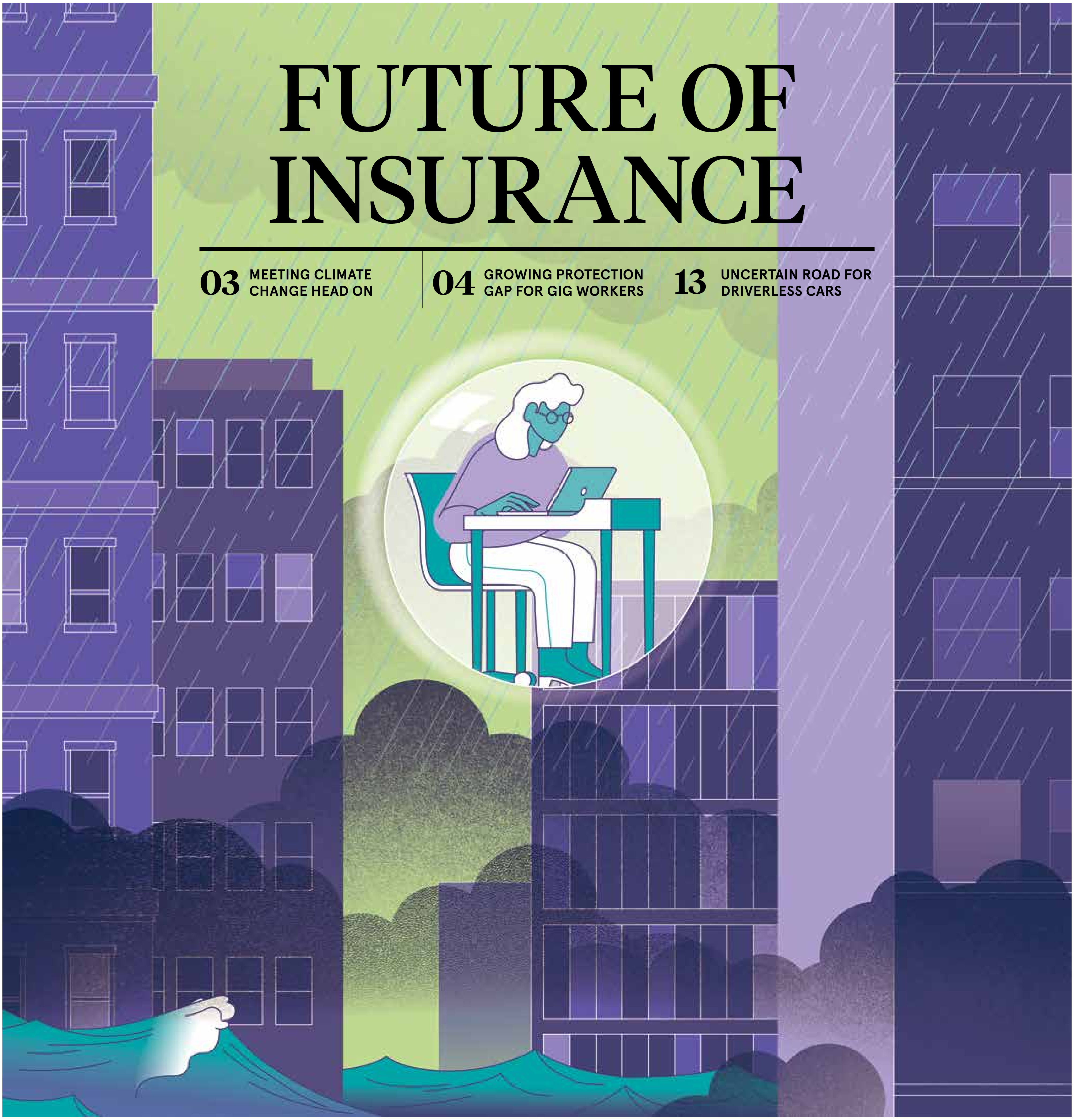
FUTURE OF INSURANCE



FUTURE OF INSURANCE

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ENVIRONMENT

Insurers have to meet climate change head on

Insurance against climate change is fast becoming non-negotiable for both individuals and businesses

Olivia Gagan

Climate-change risk to the insurance sector has never been greater. Weather anomalies are now commonplace: the past year alone saw unprecedented wildfires in California and Australia, exceptional flooding in Venice and the costliest typhoon on record in Japan.

2017-18 was the most expensive two-year period on record for global re-insurance, which had to stump up $219 billion to settle claims for weather-related damages, according to a World Economic Forum report.

That's just for those who can get insurance. Antony Woodhouse, partner at law firm DWF, says: "One of the biggest issues is whether insurance companies can carry on offering insurance that responds to climate change-related risks. The more frequent the natural disasters, the more difficult it can be to find insurers with an appetite to provide cover.

"There's also the issue of insurers adjusting their prices to reflect the increase in risk of freak events. Premiums would necessarily rise and become unaffordable to some people, which could then become a social and political issue."

As a result, governments and regulators are increasingly asking insurers if they can handle the liabilities climate change represents. Since last year, the Bank of England's Prudential Regulation Authority has required insurers to stress test their businesses against the risk that the world fails to meet temperature and carbon reduction targets. Independent watchdog, the Asset Owners Disclosure Project, has warned that the industry is failing to meet the objectives of the 2016 Paris Agreement.

So how is the industry adapting? In the UK, flooding is perhaps the biggest climate risk. UK trade organisation Business in the Community estimates 40 per cent of businesses close for good after a catastrophic loss from flooding, with small businesses losing 50 working days on average after a water breach. February 2020 saw Storm Ciara and Storm Dennis overpower homes and high streets and batter infrastructure, just two months after then-environment secretary Theresa Villiers promised an inquiry into why many flood-prone communities are denied insurance.

David Gray/Getty Images

Dr Bev Adams, head of catastrophe resilience at insurance broker and risk manager Marsh, says that in the UK and beyond, the industry's approach to climate change and flood is evolving. As risk heightens, the payouts grow and the gap between climate risk and protection gets bigger, so the sector is starting to focus on recoverability, as well as prevention.

Cue the rise of a different type of cover against climate change: parametric insurance. Policyholders aren't compensated for a specific loss, like a collapsed factory wall or a waterlogged sofa, but for the triggering event, like a flood or a drought. A pre-agreed sum of cash is paid out when floodwater reaches a certain level, for example, or temperatures or wind speeds hit a predetermined high.

Adams says we should increasingly expect preventative measures to be built into homes and businesses. "Traditional insurance protects you financially against the risk of water entering your facility. Greater resilience opens up more options, like parametric insurance, which uses sensors to detect water exceeding a particular depth in buildings and can result in an instant payout. Anything below that [is covered by the fact that] you've built flood resilience into your building," she says.

Parametric insurance makes sense if businesses have prepared themselves by taking action to install resistance and recoverability measures, Adams adds. Each property is different, but a business that could more easily qualify for parametric insurance would be one which can tell their insurer: "I've moved my electrical sockets up. I've put in water-resilient plasterboard. I've tanked out my floor. I put some pumps in. I've moved my product on to crates. I've moved my key machinery up."

Insurers like parametrics because they know in advance what the settlement will be and the exact conditions that will lead to a payout. It's a model that could work well for people and businesses in high-risk areas which fail to qualify for traditional insurance.

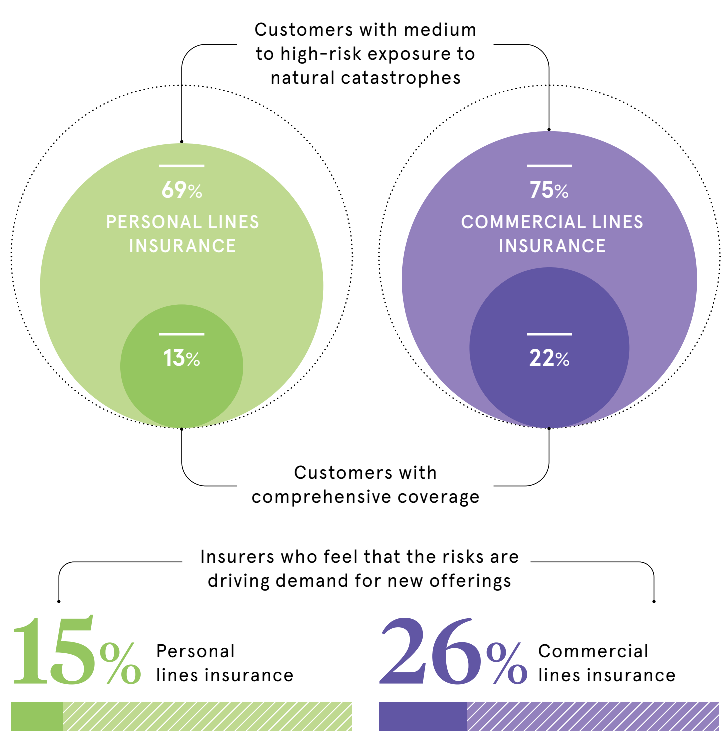
Such cover relies on data and measuring tools. UK parametric insurer FloodFlash calculates its premiums according to the flood risk it believes an individual or business faces. It calculates this using data such as historic rainfall records and sensors which measure the quality of terrain. Tamper-proof sensors developed by ex-Dyson staffers are installed at the insured location, triggering a payout when water reaches a pre-agreed depth.

Dr Bronwyn Claire, senior programme manager of ClimateWise, a University of Cambridge-backed network of insurers seeking to reduce the impact of climate change on the sector, is focused on industry best practice to provide as much cover for natural disasters as possible.

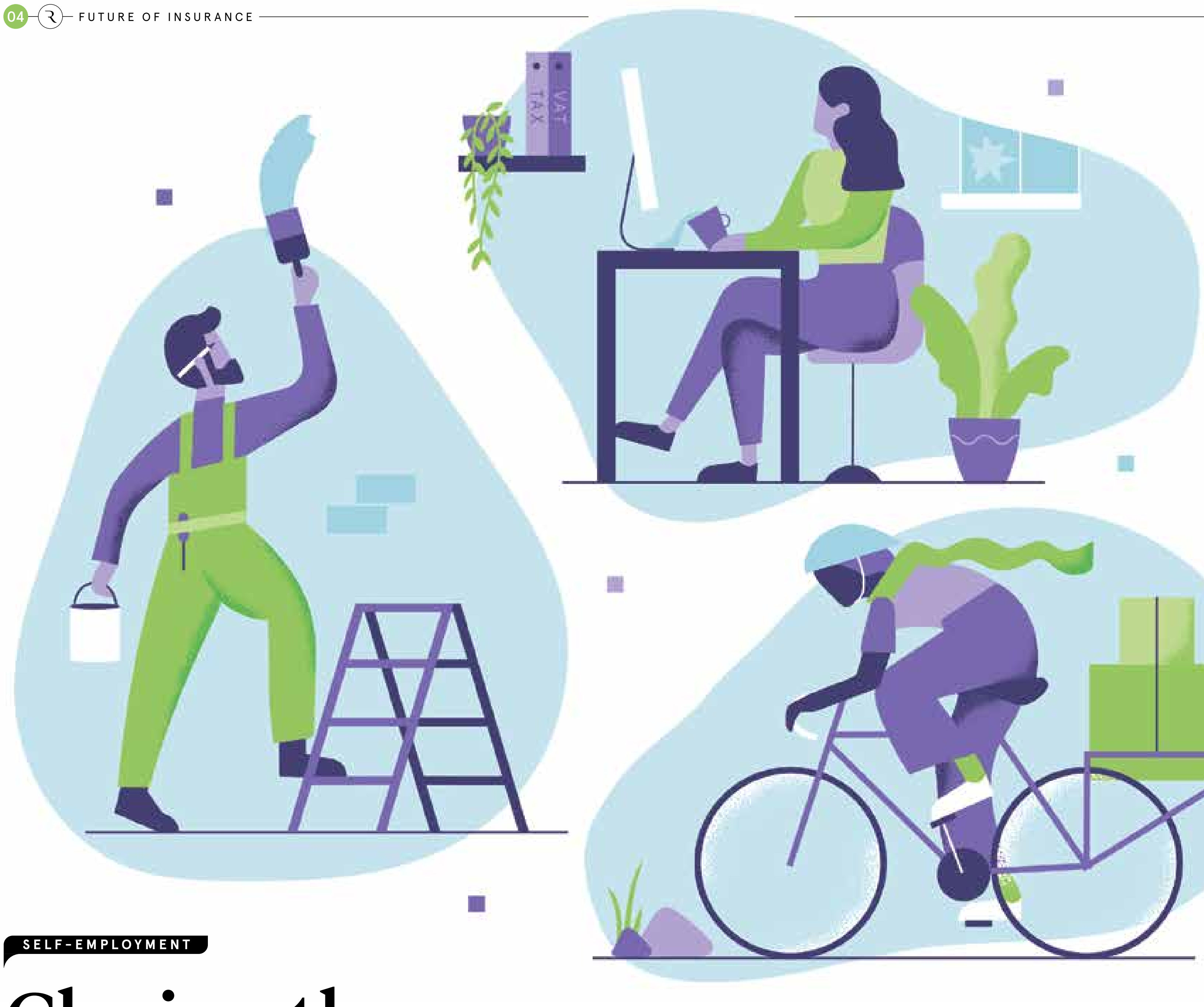
"How do we make sure that as much is covered by insurance as possible, so everyone can be more resilient and bounce back?" she asks.

