2018

ADVANTAGEGO INSURTECH SURVEY





INTRODUCTION

The need to upgrade technology is the number one concern of senior insurance and reinsurance professionals who took part in an exclusive survey on InsurTech organised by AdvantageGo.

And when asked how they view some of the many technologies such as machine learning, artificial intelligence (AI), blockchain, robotics and the Internet of Things (IoT) which fall under the umbrella term of InsurTech, the overwhelming majority of those surveyed see them as an opportunity. None of them view InsurTech as a threat.

However, whilst there is clearly a recognition of the need to adopt innovative technology as well as the need to partner with industry experts to maximise the potential benefits of InsurTech, there is real concern about the pace at which the industry is transforming.



AS A STRATEGY TO GET THEIR BUSINESSES UP TO DATE WITH

THE LATEST INSURTECH
DEVELOPMENTS, ONLY ONETHIRD OF RESPONDENTS ARE
DEVELOPING INITIATIVES INHOUSE, WHILE MORE THAN HALF
ARE NOT.

When it comes to identifying the most important factors insurers look for in an InsurTech supplier, demonstrable capability topped the list, followed by track record of successful delivery, customer-centric mindset, and industry knowledge and experience. These were seen to be more important than suppliers being able to demonstrate that they are InsurTech innovators.

InsurTech can be seen as a broad brush term, and the survey asked executives to summarise what it means to their business. The tone is perhaps summed up best by a North America-based professional who said: "InsurTech provides an opportunity for traditional insurers to become more efficient at delivering on their core mission of creating value to their customers. It allows them to focus on value added products rather than simply reinventing the wheel each time a new system is required. With the latest products on the market, insurance companies can focus on what they do best whilst having their needs met by external technology providers."

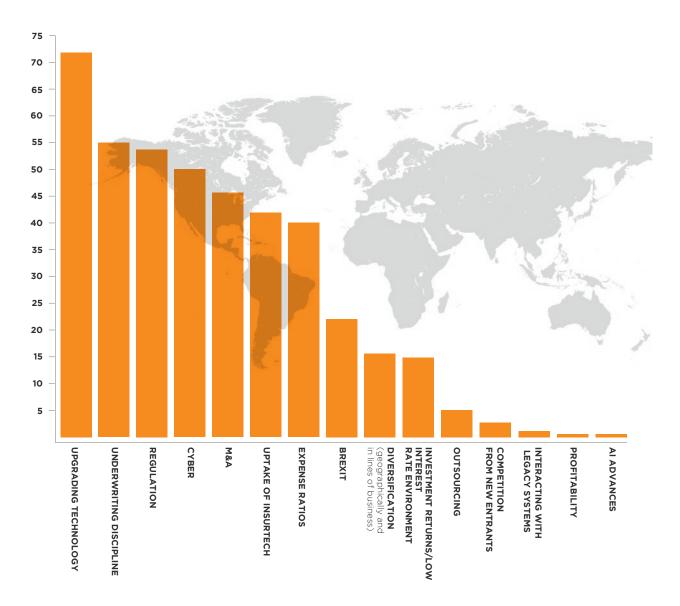
Our survey, which was conducted by email and telephone interview, involved 30 C-suite insurance and reinsurance industry executives in North America, London, Bermuda and Switzerland. The respondents included CEOs, COOs, CIOs, underwriters, top level brokers, as well as legal, accounting, analytics and technology advisers.

WHAT ARE YOUR TOP FIVE CONCERNS ABOUT THE MARKET IN ORDER OF IMPORTANCE?

Our survey asked global executives to list the most pressing concerns they think the industry is currently facing.

The answers were weighted to give a score of five if they were the most important and one if they were least important. Using this methodology, upgrading technology was seen as the number one challenge of the industry, with a score of 72, followed by underwriting discipline (55), regulation (54),

cyber (50), mergers and acquisitions (46), uptake of InsurTech (43), expense ratios (40), Brexit (23), diversification geographically and in lines of business (16), and investment returns/low interest rate environment (15). Other concerns were listed as insurance being able to draw from other bigger data sources, interacting with legacy systems, outsourcing, AI advances, profitability, and competition from new entrants.



WHAT DOES INSURTECH MEAN TO YOU?

Covering the convergence of technology and insurance, InsurTech was described by our executives as a broad landscape, with some firms dealing with big data and artificial intelligence for faster and better-informed decision-making, while others are exploring distributed ledger innovations such as blockchain, which is one of the hottest topics in InsurTech circles. Two of the words most frequently used to describe InsurTech were "disruption" and "transformation".

