special reports reach more than 141,000 C-suite executives, who spend on average 27 minutes reading a report.

We publish more than 70 titles a year on the key topics that matter. To find out more about sponsoring a report, please visit

raconteur.net/special-reports

DATA SCIENTIST

Rise of the data scientist in insurance

As insurers become increasingly reliant on data, specialists are in great demand to get the most out of a company's databank

SOORAJ SHAH

Over the last decade or so, every significant business has been paying close attention to what seems to be a game-changing asset for their industry – data.

For insurers, however, data has always been at the heart of what they do. Traditional actuarial underwriting, for example, has involved the analysis of data to get a better idea of risk-based pricing for many years.

What is new is that data has grown in volume, quality and accessibility, and there is now the ability to combine and analyse multiple data sources, which is giving insurers plenty to think about.

Richard Warner, chief operating officer and former chief information officer at LV=, says the combination of sources could include the merging of a fitness app, diabetes app, calorie-tracking app and a mindfulness app, for example, with the resulting data being used to create better customer insight for use by the business and consumer.

With more sophisticated technology comes the need for a more advanced skillset to exploit the tech to its full capability

With more sophisticated technology comes the need for a more advanced skillset to exploit the tech to its full capability. This is why there is growing clamour for data scientists within the insurance industry.

"We've always had data scientists; they've been called actuaries and they've had tried-and-tested models for many years. But with the rise of big data, artificial intelligence and machine-learning, people are

understanding that we can combine multiple data sources of our own, as well as external data, and better target specific cases or niches, and get better insight, whether it is for pricing or countering fraud," says Mr Warner.

He explains that weeding out any cases of fraud at any point in the timeline can help to drive prices down in the market. In 2016, insurers detected 125,000 dishonest insurance claims valued at £1.3 billion, but the real number is likely to be far higher and is resulting in higher premiums for customers.

Another way that data science can help insurers is to provide better advice to customers by combining data sources. Data scientists have statistical, mathematical, programming and data-mining knowledge that enables them to get the most out of a company's data.

According to Camille Haddjeri, business manager at recruitment company Montreal Associates, the insurance sector needs data scientists for a number of reasons, including applying machine-learning and predicting customer patterns.

"It's a complicated industry that becomes more data led as time goes on. Insurance is a service which needs to be customised and personalised based on different factors, and deep-learning and machine-learning are helping with this," she says. "That's why data scientists can command a far higher salary within this sector because they know their roles are crucial and have a direct impact on profitability for their employers."

According to her estimates, a data scientist in insurance could expect a salary of up to £120,000, depending on seniority, responsibilities and technical knowledge.

But it is the combined role of a data scientist and insurance underwriter that would earn the highest pay package. In fact, with such a high demand for these skills, Ms Haddjeri believes that specialists possessing the required skills can effectively name their price.

"The more effective the algorithms these data scientists develop and the more their skills are honed, the higher their earning potential," adds Steve Preston, managing director at Heat Recruitment.

The highly sought-after hybrid data scientist-underwriter is so rare they are referred to in recruitment as "purple squirrels".

"This means they're out there, but they're very hard to find," says Ms Haddjeri. "As data science and big data are such new disciplines, there are people in the pipeline learning these skills for the future. However, today you're far more likely to find a data scientist and train them in the requirements of the insurance industry."

Steve Wilcockson, financial services industry lead at MathWorks, a mathematical modelling software company, believes the best alternative to finding a data scientist is to put the data science tools into the hands of insurance experts.

"Mathematically inclined actuaries and their IT project partners already possess core analysis skills – knowledge of matrix algebra, regression and classification methods, probabilistic modelling and parameter estimation on the numerical side, and data format interfaces, reporting and price delivery on the IT side," he says.

This is the approach that LV= is taking, with Mr Warner claiming the insurer requires a cultural change among actuaries. "What we've been trying to do is introduce them slowly to tools and technologies – almost leaving the tool beside them and saying 'you might want to play with that' – and take them on a little bit of a cultural and change journey," he says.



The highly sought-after hybrid data scientist-underwriter is so rare they are referred to in recruitment as ‘purple squirrels’

“They’ve come back and realised there’s some interesting things they can do with these tools and now they’re very much converts, particularly as it has been shown to improve our pricing and fraud detection capabilities, and therefore benefit our customers.”

Some insurers may look at off-the-shelf products or algorithms they can deploy that would do away with the need for data scientists. But Xavier Fernandes, director at financial analytics company Metapraxix, cautions that algorithms need to be policed to ensure there are no in-built biases.

“There have been recent reports of unpoliced algorithms having in-built biases against certain minority groups when pricing car and home insurance policies, which

can easily bring reputational risk to an insurer,” he says. “Firms need to be able to trust the outputs of their algorithms and have the data literacy to use them effectively, if this technology is to succeed.”

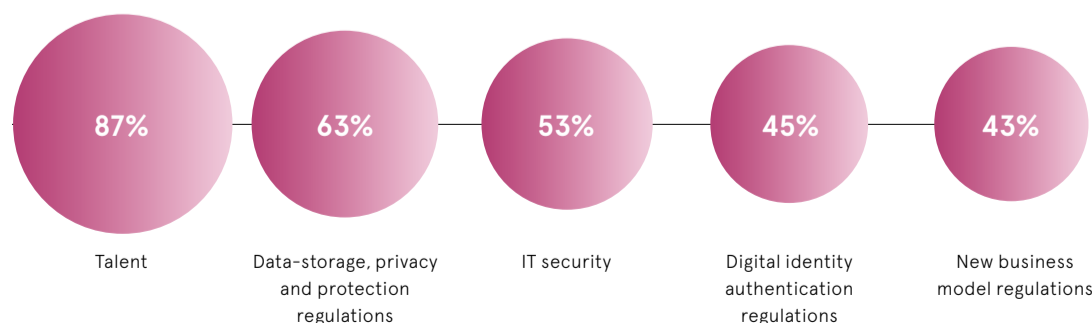
Therefore, the answer seems to be an in-house data scientist, or ideally a data scientist-underwriter, to head up and direct a team.

“We’ll see a hybrid specialist leading and retraining underwriters, and acting as a link between the data science department and senior stakeholders,” says Ms Haddjeri.

How quickly companies can adapt and ensure data science is a part of their organisation will determine how competitive they’re likely to be in the years to come. The hunt for purple squirrels is on. ♦

Talent tops challenges facing insurers

Global insurance executives were asked about the challenges they face in their ability to innovate



Discover the Future of Financial Modelling & Calculations Today

Imagine...

A single calculation engine that supports each stage of the insurance lifecycle, from front-office illustrations & quotations, through core actuarial & risk modelling activities, to back-office policy administration & servicing calculations

Imagine...

The business agility and customer experience in being able to access calculations on-demand from any device, inside and outside the walls of the insurance enterprise

Now, for the first time, this is all possible with a single platform

hello@softwarealliance.net

+44 (0)20 7520 9477

www.softwarealliance.net

Software Alliance Limited, Adam House, 7-10 Adam Street, London, WC2N 6AA



DESIGNING SIMPLIFIED SOLUTIONS THAT WORK FOR YOU AND YOUR CUSTOMER

As a **process transformation company**, Sutherland rethinks and rebuilds customer-centric processes for the digital age by combining design-thinking insights and data-driven analytics. We complete **43 million transactions** a month on a digital backbone that spans **20 countries** around the world for more than **120 clients**.



43 million
transactions
a month



20
countries



120
clients

Contact: **Romy Nash**
EMEA Insurance Sector Director
romy.nash@sutherlandglobal.com

To learn more visit:
www.sutherlandglobal.com