As high-impact weather events are increasingly seen more as an expectation than a risk, insurance against climate change now seems to be about enabling recovery for as many people as possible. There is a sense of inevitability about the physical damage society must reckon to cope with as a result of climate change. Claire concludes: "The goal now is to recover quicker."

NATURAL CATASTROPHES AND INSURANCE



Capgemini 2019



SELF-EMPLOYMENT

Closing the protection gap for gig workers

The exponential rise of the freelance workforce is a much-discussed trend across the globe, but is enough being done to protect those who don't have cover?

Oliver Pickup

When Anthony Beilin suffered a prolapsed disc two years ago and was automatically afforded three months' paid sick leave by his corporate employer, starting a business from scratch was the last thing on his mind. Yet as self-employed well-wishers expressed their envy at his financial situation, and it became clear inexpensive insurance cover for freelancers didn't exist, Beilin identified a protection gap that he felt duty-bound to narrow.

"It was only after some freelance friends visited me that I realised the extent of my good fortune," says the co-founder and chief executive of Collective Benefits. "The penny dropped when one said, 'You are so lucky. If I had time off work because of sickness for a quarter of a year, I wouldn't be able to afford the mortgage or cover child costs'."

Alarmed but curious to explore this worrying comment, Beilin soon learnt the scale of vulnerability facing a growing number of self-employed workers, who typically don't have the protection and benefits he had taken for granted. "What became apparent was that all these people had turned to self-employment for the same reasons of flexibility, greater earning potential and choice of work," he says. "But they had left themselves in a risky position in terms of financial wellness.

"Most of them had children, but no income protection (IP) and they were not receiving the legal or financial advice they needed. I couldn't comprehend why, in such a big shift in the make-up of the workforce and the rise of the gig economy, there were woefully inadequate services available for self-employed workers."

Beilin resolved to revolutionise insurance cover for freelancers. In April 2019 he launched Collective Benefits, which provides freelancers with benefits including sick pay, maternity leave and mental health support. Validation that there is a market need arrived quickly as in late-November the young organisation was selected as one of 13 startups, out of more than 600 applicants, to join Facebook's London-based accelerator LDN_LAB.

He points to research, published in January by responsible technology think tank Doteveryone, that suggests 93 per cent of freelancers lack any IP, health or critical illness cover. "That number is so shockingly high because freelance insurance products are inaccessible, inappropriate and unaffordable, something we are actively trying to solve," says Beilin.

"Currently, for example, a self-employed individual might pay three times more for health insurance compared to the tax-efficient corporate rate. No wonder uptake in insurance cover for freelancers has been so poor and people are willing to risk living without that financial safety net."

Providing reasonably priced insurance cover for freelancers is crucial for businesses in particular and society in general, given how rapidly the make-up of the workforce has transformed in the last decade. Indeed, the Association of Independent Professionals and the Self-Employed (IPSE) estimates the number of freelancers in the UK has surged by 35 per cent since 2009. Consider that the solo self-employed market contributed a whopping £275 billion to the UK economy in 2018.

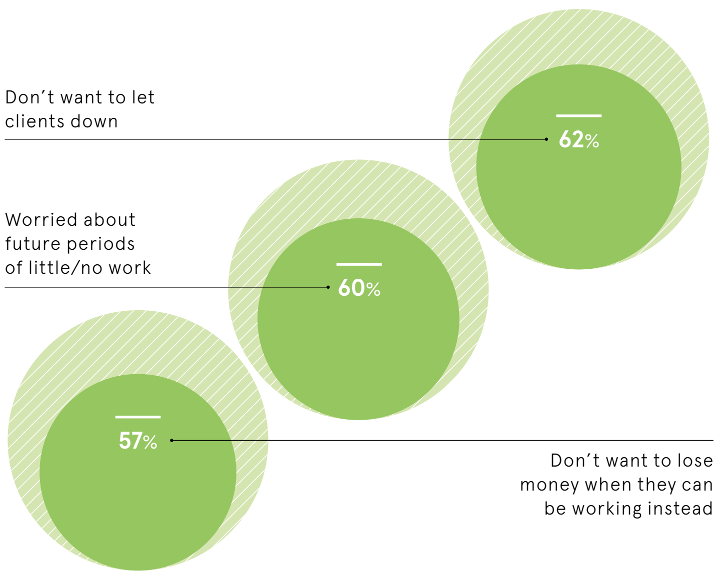
93%

of freelancers lack any IP, health or critical illness cover

Doteveryone 2020

TOP REASONS WHY FREELANCERS DON'T TAKE TIME OFF

UK survey of over 900 freelancers



IPSE 2019

IPSE calculates there is a record high of around five million people, just over 15 per cent of the UK workforce, who are self-employed, of whom freelancers account for almost half. Only 4 per cent of those five million workers have IP in place, though, according to a recent report from insurer LV=. Moreover, 33 per cent of self-employed people could not survive for more than three months if they lost their income.

How have we got here? "Simply put, insurance products have not evolved in 300 years," argues Beilin. "It seems obvious that they should be adapted when new markets emerge, but the most prominent players are laggards."

Ben Rose, chief underwriting officer and founder of Digital Risks, an insurance provider focused on the requirements of digital businesses, agrees. "The shift to self-employment has developed at an astonishing rate," he says. "The transition has happened so quickly that an insurance lag has developed, whereby traditional market players' rigid policies are unable to match this fast-moving industry."

However, the meshing of two verticals – the shift towards a freelance workforce, plus the ability to distribute and engage people on digital platforms – has forged an exciting chance for those progressive and agile enough to take advantage. The sluggishness of market incumbents has accelerated the emergence of nimble insurtechs, such as Collective Benefits, Digital Risks and many others, looking to offer freelance insurance that is specialised, personalised, flexible and wide-ranging, at a reduced cost.

"There are great opportunities for the insurance sector to refresh its approaches and offerings to serve this growing self-employed market," says Freddy Macnamara, founder and chief executive of Cuvva, which has been offering flexible car and travel insurance through its mobile application since 2017. "Innovative startups are stepping up to the challenge, building flexible, short-term products, filling a gap between commercial and personal insurance.

"The flexibility of short-term insurance that can be switched on as needed is filling a much-needed insurance gap, providing gig-economy workers and freelancers with a better alternative."

Insurance cover for freelancers on demand may be a click away for those in the know, but are enough self-employed workers sufficiently educated about their insurance options? Steve Bryan, director of distribution and marketing at The Exeter, an insurance provider that celebrates its centenary in seven years, understands why more people are opting for a freelance career, but warns: "All that glitters is not gold." He is sure more can, and must, be done to help freelancers.

"Undoubtedly, there is still a significant 'protection gap' and advisers play a critical role in narrowing that gap," he says. "They are ideally placed to kickstart those difficult conversations and educate their freelancing clients on why IP is a necessity and not just a 'nice to have'."

> **Insurance products should be adapted when new markets emerge, but the most prominent players are laggards**

Rallying for a more joined-up approach, and collaboration between the insurtechs, more traditional providers and the government, Bryan adds: "Ultimately, advice is what is going to make the difference and will be the driving force behind how the freelance insurance marketplace will look in five years."

Given the record number of self-employed workers looks certain to continue rising in the coming decade, it makes sense for everyone in society that education and advice is provided as soon as possible.

Commercial feature

Understanding insurance megatrends

Emerging megatrends in a fast-changing world, increasingly impacted by climate change, pose testing challenges for the insurance industry

Shocking bush fires in Australia recently dominated headlines around the world and will dominate insurers' inboxes for some time to come as families and businesses count the cost of the devastation. But were this season's fires a one-off extreme event or a new norm?

"It's impossible to say at the moment" says Simon Laird, global head of insurance at law firm RPC. "We are seeing a series of new and evolving risks that are hard to quantify in traditional ways."

Insurance, as a business, demands a wealth of data to be profitable. You can, of course, insure anything from an alien abduction to a skydiving nonagenarian, but such one-off events are a specialist side of the industry. Setting the right premium generally relies on an in-depth understanding of the customer, the product and the probability of insured events occurring.

An underwriter assessing risk will be looking to the past for that understanding; without a reliable data set behind it, risk assessment becomes considerably more difficult.

But underwriters are now having to cope with a rapidly changing world that is placing unusually high demands on the profession and impacting the portfolio of risks insurers cover.

> **It is time to take stock of the portfolio of risks your business covers and ensure you understand the impact of these megatrends**

"While insurers have always faced change, it is the number of megatrends that is unusual," says Laird. He cites as examples the increasing use of technology, political unrest, cyber and climate change. "The challenge for insurers is that it is hard to predict the new and evolving risks arising out of these global megatrends," he adds.

"Insurers talk about the importance of making evidence-based decisions. These megatrends are changing the nature, frequency or severity of insured events. The data insurers have to hand does not necessarily help them to understand that changing risk. Take the bush fires; there have been bush fires for years, but how will the frequency and severity be amplified by climate change?"

Insurers are experts at assessing probabilities, but the present age of disruption can make it hard to understand claim trends. In some cases, the law is playing catch up. It has taken two years already for the UK courts to weigh the evidence on whether supermarket chain Morrisons is vicariously liable for the actions of a rogue employee who published sensitive staff details online and the final decision is not expected until later this year.

Uncertainty such as this is often resolved by legal disputes or changing regulation. In the meantime, how do insurers assess and price the risks of that kind of data breach?

Or take the issue of "silent cyber", whereby an insurer may have to pay out on cyber losses under a policy not designed for that purpose. The cyber risk arising out of the technology megatrend has arguably caught out insurers and the markets are now taking steps to clarify whether cyber risk is covered under their existing suite of policies.

"It can be difficult to assess the adequacy of existing products," says Laird. "There are a whole series of uncertainties which means insurers need to constantly be reviewing their products, pricing and adequacy of reserves. Adequacy of reserves is incredibly important for insurers and something the regulator takes a keen interest in."

The industry needs urgently to examine how these megatrends might affect its portfolio of risks and keep an eye out for new ones on the horizon. Will, for example, the law around mental health develop in such a way as to introduce a new megatrend?

Not surprisingly, those who best understand the uncertainties as they evolve will be best placed to deliver sustainable underwriting profits. That may well mean a forensic re-examination of contracts; "standard" clauses may need to be revised or new products developed to meet new challenges. Insurers will need to innovate to stay ahead of the game in a digitally transformed world.

Despite the overflowing data pools that are being produced by new technology, insurers are wrestling with a series of unknown unknowns. It is time to take stock of the portfolio of risks your business covers and ensure you understand the impact of these megatrends.

TALENT

Five key roles shaping the future of insurance

The many changes affecting the insurance sector make it an exciting destination for graduates from a variety of backgrounds, so what are providers doing about it?

Cath Everett

Traditionally, graduates have not considered the insurance industry as a go-to career destination. Generally viewed as staid and lacking in innovation, it has neither been seen as sexy nor positioned as offering lucrative job opportunities.

But things are changing. Since the 2008 recession, customers have become less loyal, more price sensitive and more likely to shop around using price comparison websites. As a result, many insurers, particularly on the general and life insurance side, have had to become more customer focused to compete in ways that were unnecessary before.