One senior executive working in insurance and technology said: "It's really a disruption of what has always been a very traditional industry by technology. It's the onset of the digital revolution, which is like a fourth industrial revolution."

A London-based broker said the industry was poor at dealing with data consistently, noting: "Dealing with the US market, we are staggered at receiving pdf documents of several hundred pages of figures which are of no use to man nor beast. We would like to see better use of that technology and improved delivery of products to enhance customer experience. If you can make it easier for people – as InsurTech start-ups do – that's the way it's going to go."

Another London-based executive agreed InsurTech was about "improving the plumbing of the market" which "historically has been so inefficient". As well as being a disruptor, InsurTech was "adding to the intellectual knowledge of the insurance industry".

A specialty insurance executive said the London market was more than 10 years

behind other financial services sectors when it came to electronic processing and that there had had been "no real adoption" of data standards such as ACORD. Their approach to InsurTech focussed on internal applications such as modelling, big data, AI, robotic process automation and Natural Language Processing.

One executive observed that the industry had always innovated, albeit slowly. "The emergence of new technologies presents the market with a never-seen-before opportunity to innovate and do so quickly." He said InsurTech could be split into 'distribution disruptors' who use technology to reach clients in more efficient ways, and 'business process re-engineers' - companies using technology to eliminate cost and improve customer fulfilment. He predicted that a number of InsurTech companies will fail, but a second wave will emerge "that will learn from past mistakes and be more successful".

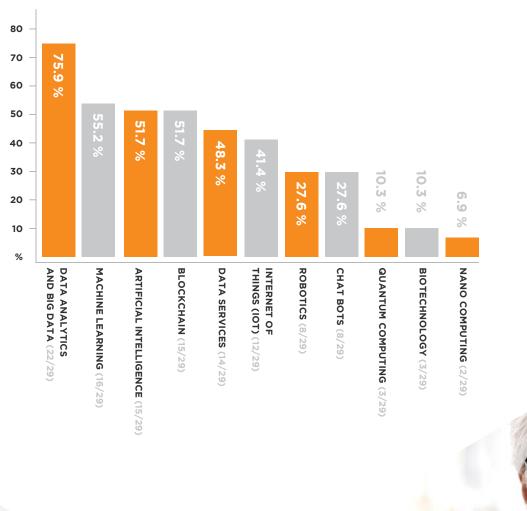
A senior lawyer advising global re/insurers said clients saw InsurTech as a way of addressing the challenges of big data and cyber, as a well as a tool to better understand, price and write these risks.

A Swiss-based reinsurance executive noted the industry is finding it difficult to keep abreast with the wide range of InsurTech developments, saying: "There is so much going on that you have to learn about everything because we don't yet know what it is that will lay the golden egg for us." The executive added: "Companies that are not at the forefront of this will not survive. You can feel we are on the cusp of change – our industry must evolve or become extinct."

IN WHICH OF THE FOLLOWING INSURTECH INITIATIVES IS YOUR COMPANY INVOLVED?

Our survey showed re/insurers are involved in a wide range of InsurTech projects, with 75.9% currently working on initiatives involving data analytics and big data. Just over half (55.2%) are involved in machine learning, while 51.7% are exploring the idea of using artificial intelligence (AI) in their business, and the same number are looking at one of the hottest advances in the market, blockchain.

Almost half are involved in data services projects, 41.4% are looking at the Internet of Things – dealing with the inter-connected of variety of web-enabled devices such as smart phones and sensors – and about quarter are exploring robotics and chat bots. One in ten are involved in initiatives in the fields of quantum computing and biotechnology, while 6.9% are looking at Nano computing.





DOES INSURTECH POSE MORE OF A THREAT OR AN OPPORTUNITY TO YOUR BUSINESS?

(SCALE OF 1-5, WHERE 1 IS THREAT AND 5 IS OPPORTUNITY)

The re/insurance industry overwhelmingly sees InsurTech as a positive opportunity to improve the way that business is conducted. When asked to rank InsurTech as an opportunity or a threat – with five representing an opportunity and one as a threat – 81.5% gave it a four or five, and none of those surveyed viewed it as a threat. Some 55.5% gave it the highest ranking of 5, followed by 26% a 4, and 18.5% a neutral 3.



81.5% OPPORTUNITY



18.5%
NEUTRAL



O%
THREAT

A Swiss-based executive said: "We are investing a lot of time and money in future-proofing our business. We are hugely involved, so here's hoping we are ahead of the curve." Another executive said: "Undoubtedly it is an opportunity. The pace at which technology-enabled inovations are coming to market is extremely rapid. This will entail disruption and challenges."