To do so has meant turning to technology and the clever use of data, not least to keep the potential threat posed by insurtechs at bay.

Adam Gates, head of recruitment consultancy Odgers Interim's insurance practice, believes such dynamics will result in the "insurers of the future looking and feeling much more like modern retail banks". This means their operations will become increasingly digitalised and transparent, with the focus on mechanisms such as loyalty schemes to attract and retain customers.

But which are the roles shaping the future of the insurance industry?

Chief marketing officer

Historically, insurers did not engage directly with customers. But general expectations of more personalised products and easy-to-use services, on top of the disruption to traditional business models generated by insurtechs, are inevitably generating change.

As part of this shift, the role of the chief marketing officer (CMO) is becoming increasingly vital not only to build a strong company brand, but also to be the "voice of the customer", says Claire Sadler, marketing director at insurer Direct Line for Business. Being this voice involves "making sure customers are understood, and their needs are known and represented in business decisions, from product development to the service experience", she explains.

A key challenge for many established CMOs, however, is being able to adapt to the fast-changing customer landscape and respond quickly enough to new challenges and opportunities, which includes employing cutting-edge marketing technology effectively. As a result, says Gates, recruiting people from "more customer-centric sectors, such as retail banking and telecoms, is becoming increasingly popular to bring in fresh thinking".

Over the next five years, he also expects to see a rise in the number of currently rare chief customer officer roles as customers progressively move to the heart of insurers' businesses.

Chief data officer

The shift to a more customer-centric business model, plus a desire not to be left behind by digital startups, has resulted in a growing focus on how to employ data more strategically with the help of new technology, such as machine-learning. The aim is to improve everything from product innovation and customer acquisition and retention to risk and investment decision-making.

This momentum led to the somewhat belated arrival of the chief data officer (CDO) role into the insurance sector about 18 months ago, although in some instances, it has been rolled into the more traditional chief technology officer (CTO) position due to the close link between the two disciplines.

While in the past, such roles were viewed simply as offering support services to the business, they are now considered of growing strategic importance, not least to enable innovation, explains Steve Woodford, CTO of BGL Group, a digital distributor of insurance and domestic financial services.

"The CDO/CTO role is now pivotal to the success of any organisation in the insurance sector and I can't think of a single aspect of any service offered to customers that isn't materially impacted by it," he says. "Using data to best effect to serve customers, ensure they get the best prices and a personalised service is increasingly how we compete."

Chief talent/diversity and inclusion officer

A key means of generating change in a traditional industry is for organisations to broaden their current talent pool and bring in new people from a diverse range of backgrounds.

Miriam Earley, global head of diversity and inclusion (D&I) at professional services group Marsh & McLennan, explains: "To deal with an era of disruption and fast-paced change, there's a need for different ways of thinking as traditional ways of approaching work, clients and organisational strategy may simply not be right any more."

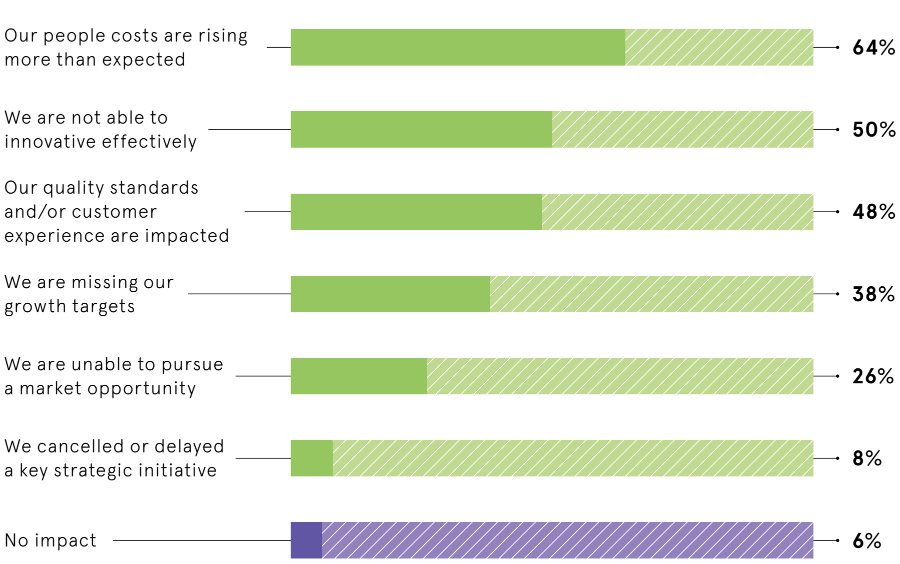
But while the head of D&I role is already quite widespread, among larger organisations at least, it is an area that is still evolving. While the diversity element is about broadening the net to increase members of under-represented groups, the inclusion aspect involves embedding change into organisational processes ranging from recruitment to talent management.

However, for most insurers there is still some way to go, not least because they often neither fully understand what D&I professionals can bring to the table nor what they actually want from them.

Although traditional industries, such as insurance, are at earlier stages of the journey, says Earley, she expects the breadth and influence of the role as a catalyst for change to grow over the coming years.

HOW SKILLS SHORTAGES ARE AFFECTING GROWTH

Global survey of insurance professionals



PwC 2019

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4

Chief sustainability officer

During the next few years, existing corporate social responsibility (CSR) leadership roles are expected to morph into those of chief sustainability officer (CSO). The difference between the two is one of depth, with sustainability being less about individual projects and more about internal change at a systemic level, says Kelly Coombes, founder of consultancy Climate Risk Solutions.

"CSR was the starting point, but having a CSR officer was mainly a nice-to-have that looked good in an annual report," she says. "Organisations are now realising, however, that there are commercial benefits to be gained from using sustainability metrics and the social, environmental and financial triple bottom line."

But CSO positions are still few and far between. For example, industry giant AIG only appointed its first CSO last July to develop and implement an enterprise-wide sustainability strategy, covering everything from insurance and investment activities to its approach as an employer.

"There's a lot of movement going on in the wider commercial economy and customers, employees and investors are all looking for companies to be more socially responsible," says Coombes. "So the insurance sector will have to change, but many of those conversations just aren't taking place yet."

Tamarcus Brown/Unsplash

5

Chief investment officer

Changing customer expectations and the growing commercial pressures posed by new market entrants in the shape of insurtechs are making the insurance sector extremely competitive.

Moreover, the challenges faced by companies, particularly in pensions, and general and life insurance cover, due to the impact of an ageing population on policies, are leading to market consolidation. For many businesses, the aim is to grow by acquisition rather than rely on organic growth.

"Given how competitive the insurance market is, the need for astute asset and capital allocation strategies that ensure risk-mitigated investments is growing significantly," says Gates. "This includes the need to ensure a watertight strategy, but also a governance and monitoring structure to track the performance of investments and the agility to reallocate where necessary."

Other influences include the rise of activist investors, who are applying increasing levels of pressure on companies' investment strategies. As a result, to cope more effectively with such dynamics, a number of chief investment officer roles have sprung up over the last few years, although they are yet to become widespread.

Into the future though, Gates expects to see this "increasingly scrutinised and regulated role" work very closely with the CSO to "co-ordinate sustainable investment portfolios".

Commercial feature

SaaS in the city

From helping to alleviate the upgrade burden, to engaging in a modern commercial conversation with customers, Duck Creek Technologies managing director for Europe **Bart Patrick** spells out how leveraging software as a service supports insurers' strategies, rather than dictating them

Here we are, at the dawn of a new decade, but for far too many re/insurers the technology deployed as they enter 2020 is frighteningly similar, if not the same, to the tech they were using when they were partying like it was 1999.

Anyone who has worked at a large, well-established insurer knows this is not an exaggeration. Many insurance enterprises are running layers of outdated technology and too many highly skilled back-office teams are currently mired in "just keeping the lights on", a time-intensive and expensive process that adds to already significant technical debt accumulations.

This scenario results in more frequent system downtime and a lack of interoperability that makes other inefficiencies almost unavoidable, constituting a massive expense and drain on resources for the sector when it comes to upgrades.

£1m

cost of performing an enterprise-wide upgrade of one version of a system to the latest version, according to 20 per cent of all respondents

90%+

of respondents agreed out-of-date IT systems create inefficiencies and costs that ultimately the insured have to pay for

75%

reported that their IT systems had fallen behind with upgrades, despite having service level agreements in place with vendors

75%+

were not confident in their current IT systems' ability to support growth strategies

www.duckcreek.com/upgrades-report
Are Upgrades Holding Insurers Back?

Layers of legacy

Indeed, the majority of respondents to a recent independent survey of more than 100 senior insurance executives characterised their IT infrastructure as consisting of multiple legacy systems operating across a host of different IT vendors and often falling behind with upgrades.

In particular, it was clear that systems upgrades and maintenance can cause a huge drag on the efficiency of a business and regularly impact the working life of staff, in some instances causing major disruption across an enterprise.

And with the costs of upgrading enterprise-wide from one system to another all too frequently exceeding €500,000 or even €1 million, this is not a small change for any business.

In fact, 91 per cent of senior insurance respondents to the survey admitted that out-of-date IT systems created inefficiencies and costs that ultimately the insured – that's you and me – have to pay for.

Step-change for the industry

It's clear the eradication of the upgrade burden would constitute one of the biggest steps forward in insurance operations. Upgrades are holding insurers back from innovating, but without wholesale systems change, companies risk getting stuck in a cycle of bolting on new layers of technology, essentially akin to rearranging the cornflakes in a box of cereal.

In contrast, software as a service (SaaS) enables faster upgrades that provide insurers with the latest features and functionality and provides greater speed and agility to meet evolving customer needs.

But the SaaS model goes way beyond simply hosting software in the cloud. By providing a set of services and support, it enables a fundamentally new approach to competing in today's economy, one where technology supports strategy rather than dictating it and insurers are empowered to focus on innovation in entirely new ways.

When combined with technology built on an open platform, which provides access to pioneering insurtech partners in the broader ecosystem via application programming interfaces (APIs), carriers can realise significant operational efficiencies.

An ecosystem is typically defined as an inter-relationship of offerings in a common market and our mission at Duck Creek is to build the most dynamic and valuable partner ecosystem for the insurance industry.

For instance, we've built productised integrations to the most commonly used insurance data and services solutions, including geolocation, MVR (motor vehicle records) lookups, vehicle data pre-fill, e-signature and more.

> **Without wholesale systems change, companies risk getting stuck in a cycle of bolting on new layers of technology**

We're also continuously adding new solution partners. A good example is our relationship with Cytora, an ecosystem partner powered by artificial intelligence, which enables our customers to access a wealth of information about a commercial property with just a few key variables, doing away with those seemingly endless question sets normally associated with commercial property, while increasing accuracy too.

And another of our ecosystem partners, FRISS, dovetails with Duck Creek in claims, providing fraud prevention technology that is impacting directly on combined ratios.

Designed for change

Our SaaS offering, Duck Creek OnDemand, is built for insurance and designed for change. We provide insurers with faster upgrades, end-to-end support, productised third-party integrations, reduced implementation timelines and risk, high scalability and performance optimisation, plus advanced security and privacy that paves a path forward to faster innovation.

The bubble of layer upon layer of legacy systems that currently haunts the insurance business may make companies feel safe because it maintains the status quo, but it's not safe. It's very fragile. Bubbles burst.

It's time insurers assessed their technology risk with the same eye they use to assess the risks they underwrite. SaaS redefines IT risk and the nature of safety. Change is the new safe. Change is modern. Be modern.

For more information please visit www.duckcreek.com

Duck Creek Technologies

Commercial feature

Blending people and technology to transform insurance

As customers continue to demand a heightened digital experience, successful insurers will be those that collaborate openly and combine their focus on a new business model, technology and people, rather than any one in isolation

Insurance may be one of the world's oldest industries, but it is as prone to disruption as any other. For the first time, consumers and businesses alike are demanding digitally enabled products with more transparency, flexibility and fairer pricing. To compete, insurance incumbents need to evolve their workforce and strike partnerships with both new entrants and adjacent players in a more open, collaborative ecosystem.

> **"The outlook of insurers has arguably never been as positive, providing they can embrace the opportunity that disruption presents and evolve their workforce**
>
> **Jim Bichard**
> PwC UK Insurance Leader

Historically, small and medium-sized enterprises have sought advice on insurance through brokers and intermediaries. In recent years, however, this has changed significantly, as small business owners have increasingly wanted to purchase insurance in the same way as they buy their own personal cover, on their mobile or desktop devices, with a digital experience. They want to make claims and get reimbursed in the same way too.

The situation is similar in the life insurance market, where independent financial advisers (IFAs) may still be a firm fixture, but a growing number of people are more comfortable transacting online. Closing the life insurance gap – half of adults have never bought life insurance, a recent PwC *Currency of Collision* survey found – and meeting the digital expectations of those that do, requires transformation in the front and back office of insurance companies, and automation of both servicing policies and processing claims.

Some new insurtech entrants have gained quick traction by capitalising on this demand for more customer-centric and digitally enabled services. Having initially viewed them as a threat, insurance incumbents are now seeking to develop innovative propositions in collaboration with them. Manulife, for example, has partnered with Irish travel insurtech startup Blink, whose technology monitors global flight disruptions in real time on a suite of products that enable travellers to claim on their insurance policy without the inconvenience of submitting proof that a flight was cancelled or delayed.

There are clear benefits for collaborative insurtechs too, providing access not only to large customer groups, but also the brand equity that companies have spent decades building. In insurance, perhaps more so than any other industry, customers seek brands they know and trust. John Lewis and Marks & Spencer are examples of two companies that have leveraged their brand recognition to drive success in the insurance space.

"A lot of traditional players may have resisted this direction for a while, but they're now seeing the need to collaborate. The pace of change required to survive and indeed thrive in the marketplace is rapid," says Jim Bichard, UK insurance leader at PwC. "Most are only at the beginning of that journey. Even if they are several years in, fundamentally their business model is still pretty consistent with how it has been for a long time. But working with those new entrants and technologies can accelerate transformation."

While customer switching is not perhaps as prevalent in insurance as it is in banking, it's still a major concern for companies. Certain areas of the insurance market, including life insurance, tend to be very opaque, making it difficult for customers to understand what they're buying. Regulators are trying to drive more transparency and fairness. The Financial Conduct Authority's recent review of home and motor insurance found that loyal customers can pay far more for the same risk than newer customers. The same review found six million customers could save £1.2 billion if they paid average premiums instead.

Savvy insurers are seeing an opportunity to get on the front foot to increase loyalty or take market share. Saga, for example, has launched a three-year fixed car insurance product, providing the clarity and simplicity consumers desire. Others are embracing flexible models such as pay-as-you-drive car coverage, and startups such as Anorak are releasing clear and tiered offerings with no hidden fees or charges. By responding to customers' demands, companies are identifying ways to take a lead in sub-sectors of insurance, driving industry convergence and new opportunities for growth.

"Customers have previously been most influenced by price and while that's still important, we're seeing a significant resurgence of brand value and service quality in decision-making," says Christine Korwin-Szymanowska, partner in PwC's Strategy& business. "That's good for some of the incumbents, but also adjacent players such as retailers or consumer brands. Differentiating based on claims service and after care is likely to be more important than pricing, so insurance firms need to prepare for that."

While technology is vital to enhancing transparency, removing barriers to buying and enabling the experience that customers crave, transformation will not succeed unless it places people at its heart. However, keeping up with changing talent requirements is the most difficult challenge of all, requiring not only a willingness from staff to invest in themselves and embrace a different way of working, but also an understanding from companies of how to adapt their talent capacity and prepare a workforce for the future.

Companies that overlook the talent and mindset shifts needed to stay connected to their customers' evolving needs risk being blinded by digital. This is where partnerships are providing further value to incumbents. Collaborating with startups brings more than cutting-edge products and services, it also brings the skilled people who can develop and maintain them and provide a fresh take on how to meet customer expectations.

PwC's latest *Global CEO Survey* shows that, following an initial period of fearing digital disruption, insurance chief executives are increasingly positive about the future. Rather than feeling threatened by technology and worried about how they can work in harmony with it, they are now thinking about how they can work collaboratively with startups to increase their digital capability, as well as grow revenue and access new markets.

AIG, for example, has partnered with online mortgage broker Habito, recognising opportunity because getting a mortgage is a common decision point at which people also purchase life insurance. When applying online through Habito, customers are asked if they've considered getting life insurance and are posed nine simple questions to do so.

"The outlook of insurers has arguably never been as positive, providing they can embrace the opportunity that disruption presents, and evolve their workforce," says Bichard. "Transformation needs to happen, but the crucial element is talent. How do you take your people with you? How do you think about digital upskilling and the workforce of the future? Using our knowledge of the global market, we help our insurance clients understand what transformation really means to deliver value; we support them from strategy all the way to execution."

For more information please visit pwc.co.uk/currency-collision/insurance

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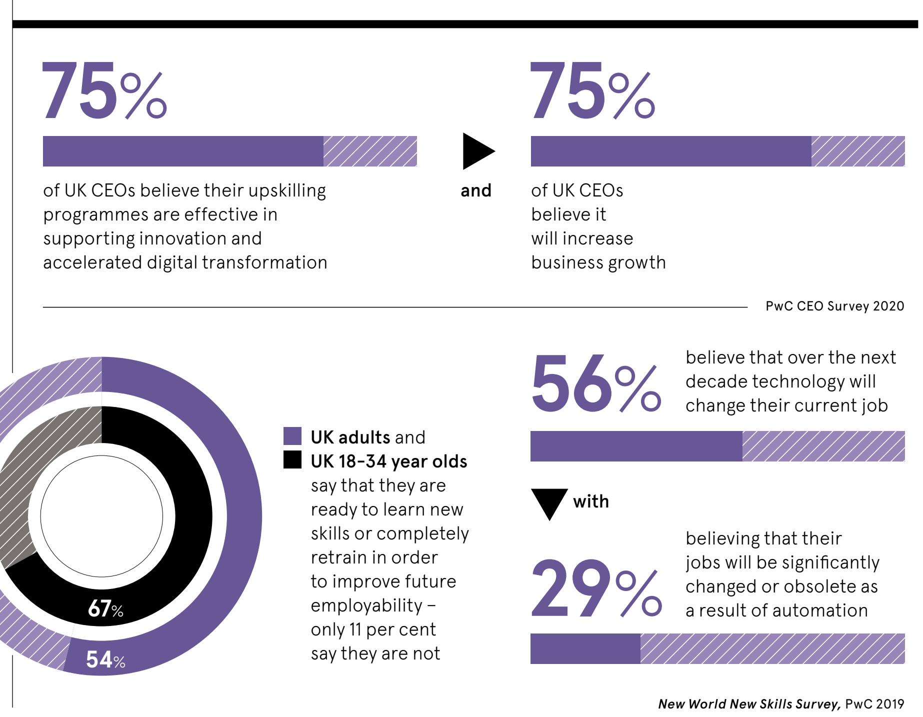


OPINION

Diversity and disruption

Ahead of Insurtech Insights Europe next month, **Bradley Collins** and **Ellenie Chan** call for a fresh approach to hiring and people management to supercharge disruptive growth in the insurance industry

How many schoolchildren dream of working in insurance? I don't claim to have the latest figures, but I would hazard a guess it's not many.

Personally, my tennis abilities led me to believe I would one day go on to triumph at Wimbledon, but life took a different turn. The dreams and ambitions of young people are far-reaching and while we know a job in insurance can be stimulating and challenging, it's unlikely to lead to personal fame and stardom.

But how many senior industry leaders can honestly say they have pulled out all the stops to make the sector an attractive prospect?

This is not a criticism of the sector. I believe the insurance industry makes a positive contribution every day to improve the lives of ordinary people.

There are a number of positives that should appeal to the modern sensibilities of the young jobseeker which we should promote, for instance a focus on mindfulness, health and wellbeing is high on their agenda. Providing peace of mind to help people enjoy their holidays or protect their family should be rewarding for people with this mindset.

With the huge demand for STEM (science, technology, engineering and maths) talent in the industry, every insurer should be ploughing resources into a recruitment strategy. Currently, this talent is attracted by tech companies like Google, Facebook, Amazon and other prominent names in the technology sector. These companies promote an enjoyable culture and the opportunity to work on cutting-edge projects.

Why would this talent choose to enter the world of insurance? It should be a consideration because there is a diverse range of opportunities that fall under the insurtech umbrella and more created all the time as the industry undergoes serious disruption through innovation.

I think insurers can do much better in drawing on the emotive aspect of what they do to appeal to the millennial generation who deeply care about the world they live in. The *2020 Edelman Trust Barometer* discovered that 92 per cent of employees expect their leaders to speak out on a range of well-meaning topics, two of which stand out for me: training for jobs of the future and ethical use of technology.

Insurtech investment has hit a record high and it's safe to say that companies are genuinely offering jobs at the cutting edge of futuristic development. Also, if we boil down what insurance is, at its core essence it protects the world and the people within it. It gives people freedom. That's a pretty ethical use of technology.

The industry can do a far greater job at marketing itself to appeal to students and grads, based on these two factors alone.

While large insurers and smaller insurtech startups might not immediately seem glamorous companies to work for, especially compared to the casual trainers and tees dress code and ping pong tables offered by big tech companies, let's not undersell our great industry.

It's an exciting time for the insurance sector. Leaders should be taking steps to supercharge growth by evolving culture and archaic traditions, while simultaneously promoting the ethics that already sit at the heart of the industry, to attract the finest talent out there.

> **"The industry can do a far greater job at marketing itself to appeal to students and grads**

Bradley Collins
Chief commercial officer
Insurtech Insights

As with wider financial services, the insurance industry doesn't score well on diversity and inclusion (D&I). While the situation is improving at nearly all levels, the Association of British Insurers (ABI) recently revealed that female representation at board level has only increased by a negligible 1 per cent, with women still accounting for just one in five jobs.

Despite three quarters of organisations having a D&I strategy, representation from the BAME (black, Asian and minority ethnic) community dropped from 15 to 13 per cent.

However, this is not another polemic targeting industry leaders or resorting to stereotypes about old white men. At Insurtech Insights, we recognise the need for leaders to drive growth and growth comes from positive action.

Aside from the altruism of creating opportunities for those who may not have had them, there is a raft of business benefits arising from a diverse and inclusive workplace culture. These include increased productivity, creativity and innovation, which add up ultimately to profitability.

Higher representation of women in C-suite-level positions results in 34 per cent greater returns to shareholders; companies with above average diversity had 19 per cent higher innovation revenues; and racially diverse teams have been shown to outperform non-diverse teams by 35 per cent. Add to this the reputational benefit to your brand and the appeal to a wider pool of talent, and it all makes sense.

The consumer-base is becoming increasingly diverse and it takes a diverse management team to set clear strategic business goals to address a wider group of consumers. It takes an inclusive and empowered staff culture to execute high-valued, novel and personalised insurance products and services for this group of consumers.

Women control up to 80 per cent of all purchasing decisions and we're excited to see women-led insurtechs disrupting the industry as they act as an inspiration. We're excited to see and hear insurers speak more about D&I programmes to empower the workforce and executives.

The ABI research shows that 88 per cent of companies now have an executive sponsor for D&I and more than half have someone responsible for inclusion of LGBT+ (lesbian, gay, bisexual, transgender/transsexual plus other groups). That's a good step and it's heartening to witness the increase in awareness of the need for D&I initiatives and the detriment of a uniform workforce.

The world is changing and so is the insurance industry. If the incumbents don't keep up with the pace of change, they run the risk of becoming irrelevant, losing market share to young, fast-paced, agile, digital-first insurers that really understand their customers. We have made it our mission to assist incumbents by bringing them together with their startup peers to share learnings and insight in March.