Another noted: "Insurers and InsurTech have combined actuarial analytics, artificial intelligence algorithms and the power of computing to influence efficiencies, minimise leakage and increase net promoter scores that support customer retention. InsurTech companies have amassed a wealth of innovative analytics that could enhance insurance processes, but insurers already have rich troves of information about policyholders on pricing, retention, churn, uplift from analytics, policy-specific information and underwriting."

A Bermuda-based executive observed:
"Overall, for the market, it offers general
efficiencies in the form of smart contracts,
policyholder benefits and reduction of costs.
It makes claims management and administration
more efficient and speeds up the processing
of claims. It means there is far less paperwork."
However, he noted that greater use of
InsurTech will require a different mindset and
different skills.



InsurTech can allow insurers to inexpensively set up platforms that allow customers to buy their products. While this will not eliminate brokers – some brokers are already doing some of this – it will reduce frictional costs

A North America-based insurance professional said InsurTech developments allowed companies to bring products to market swiftly and grab market share ahead of their competitors.

One insurance advisor said that in addition to cutting costs and improving efficiency, InsurTech can help companies with their regulatory requirements by ensuring their data processing is correct.

A London-based professional noted that there tend to be two different attitudes among insurers: the forward-thinking companies which want to embrace it, and others who fear they will lose out unless they embrace it.

One US executive said:

Vanguard it is a top priority, a massive opportunity. If you're lacking in awareness of the explosive disruption that is taking place, it can only be a threat.



WHAT OPPORTUNITIES DOES INSURTECH OFFER YOUR BUSINESS AND THE MARKET?

Our survey found that executives are using a wide range of InsurTech developments to improve their businesses.

These included data analytics for claims and reserving, smart contracts, streamlining costs and processes, distribution cost savings, improving insights for underwriters and combining actuarial analytics with AI algorithms to increase efficiency.

One North American executive noted:

I firmly believe that the industry is at the beginning of a transformational stage. As younger employees who have grown up with technology begin filling more senior roles, they will demand new ways of interacting with clients, and as such this will present an opportunity for InsurTech to fulfil this void.

Another noted both insurance companies and InsurTech businesses have amassed huge amounts of data. "InsurTech companies will find deploying these capabilities difficult as they lack scale, while insurers may lack the depth of knowledge about the power of computing and machine-learning techniques. The combination of the two could be powerful and may lead to an inflection point that could change the typical insurance model."



STREAMLINE COSTS AND PROCESSES



IMPROVE INSIGHTS FOR UNDERWRITERS



COMBINE ACTUARIAL
ANALYTICS WITH
AI ALGORITHIMS TO
INCREASE EFFICIENCY



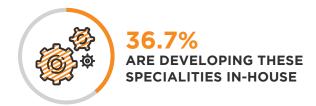


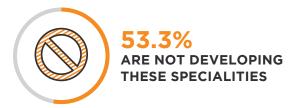
ARE YOU DEVELOPING INSURTECH IN-HOUSE? IF YES, PLEASE PROVIDE DETAILS OF THE AREAS YOU ARE WORKING ON.

Many insurers and reinsurers are grappling with whether to develop bespoke InsurTech solutions within their own business, or to partner with an external expert provider. Just over one third (36.7%) are developing these specialities in-house, more than half (53.3%) are not, and 10% said the question was not applicable or they were unable to discuss it due to commercial sensitivities.

Of those not developing in-house expertise, one quarter each were adopting the following strategies: using third parties; working with existing tech vendor partners; partnering with new tech companies; and waiting to see how InsurTech develops.

A software skills deficit was identified by a number of businesses as a barrier to them





developing their own InsurTech solutions. Many of those surveyed said they were taking a hybrid approach of developing some solutions in-house while also partnering with external vendors.

Some had digital divisions exploring opportunities, while others combined their own teams' expertise with that of external vendors. One London-based international insurer noted that it had made minimal progress around automation and analytics, but to do this in a meaningful way at scale, would require partnering with an external supplier.



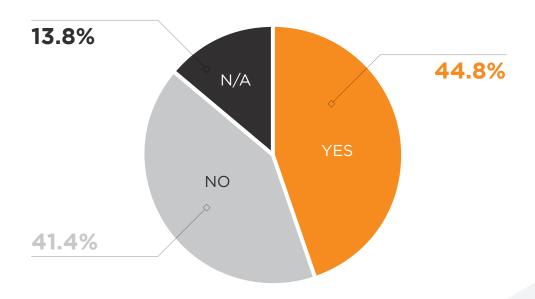


ARE YOU HIRING OR TRAINING PEOPLE IN INSURTECH?