> **"It takes an inclusive and empowered staff culture to execute high-valued, novel and personalised insurance products and services**

Ellenie Chan
Chief content officer
Insurtech Insights

Europe's largest gathering of insurance leaders and innovators returns to London at the Royal Lancaster, March 17–18, 2020

PERSONALISED PREMIUMS

The ability to offer insurance products tailored to each individual customer is predicted to be commonplace in the coming years, according to research. And while the expectations of providers continue to grow, the benefits they will experience from value-added services could be transformative

89%

77%

4%

89% of insurers expect that, within five years, personalised insurance will be expected as a standard practice

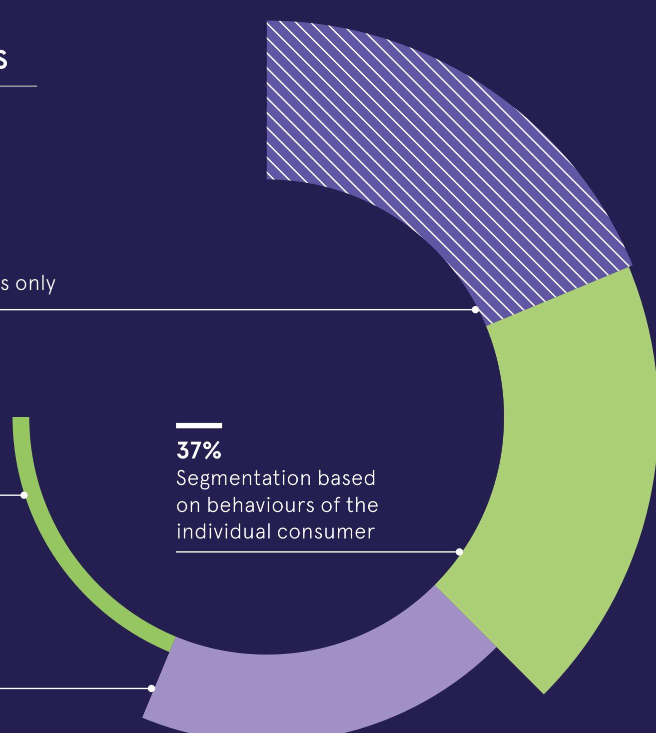
77% believe that, in the future, all insurers will have access to the same data, and therefore the quality of analytics will provide the competitive edge

4% can currently adjust the individualised personalisation of product bundles in real time, based on data from connected devices

Earnix 2019

MAIN WAYS INSURERS ARE PERSONALISING PRODUCTS

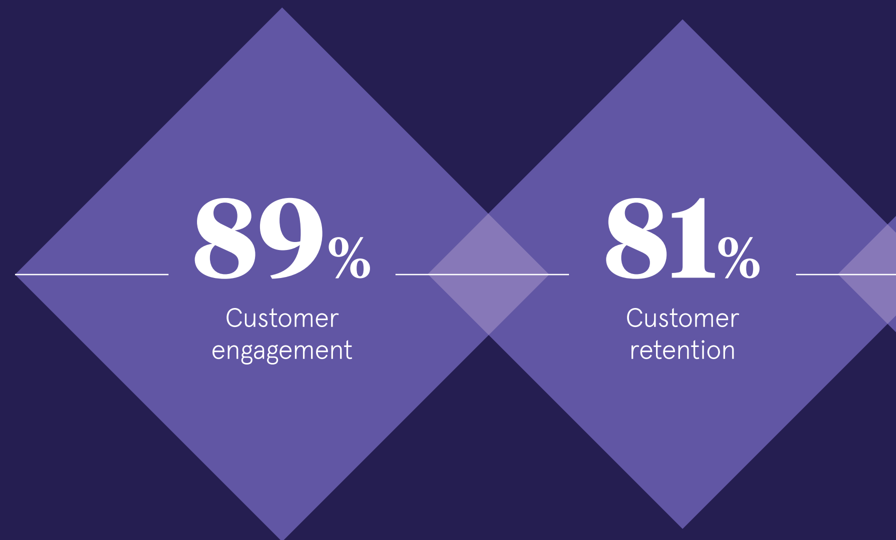
Level of personalisation insurers are currently able to deliver



Earnix 2019

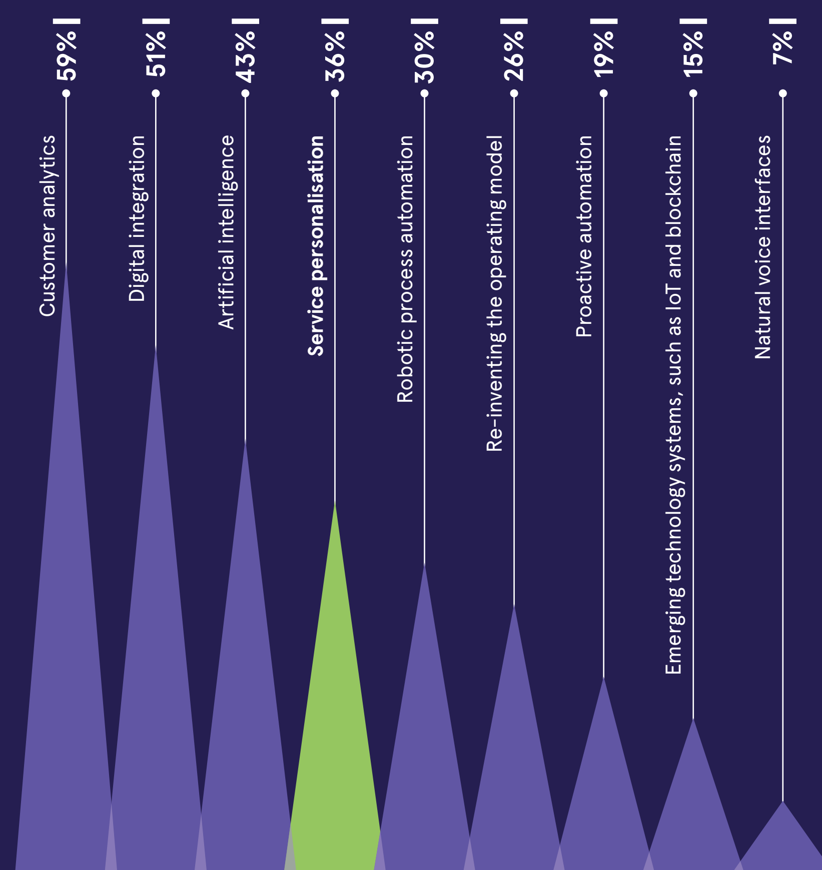
PROVIDER BENEFITS FROM INSURANCE PERSONALISATION

Survey of insurers offering advanced, personalised services



DRIVING SUPERIOR CUSTOMER EXPERIENCE

Insurers ranked the top things most likely to reshape their customer experience over the next five years

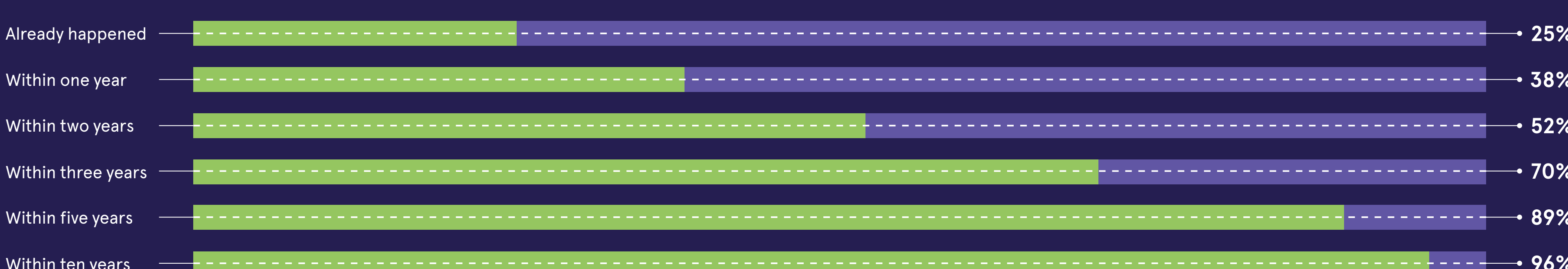


Dimension Data/NTT 2019

CUSTOMER EXPECTATIONS OF PERSONALISATION

When insurers anticipate customers will expect individualised personalisation as standard

Earnix 2019



Earnix 2019

75% Sales and marketing conversion rates

73% Customer comfort with a purely online focus

61% In-house sales agent effectiveness

60% Revenue per customer

60% Broker channel effectiveness

CUSTOMER INTEREST IN NEW INSURANCE MODELS

Survey of both individuals and business customers

Capgemini/Efma 2019

DISCONNECT BETWEEN WHAT CUSTOMERS WANT AND WHAT INSURERS OFFER

Customers' demands versus insurers' offerings and level of readiness

Capgemini/Efma 2019

Commercial feature

Enabling the new age of insurance

Whether they are incumbents or startups, insurance players embracing innovation and building products that meet the changing needs of customers will lead the way

The insurance sector has transformed in recent years from dipping its toes in the water when it comes to digitalisation, trialling products that weren't too expensive or obtrusive, to a clear recognition that new business models and ways of engaging with customers are crucial. While insurtech startups have been central to driving this realisation through the traction they've gained, recently their influence has been re-evaluated.

Two to three years ago, startups such as Trov and Lemonade were being heralded as representing the emergence of new business models and the definition of how insurance should now be thought about. Since then, however, Trov has pivoted and is providing a service in collaboration with the large organisations in the industry. Lemonade, meanwhile, a firm with a huge valuation and significant hype behind it, still has to prove it will be able to make a significant difference to the market at scale.

"Our hypothesis is there will definitely be more insurtech upstarts, but in terms of new entrants making a significant difference to the insurance market at scale, the jury's still out," says Tim Hardcastle, founder and chief executive of INSTANDA, whose cloud software enables insurance firms to easily create, manage and distribute their products.

"Particularly at the consumer end, there is a level of brand impact, loyalty and psychological alignment that means it's hard for any new arrival to invest the billions of dollars required to scale in a meaningful way. Meanwhile, incumbents are doing a good job of flexing their models and becoming more tuned into their marketplaces, which is where we can help."

INSTANDA's no-code product design platform is built on a powerful set of insurance-specific calculations, processing and workflow capabilities that free companies from high-cost legacy systems. Using its software, organisations can amend rates, questions, documents and customer journeys in minutes, and new products can be launched in days. Return on investment is delivered in weeks via dramatically reduced product manufacturing, underwriting and distribution costs, and improved customer experience.

"When we were considering the technology needed to address some of the pain points in the industry, we abstracted ourselves from the variety of insurance products in different geographies and with different distribution models, and thought what is insurance actually about?" says Hardcastle. "Simplistically, it's about data and ingestion, some rules and then issuing a contract. It's quite simple in that respect.

"So when we were doing the design-thinking around INSTANDA, we wanted to ensure we could enable any kind of insurance to be distributed in any channel. That design-thinking has led us to a position where we're working with some quite amazing companies in different geographies across multiple different insurance types."

One of those companies is Canopy, a startup insurance firm addressing issues in the house rental market. Rather than having to put six or eight weeks of rent down upfront as a deposit, which is often difficult for people to fund, Canopy provides a unique insurance proposition that acts in lieu of the deposit. House renters can pay for an insurance product that avoids them having to pay for an upfront deposit at all.

To meet the needs of millennials, which make up a large proportion of house renters, Canopy has built an app which provides additional services and enhances the richness of its relationship with that target market. The insurance is seamlessly integrated into the app, as well as open banking APIs (application programming interfaces) that make it easy for the rental deposit process to be replaced by a different financial product. Canopy is illustrative of a growing trend in insurance where interactions with consumers are enabled in different ways and the insurance product is intertwined to make it easier for people to live their lives.

Another startup that, via a pilot, is leveraging INSTANDA's technology to be able to approach the market in the most agile and innovative way is Pikl, a specialist insurance broker which launched in 2018 with some big-name backers. Pikl focuses entirely on the sharing economy, whose participants have different characteristics in terms of insurance products.

For short-term rentals, such as those booked through Airbnb and HomeAway, homeowners may find that their standard home insurance policy is invalidated and any claims rejected, even if they only let a room or the whole property for a couple of nights. Pikl has developed a suite of products that will fill this 'insurance gap' and run alongside homeowners' standard policies.

On the other end of the scale, insurance giant Aviva has been working with INSTANDA to introduce innovative new products in life and health cover. The company carried out significant research[1] which revealed three in ten small and medium-sized enterprises (SMEs) struggle to offer competitive benefits for their employees. With SMEs citing product cost and lack of staff and resources to manage benefits as the two biggest barriers, Aviva has seen a gap to offer a flexible, highly tailored, yet simplified, protection insurance for small businesses.

"It's fascinating for us to have a technology platform that can accommodate very different business models and ways of the insurance being distributed and engineered," says Hardcastle. "It goes back to something we identified several years ago called 'mass customisation', which involves providers customising their offers, but doing it at scale in a way that is efficient financially. Now we're starting to see companies delivering this.

"Like any industry that goes through periods of change, there are organisations which are really embracing the change and starting to change their ways of working. Blockbuster should have come up with a subscription model solution when they saw Netflix coming. The big car manufacturers should have been more proactive about electric vehicles before Tesla came along.

"While we don't necessarily think an upstart is going to disrupt insurance incumbents in a similar vein, we do think the winners will be those that adapt their models and become much more digital and flexible in their ways of doing business.

"We're fortunate because we get to work with companies that are doing this and it's why they choose INSTANDA. The losers will be the ones that haven't moved fast enough. Companies that haven't moved quickly are still giving decent returns to shareholders and perhaps it's going to take 10 to 15 years before you start to see those organisations suffering. However, the companies that we work with truly believe, unless they do something now, they will lose out in the next three to five years.

"The winners will be those that adapt their models and become much more digital and flexible in their ways of doing business

1. Survey of 102 businesses with 1 to 9 employees, carried out by Censuswide on behalf of Aviva, March 2019

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CAR INSURANCE

An uncertain road towards a driverless future

How driverless technology will affect the car insurance industry remains uncertain, but there is no doubt providers will have to adapt

Anthony Beachey

Driverless car technology promises to revolutionise the very mechanics of the motor insurance sector, not only by dramatic improvements in safety, but also how providers make, or don't make, money.

The global toll on human life from road accidents is alarming, with nearly 1.25 million people killed each year. That's 3,287 every day, according to statistics from the Association for Safe International Road Travel.

And with around 90 per cent of accidents caused by human error, the promise of driverless cars will undoubtedly be transformative. Yet there are still many uncertainties about how the rollout of the technology will affect insurance providers and how business models will need to adapt.

Not least, there is the question of how to apportion liability for an accident involving an automated vehicle. Is it the driver, if the car is not fully automated, the carmaker or perhaps the supplier of the software systems that enable automation?

The UK leads the world in answering the knotty question of how driverless cars will affect insurance, according to Laurenz Gerger, policy adviser at the Association of British Insurers (ABI). Gerger says the Automated and Electric Vehicles Act 2018 sets out a clear liability framework in terms of driverless car insurance.

"The ABI has worked very closely with the government to ensure the rollout of driverless technology works as smoothly as possible," he says, adding that the development of automated vehicles will deliver significant safety benefits and should reduce the 1,700 fatalities on the UK's roads every year.

Gerger explains that the new legislative framework is intended to ensure nothing changes from the customer's perspective. "If you are driving a car in automated mode and you are involved in an accident, you won't have to pursue a complicated, costly and lengthy process with the vehicle manufacturer. You would simply claim on your driverless car insurance in the same way as now," he says.

However, the 2018 legislation is unlikely to be the last word because of the complexities involved with driverless cars. For one thing, there are varying types of self-driving cars. Many cars already have assisted-driving features, ranging from simple cruise control to lane-keeper assist, forward and rear collision warnings, emergency braking and self-parking. But even the latest models still require drivers to pay attention and take over steering, braking and accelerating when needed.

One of the ABI's main concerns is that the description of assisted-driving systems "reflects their actual capabilities and doesn't mislead owners into thinking they can simply fall asleep on the back seat and leave the rest to the car", says Gerger.

Development of fully autonomous vehicles, which really would allow every occupant to spend their journey reading a book or watching TV, could take 30 to 40 years. Meanwhile, there will be many different cars, with varying levels of autonomy, or no autonomy at all, on the road at the same time.

> There are a whole series of things that auto insurance would still do for you, even if tomorrow we had driverless cars on the road

1.25m

people worldwide are killed in road accidents each year, equal to...

3,287

every day

Association for Safe International Road Travel

Dan Peate, founder of Avinew, a California-based insurance technology company for driverless car owners, believes legislation regarding driverless car insurance will have to evolve continuously.

Peate, a former assistant vice president at the London financial services firm Aon, notes that "even when all cars are driverless, the owners of the cars will still need insurance for acts of God, theft and so on".

He explains: "If your car is parked in your driveway and a tree falls on it during a storm, it's a claim. Even if your car is 100 per cent self-driving, someone could bump into it. There are a whole series of things that auto insurance would still do for you, even if tomorrow we had 100 per cent driverless cars on the road."

The prospect of a decline in accidents inevitably raises the question of how this will affect car insurers' profitability. Gerger says that while the number of accidents could fall dramatically, the cost of replacing the expensive new technology that is increasingly being fitted to cars is already affecting average claim costs, which rose from £2,683 in 2014 to £3,326 in the third quarter of 2019.

The ABI's motor policy expert also points out that the car insurance sector is intensely competitive and since 1983 there have only been a few years when UK auto insurance has made an underwriting profit.

However, Peate believes the advent of driverless cars will change the way the car insurance market operates. Auto insurance companies currently use actuarial tables that provide profiles of the owner and driver of the vehicle, based on available data. The actuarial tables determine how much to charge, for example, a 35-year-old male in a particular postal code and with a certain credit score. However, as the car does more and more of the driving, these actuarial tables and profiles will no longer make sense.

Rather, auto insurers should "look at the kind of car, what features it has and how often those features are being engaged", says Peate, adding that this data shift changes auto insurance fundamentally, so insurers no longer make assumptions based on a profile.

He concludes: "As cars increasingly share data, we can understand when people drive, where they drive, how they drive, including what safety features they are using, how the car drives, and we can determine what insurance rates should be in near real time. We think this is the future of driverless car insurance."

Frankie Lu/Unsplash

PRICING

Data explosion requires more transparency from insurers

Lack of transparency in risk assessment and pricing is becoming an even greater problem in the age of personalised insurance

Rossalyn Warren

Insurers are increasingly relying on consumers to give up their data, with connected devices continuously sending information on driving habits and exercise routines in real time in exchange for more personalised products and services. But does more data on individuals necessarily mean a fairer and more accurate cost for consumers?

Big data has transformed many industries and the insurance world is no different. From fitness trackers to smart cars, advances in technology and data now allow insurers to collect, store and analyse information on a far larger scale.

And it's attracting interest from an increasing number of consumers too. Research last year from Accenture found 80 per cent of consumers are willing to share their internet of things (IoT) data for personalised services, lower prices and faster claims processing, with interest particularly high among 25 to 44 year olds. In 2017, only 57 per cent were willing to share data with their insurers in return for new benefits.

While consumers may be happy to share their personal data with insurance companies, how the companies use such data, and whether the data is used fairly and in a transparent manner, is another matter.

Thanks to the digital transformation in the insurance industry, personalised insurance has been useful in tackling cognitive biases. However, access to new sources of data about people, and new ways to analyse that data, have also provided insurers with new methods for proxy discrimination, which is increasingly proving more difficult to identify and combat.

Gareth Shaw, a money expert at the consumer body Which?, says while it's against the law for insurers to set their prices according to protected characteristics, such as gender, religion, race and disability, there are grey areas where these principles are potentially being skirted, intentionally or not.

"Insurers collect vast amounts of information from you, but certain details are off limits," he explains. "It's against the law for them to set their prices according to protected characteristics, or ask for or use information about protected characteristics, but they can sometimes infer this from answers to other questions. These are sometimes referred to as proxy factors."

For example, in 2016, Which? found examples of motor insurers charging higher prices to customers who said they were born outside the UK, even though they'd learnt to drive in the UK. Strictly speaking, no questions about their race or ethnicity had been asked, but the insurers admitted to having used information about the customers' national origins – part of how race is defined under the Equality Act 2010 – in their calculations.

As proxy discrimination is more difficult to identify and combat,

PRICING BIAS CAN HYPOTHETICALLY MAKE PREMIUMS HIGHER FOR SAFER DRIVERS

Average car insurance annual premiums in the UK, by age

ValuePenguin 2019

Yiran Ding/Unsplash

companies are falling behind in successfully combating the issue, largely because there isn't enough care being paid to the problem.

In 2018, the Financial Conduct Authority (FCA) conducted a review into pricing practices in household insurance. While the review didn't find any evidence of direct discrimination based on ethnicity or other protected characteristics, it did find there were potential proxies for protected characteristics in data being used by insurers within pricing models. In some cases, it found some insurance firms were using datasets that contained factors which could implicitly relate to race or ethnicity.

To understand this, the FCA asked how insurers were sure the third-party data they used in pricing did not discriminate against certain customers. However, many firms could not provide this assurance without first contacting the third-party provider, which means insurers themselves were using the data with little understanding of how it could shape insurance policies to the detriment of the consumer.

In its review, the FCA concluded firms that use external and IoT data within their pricing models do not always undertake due diligence to ensure the data did not include factors with the potential to discriminate.

Part of the problem behind the bias in insurance is there's little transparency about insurance risk assessment and pricing, and the use of new technology only compounds this opacity.

Jathan Sadowski, a technology researcher who writes on how data is used in industries, says when insurance calculations were made by people, there were at least intuitively plausible reasons behind what factored into an insurer's assessment and pricing.

But now, with machine-learning systems doing analysis and making decisions, he says there's a good chance that nobody – customers, insurers, regulators or programmers – can actually explain how an automated decision was reached.

As a result, consumers are left in the dark over the full extent of what personal data is being factored into the pricing of their insurance.

> **Everybody is in the dark and the only option is to just trust the system**

"It means everybody is in the dark and the only option is to just trust the system," says Sadowski. "This is easy for insurers if the system leads to outcomes that benefit their interests, but it's not so easy for customers who are left wondering why. Or, more likely, are totally unaware that a machine played a potentially large part in deciding their premium or claim."

Despite the concern over proxy discrimination and the lack of transparency about how our data is used in policies, the future of personalised insurance still looks bright.

The use of artificial intelligence (AI) and IoT data has led to more opportunity than ever for life insurers to not only save costs and build closer relationships with customers, but to also improve and refine the accuracy of their processes. For example, studies have found a personalised insurance model encourages customer retention, loyalty and increased purchases.

A recent study by Mindtree found 77 per cent of banking and insurance customers across America, Europe and Asia say customised promotions encouraged them to buy products and services they have never purchased before. In addition, 68 per cent of companies say more targeted, personalised promotions are the key driver of improved online sales over the past 12 months.

While there are benefits for insurers and customers to embrace personalised insurance, proxy discrimination will represent an increasingly difficult challenge to the insurance industry, especially as AI and big data will continue to play a greater role. But there are few clear answers on how technology could address this.

A 2019 study by the University of Iowa on proxy discrimination in the age of AI and big data, proposes insurance companies could develop efforts to encourage fairness in predictive models, such as developing algorithms that explicitly seek to pinpoint proxy discrimination.

However, the report accepts there are limitations and warns AI armed with big data is still inherently structured to engage in proxy discrimination whenever they're deprived of information, and simply denying access to such information does little to solve the problem.

As insurance companies use increasingly granular and detailed data about each individual person's behaviour to refine their risk assessments, they will need to address the ethical challenges this technology brings to their industry. One thing is clear: to tackle proxy discrimination, for the sake of the consumer, insurers must put transparency and fairness at the core of every insurance decision.

TRAVEL INSURANCE

Uncertainty prevails as coronavirus rattles travel

The coronavirus outbreak has raised questions in the insurance industry for both travellers and insurers alike

Marianne Curphey

Alessandro Di Ciommo/NurPhoto via Getty Images

With business and leisure trips cancelled, plans amended and access to some parts of China restricted, individuals and businesses have had to claim on their travel insurance as a result of the coronavirus.

While coronavirus (COVID-19) ravages Hubei province, international airlines have cancelled flights and some governments have restricted entry from anyone who has recently travelled to China.

Travel insurance covers medical treatment, repatriation, cancellation of trip and treatment while abroad, but the level of cover varies greatly depending on the policy that has been purchased. If many hundreds of thousands of policyholders have to claim, can the insurance industry cope with the administration and the costs?

Insurance firms are going to be the first in line to feel the pain of any widescale illness or travel disruption, says Michael Weaver, managing director and head of valuation advisory at Duff & Phelps.

"Beyond the impact that coronavirus has had on many lives, insurance firms are likely to suffer the most tangible business losses from the outbreak," he says. "Following countless cancelled flights, holidays and events, travel and leisure businesses will quickly begin to feel the effects of disrupted business continuity and will not hesitate to make a claim."

Insurance expert Andi Dominguez from Quadient believes that the travel insurance industry has many steps to take before it's truly prepared for outbreaks like coronavirus. She says insurance companies need to provide customers with a better understanding of policy coverage, and what is not included, longer term and even before outbreaks occur. They also need to use predictive data to process claims more efficiently during and after such outbreaks.

"Recent events are likely to have driven companies to pay more attention to budgets and risk models," Dominguez explains. "Policies designed to cover widespread epidemic insurance are invaluable, but are only worthwhile if insurers are there for their customers right the way through the process."

Navigating outbreaks of disease can be complex for insurers, as new risks can emerge from day to day. New updates on disease control and prevention are being issued by governments, and centres for disease control are doing their best to provide guidance for healthcare workers and those involved in public health.

"This is why it is crucial for insurers to have a system in place that quickly delivers proactive alerts to customers in real time, as soon as new updates occur," she says.

Dominguez believes insurers need to share advice on how to stay safe if the health risk level increases or if flights, for example, are cancelled to that country. For customers, information about how to claim for refunds must be communicated as soon as possible.

"To be prepared for outbreaks like coronavirus, insurers shouldn't wait until they are asked about these, but should proactively send the most up-to-date information to customers over their preferred channel, be that email, SMS or instant messaging," she says.

An underlying problem for the insurance industry is its historic inefficiency, says Ryan Rugg, global head of industry at blockchain firm R3. While the system may tick along fine in normal circumstances, when there is a sudden and unexpected event, it may not be able to cope.

Charly Triballeau/AFP via Getty Images

Passengers leave the Diamond Princess cruise ship following a two-week quarantine in Japan

"The health insurance industry is plagued with inefficiencies because the processes underpinning it have remained largely unchanged for hundreds of years," she says. "This reliance on antiquated systems causes major challenges on any normal working day, but in the event of an epidemic such as coronavirus, the impact can be catastrophic."

> **Health insurance is plagued with inefficiencies because the processes underpinning it have remained largely unchanged for hundreds of years**

As soon as an outbreak affects a policyholder's travel plans, insurers should use predictive and historical data to determine the likelihood of future disruption, review the latest information from the authorities and any other factors that could affect the outcome of the claim, says Dominguez.

While Rugg argues that the speed with which an insurer can process a claim can in turn improve the ability of healthcare providers to treat patients and prevent the spread of a potentially deadly supervirus.

"For instance, a hospital can share certain information about its patients with the insurance company via a blockchain platform," she says. Once a consensus is reached, settlements can happen instantaneously across different technology platforms.

"In addition, by moving its transactions onto a shared ledger, a health insurer can eliminate fraudulent and duplicate claims by logging each transaction in a decentralised repository. Instantly, the insurance company is able to verify the authenticity of a customer, policy or claim. This is a simple premise, but a huge step forward for fast-tracking claims processing."

Peter Smith, head of strategic partnerships for travel, in Europe, Middle East and Africa, at Cover Genius, which provides insurance for the world's largest ecommerce companies, including travel brands such as Booking.com, says technology is driving change and efficiencies right across the insurance industry.

"Behind the scenes, a clever use of technology can breed greater efficiencies in areas that traditional insurers heavily resource, such as call centres, where hundreds of people manning the phones is becoming a thing of the past," he says.

American Express Global Business Travel (GBT) manages more than $35 billion of the world's business travel, supporting close to ten million travellers each year. Martin Ferguson, vice president of public affairs at GBT, says using technology can help provide a better service in difficult situations.

"The richer the data, the more effective the support," he says. "Services can geo-locate travellers and communicate with them via mobile app, and can help pinpoint them via their very recent credit card transactions."

Protected in 171 seconds: Data-led insurance for new economies

The way we live has changed. Consumers demand speed, flexibility and convenience in all aspects of their lives, from urban mobility to parcel and pizza delivery. So is the commercial insurance sector keeping pace, asks **David Daiches**, co-founder and chief operating officer of INSHUR

At the new decade's dawn, it is constructive for the insurance industry to reflect upon the societal changes that have been wrought since the turn of the millennium and accelerated through technological advancements. Is insurance keeping pace with changing demand?

Consider that the smartphone era, triggered by Apple launching the iPhone, began only 13 years ago. And that Uber and Airbnb, leaders in the sharing economy, are both under a dozen years old. New businesses and economies are emerging all the time to support how we live as a society.

The reality is technology has changed the way we live. We don't visit the high street in the same numbers, in urban areas car ownership is changing and how we move around is now full of choice. We expect food, parcels and the like to be delivered quickly to our door, at the swipe of a finger or click of a button. These services and new economies may be modern, but they still require protection from one of the oldest industries in the world: insurance.

While technology has powered the gig, sharing and new mobility economies, there is a critical need for the insurance industry to adapt, modernise and close the gap on customer expectations.

Protection for people, parcels and pizza

Traditional insurance is too rigid and slow. For example, think of picking up a city car for an hour, an Uber or the items delivered by a courier or pizza company. All these require real-time protection of varying degrees and for the end-user experience to be seamless.

At INSHUR, which launched in New York in 2017 and the UK in late-2018, we have built a technology platform on which we sell insurance products to respond to these emerging economies. We have proven our platform within the private hire and ride-share space, and are now extending our reach into new vertical industries and further territories.

INSHUR offers something very different from traditional insurance experience. Firstly, our platform is accessible via a mobile app, so unlike a traditional broker, we are accessible 24 hours a day, every day of the year, thereby putting the end-user in control. And rather than spending hours or even days on the phone liaising with a broker, unravelling reams of documentation, our customers scan their driving licence and private hire licence, and enter their vehicle registration number to receive a quote.

Age of the API and alternative data-led insurance

By using APIs (application programming interfaces) to integrate with our partners, we can securely pull through data during the quoting process, which means the customer needs only answer a handful of questions.

That makes our service much quicker and more convenient for drivers, whose top priority is to be on the road so they can earn money, and we help them do just that. Indeed, one driver was able to get a quote and purchase cover in only 171 seconds.

Not only do these new data integrations help to make roads safer by immediately notifying our partners if a driver's policy lapses, they also provide new and dynamic underwriting factors that can complement pricing decisions. This data transfer is in real time, much faster than waiting for a customer to tell you they have moved house, changed vehicle and so on.

> There is a critical need for the insurance industry to adapt, modernise, and close the gap on customer expectations

Not only do these new data sources significantly improve the customer experience, they also ensure the policy is being priced at a level which safeguards the long-term viability of the insurer. This ultimately protects the customer and reduces any potential friction when a claim is filed.

Driven by customer invention

We realise that customers are the beating heart of what we do; their concerns come first and help drive our progress. From the outset, we have engaged with drivers on a one-to-one basis every single day, to understand their painpoints better and how we can solve them. We want to get drivers on the road faster, reduce paperwork and provide them with an exceptional customer experience.

It is thanks to customer feedback that in September we launched our new Flex products. The first of its kind in the UK market, Flex allows private hire drivers to pay for their insurance only when they are on the road. Additionally, at the start of this year, INSHUR introduced a concierge-style insurance policy for Uber Pro drivers, offering discounts of up to 20 per cent off their premiums.

As the traditional insurance players grapple with modernising their products, at INSHUR we have worked hard to gain the trust of customers, being rated "excellent" on Trustpilot and earning an average of 4.8 stars from more than 3,000 app store reviews. Moreover, around 50 per cent of our growth is attributable to word-of-mouth recommendations.

That excellent reputation, and that we are part of their conversations, is a powerful indicator our products are meeting a need. The "talkability" within our customer base is almost unheard of in the insurance space, after all no one really loves insurance, and will help us make inroads into other markets in the coming months.

Using our platform approach, connecting with partner APIs and being data led means we can enter new markets faster. It is clear there are huge opportunities that have been presented by new economies and a new kind of insurance protection is required.

At INSHUR we have built a technology platform that works perfectly for the ride-share and private hire markets, but it can easily be applied in other verticals. Our alternative data sources power better underwriting decisions and the speed of cover we offer is what these new economies ultimately demand.

171 seconds

the fastest transaction on the INSHUR platform from quote to purchase

From 10 to 60

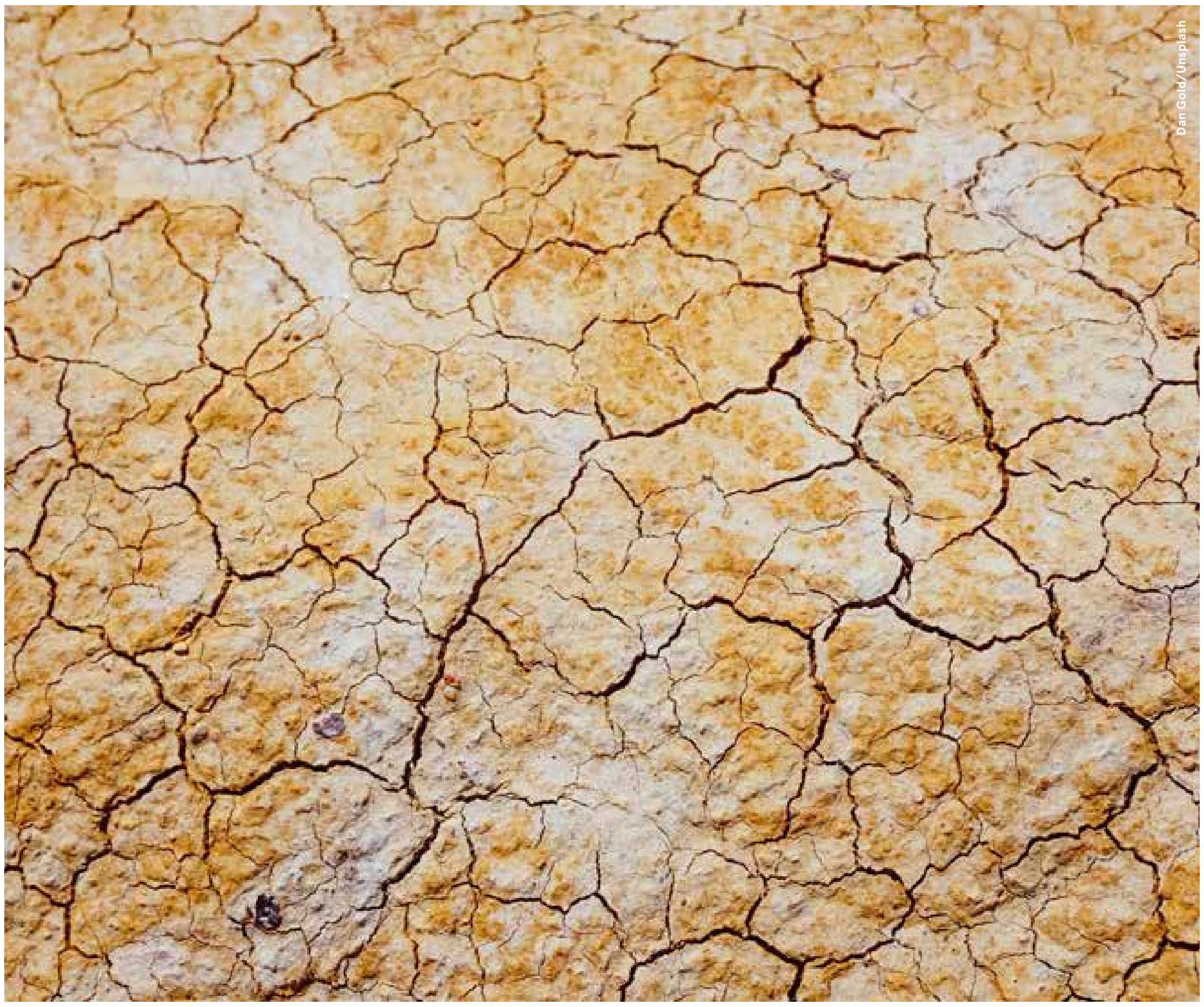
team members since December 2018

$10m

total funding raised

For more information please visit inshur.com/uk

INSHUR


Dan Gold/Unsplash

INVESTMENT

Insurers feel the heat over investments

Insurers are starting to feel the pressure over climate change, not just as companies pay up when catastrophes hit, but also as the spotlight turns to insurance investment management

Josie Cox

For the insurance sector's major players, the biggest immediate challenge presented by climate change has been an increasing frequency of extreme weather events, ratcheting up underwriting costs.

According to the Association of British Insurers (ABI), the extremely cold weather that hit the UK in early-2018, for example, resulted in insurers paying a record £194 million for burst pipes in just a three-month period.

Thomas Parmentier, European insurance analyst at UBS Global Wealth Management, says the value of insured assets has increased dramatically over the last decade, chiefly due to the "increase in property values and consequently claims for the industry".

But insurance investment management is increasingly attracting scrutiny and arguably highlighting a far more systemic and complex crisis. The value of many of the assets insurers hold could easily be imperilled by an accelerating transition towards a low-carbon economy that shuns fossil fuels and assets contributing to greenhouse gas emissions.

The ABI estimates that UK insurers alone hold in excess of £1.8 trillion in invested assets. A May 2018 report by the Department for International Trade notes, however, that only around 1.2 per cent of all assets under management in the UK were invested sustainably, compliant with good environmental, social and governance (ESG) principles, which means the shock of decarbonisation could be disastrous for those who fail to adapt.

Last July Moody's, the agency that assigns credit ratings to corporations which can determine their ease of access to funding, issued a stark warning to insurers, signalling failure to decarbonise could cause severe damage and, in some cases, mean insurers fail to meet financial obligations.

"Climate change in particular gives rise to greater uncertainty for insurers, both with respect to expectations for frequency and severity of natural catastrophes, and exposure to carbon-transition risk through their investment portfolios and the possibility of stranded assets," according to Brandan Holmes, senior credit officer at Moody's.

In the foreword to an extensive analysis on climate-change risk, published by the Bank of International Settlements in January, François Villeroy de Galhau, governor of the Bank of France, issues a similarly austere warning.

"The increase in the frequency and intensity of extreme weather events could trigger non-linear and irreversible financial losses," he says. "In turn, the immediate and system-wide transition required to fight climate change could have far-reaching effects potentially affecting every single agent in the economy and every single asset price."

Though progress towards adapting to a new ESG-centric world has in many cases been sluggish, there are some insurance companies that are paving the way.

In November 2019, Paris-based multinational insurance firm AXA committed to aligning its investments with the United Nations-backed 2015 Paris Agreement and pledged to commit to a 1.5C warming potential by 2050. The warming potential is defined as the impact AXA's investments may have on climate, expressed in temperature.

AXA in 2015 became the first of the major investors to divest from the coal industry and it has since committed to a complete coal exit by 2030 in Europe and Organisation for Economic Co-operation and Development countries, and by 2040 for the rest of the world.

A significant development forcing insurance investment management to become greener is that the world's largest asset managers' efforts to decarbonise are gathering pace, setting a standard.

In January, Larry Fink, chief executive of bellwether BlackRock, which has approximately $7 trillion of assets under management, wrote to business leaders stating that they must stamp out unsustainable business practices or risk serious economic repercussions, in addition to irreparable damage to the planet.

Fink warned his company would "be increasingly disposed" to cast critical proxy votes if organisations were not committing to greater sustainability. In a separate letter to BlackRock's clients, he vowed that by the middle of this year the firm would divest stakes in companies in BlackRock's actively managed portfolios which derive more than 25 per cent of their revenues from thermal coal production.

Martha McPherson, head of green economy and sustainable growth at University College London's Institute for Innovation and Public Purpose, says insurance companies have an obligation to adjust, even if some financial services firms are lagging in their commitments.

"Nobody needs reminding that the climate crisis is urgent, but the responses of some players in the UK's financial sector have been glacial. With the UK hosting COP26 in November, now is the time to make a genuine, cross-sector commitment to tackle climate change," she says.

As for insurance investment management, McPherson says companies are already aware of their role to price and manage risks, and offer security to both their policyholders and society more broadly. She concludes: "It is inevitable that insurers will need, and want, to play an increasing role in championing a low-carbon economy."

> "The increase in the frequency and intensity of extreme weather events could trigger non-linear and irreversible financial losses

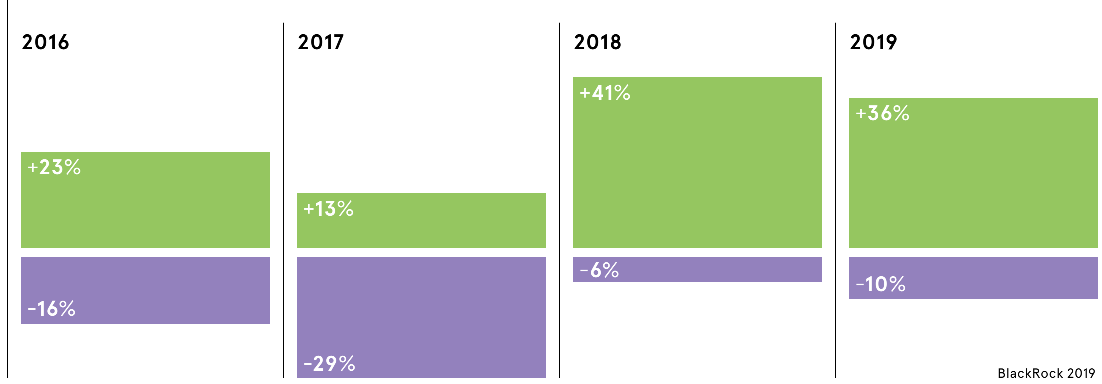
67%

of insurers are focusing more on ESG investments than a year ago

BlackRock 2019

INSURERS' INTEREST IN ESG/IMPACT INVESTMENTS

How insurance providers anticipated changing allocations to ESG or impact bonds



BlackRock 2019

OPINION

‘Given the importance of insurance to sustained economic growth, it should be a service that is recognised and appreciated’

Over the last 20 years, insurers have focused on convenience, especially for those buying and renewing cover. For most of us, this means our interaction with the insurance profession has shrunk to a few minutes spent online two or three times a year.

However, the impact that insurance has on our lives is far greater than this. Not only do insurers pay out billions of pounds in claims every year, insurance underpins many of the processes that keep society ticking over.

For example, when we are sick at work and our employer pays us an income that goes beyond the statutory minimum, there will often be a group insurance product funding these benefits and, indeed, effective support for rehabilitation may be arranged by the insurer as well.

Similarly, if a chain of distributors goes bust, credit insurance will help suppliers avoid going down with it. As new risks appear, such as cybercrime or new forms of terrorism, insurance helps to mitigate their impact on all those affected.

In a recent report, the World Bank found that over a period of four decades, sustained economic decline was concentrated almost exclusively on countries that had a below-average level of insurance premiums. A thriving insurance profession all but guarantees increasing prosperity for individuals, but an underdeveloped insurance sector turns sustained prosperity into a lottery.

New technology means the insurance profession is now at a crossroads. It can either get closer to its end-customers or retire even more into the background. As the transactional side of insurance becomes slicker and more automated, it may appear even less of a presence in our lives.

Ultimately, it may simply mean that we never take out an insurance contract or make a claim at all. Brands could simply provide us with guaranteed levels of service and use insurers funding capital in the background.

Instead of having buildings and contents insurance, for example, we may have a separate contract with a service company to provide cover. This provider will, in turn, use insurance as one of several sources of capital to maintain service-level agreements.

Alternatively, insurers could step forward and play a bigger role in managing risks. For example, by creating a service that is designed to coach us towards better behaviours.

In this scenario, traditional financial products will simply be a component in a larger range of services that include information and tools for people to manage their own risks more effectively.

In the corporate space, insurers and brokers can choose to be product suppliers, distributing traditional insurance products through increasingly demanding procurement exercises or they can become fully fledged risk managers, helping clients to understand and mitigate their risks themselves.

We already see this approach in areas such as cyber-insurance, where traditional insurance products rarely cover every risk.

Instead, brokers are developing services that help organisations plan for cyberattacks, while insurers are preparing benefits in kind, such as legal and reputational support that can minimise the impact of an attack as soon as it takes place.

Whether insurers step to the forefront of risk management or retreat to the background matters to us all. Services that are hidden tend to be undervalued, but services which make a connection with our day-to-day lives are cherished and thrive.

Given the importance of insurance to sustained economic growth, it's important it should be a service that is recognised and appreciated. It is in all our best interests if the insurance professional choses to be in the limelight rather than the shadows.

Sian Fisher
Chief executive
CII

Commercial feature

Insurance needs to speed up

A turbulent investment environment encourages insurance operators out of cruise control

Traditionally, the insurance sector has consisted of large organisations that could take time to analyse the various complexities sitting within their books and spend significant resources on building bespoke modelling tools to understand these complex dynamics.

However, the past two years has witnessed a digital injection, complete with regulatory sandboxes, and a common expectation of innovation to change the industry.

The new norm means that to provide digital guidance to policyholders, organisations have to follow suit themselves.

Ortec Finance, a specialist in ALM (asset-liability management), is looking to leverage its global experience and unique model-based approach to investment decision-making to not just facilitate insurance clients' acceleration towards digital, but to accelerate in the right direction.

"Traditionally, insurance clients would have worked with software applications that took days to run and in the past that would have been fine," explains the company's managing director for Insurance, Marco Hoogendijk.

"However, given the uncertainty and opportunities digital insurance brings, together with a continued challenging investment environment, management teams are now demanding their organisations have the ability to respond more quickly to the complex questions they face."

For this to be achieved, they require software solutions that have the ability to engage on a real-time basis more easily, while simultaneously being able to analyse future potential scenarios.

Working primarily with large life insurance companies and pension plans, Ortec Finance boasts a sophisticated toolset that helps to evaluate both current and possible future market conditions via its Economic Scenario Generator, part of its institutional ALM solution which supports and informs the ultimate decisions being made by management.

Hoogendijk clarifies: "If you look at what we do in detail, we run a client's balance sheet through 10,000 different economic scenarios for a range of alternative strategies.

"Using the analogy of a flight simulator, we simulate what would happen to the 'plane' on 10,000 different routes, through different economic 'storms'. We then help management understand the implications of each route so they can either take action to avoid upcoming storms or prepare for unavoidable storms and understand which management actions can be taken to ensure the plane is able to navigate these challenging environments successfully."

96%

client retention rate which speaks to our ability to problem-solve and innovate; and we continuously improve our own service to ensure we can keep improving theirs

Understanding and conveying the implications of multiple economic landscapes is where Ortec Finance really adds value, preparing insurance companies on both the asset and liability sides for the next, possible major move in the market.

"We do this via our own private cloud solution we offer to our clients," says Hoogendijk. "Within this environment they can carry out HPC (high-performance computing) which means they can report back to management with results in the most desirable timeframe."

To this end, flexibility in the insurance space is also of vital importance so organisations have the leeway, as well as the means, to enact change from front to back, more efficiently. By offering a cloud environment where machine-learning and APIs (application programme interfaces) flourish, wider ecosystem integration is facilitated and flexibility is assured.

"We have a 96 per cent client retention rate which speaks to our ability to problem-solve and innovate, and we continuously improve our own service to ensure we can keep improving theirs," says Hoogendijk.

A new, improved modular approach, where insurance companies' different departments can subscribe to technological advancements that are specific to their domain, is testament to this philosophy. It also lays the foundations to help combat even bigger industry challenges yet to come.

Chiefly, as Hoogendijk says, these bigger challenges include understanding the impact climate change will have on insurance in the future.

"We will see interesting developments on both the asset and liabilities side as a result of climate-change implications," he concludes. "This, in tandem with developments being made around big data and machine-learning, and also the role of alternative data to gauge how private assets are performing, will mean you have to be more turnkey and possess the ability to provide services from front to back to remain a strong player in the market.

"To achieve this, we have a dedicated insurance group to provide insights, tools and guidance for this journey, including different climate-change scenarios."

For more information please visit www.ortecfinance.com

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