Almost half of the respondents (44.8%) are hiring staff to meet the demands of InsurTech developments, while slightly less (41.4%) are not, and 13.8% either did not know, thought the question was not applicable or described the subject as commercially sensitive.

One global reinsurer said it was just starting to hire InsurTech-related staff, while another said it was not, but was sending staff to conferences to try to keep the business up to speed. Another global reinsurer said that it was not hiring staff in this area yet.

We are creating awareness for what InsurTech is and is doing around the company.



HAVE YOU FOUND IT CHALLENGING TO RECRUIT AND RETAIN TECH-SAVVY TALENT? WHAT ARE YOU DOING TO ATTRACT AND RETAIN THAT TALENT?

The technology sector is dominated by younger professionals and our survey found that the insurance industry does struggle to attract them. The survey found many millennials thrive on the flexibility and buzz of start-ups, and insurance companies are viewed by younger workers as more traditional businesses.

An executive at a London-based global insurer noted: "Yes, it has been a challenge initially because the best people at InsurTech are not insurance people, and it's difficult to get non-insurance people to come here to the market because we're behind other industries from a technology perspective." When you get millennials into the business, however, they come to recognise just what an exciting and intellectually challenging industry it is.

A North America-based executive said that the insurance industry was not good at offering many of the working practices that younger people value such as flexi-time and remote working.

A London executive agreed that a different approach is needed to attract and retain the best young tech talent. Most young people don't know enough about the industry because "insurance talks to insurance. But once people get in, they are agile workers, they don't have to wear suits and they work from home - that's how to retain them."

Another global reinsurance executive said:

to recruit as many want to work for start-ups. We haven't yet had to think about retention, although the focus will be on keeping them busy with engaging projects which add tangible value to the company.

A North America-based insurance executive said the company had started to partner with colleges to try to attract the best tech talent.



DO YOU THINK YOUR BOTTOM LINE WILL BE IMPACTED BY INSURTECH IN THE NEXT THREE YEARS?

Our survey found that executives are in no doubt that the profitability of their business will be affected by InsurTech - with most believing it will deliver positive benefits. An overwhelming 79.3% feel the bottom line will be impacted, 10.35% believe it will not and 10.35% thought the question was not applicable or did not answer.

One London-based global insurer noted:
"It already has affected us. Without InsurTech,
your bottom line will be negatively affected."

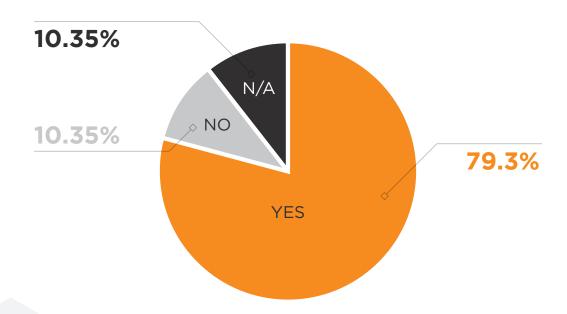
A Bermuda-based executive said: "Ultimately there will be a cost to implementing a lot of these changes either by investing in InsurTech in-house or hiring a third party or parties.

The cost element will fade in the long term."

Another reinsurer agreed implementation costs will affect profits, adding: "The real question is what is the payback period on the investment, which remains to be seen."

A leading broker predicted that InsurTech will have a negative effect on the business, while a global reinsurer does not believe the technology – in its current state - will have an impact. However, the executive added:

66 If we see a serious end-to-end player, then yes, we will be impacted. 9 9



WHAT WILL THE MARKET LOOK LIKE IN 10 YEARS' TIME?

We asked our experts to look into their crystal balls and predict how the industry will look in a decade – and they provided some fascinating observations.

A North America-based executive said: "We simply have to look to other similar markets to see what could happen. Look at the traditional personal investment market. They have had to adopt a hybrid approach and work with FinTech companies in order to not become irrelevant to their target markets. I believe the insurance industry has entered this same period of transformation."

Another noted the industry will be much more fact-based and powered by AI, data and technology, adding that legacy players will not exist in their current form

One US observer predicted the trend of insurers acquiring InsurTech companies will accelerate. "As technology continues to separate the leaders from the rest of the pack, we expect to see a more concentrated market share among the most technologicallyadvanced and well-capitalised insurers. Those that fail to adapt will either be acquired or be left behind. Leaders in the technology sector may lack the expertise to run insurance companies. Likewise, insurers with decades of experience may lack the technical expertise to advance technologically until new tools are firmly entrenched. New relationships that highlight the skill sets of each are more likely."

A Bermuda executive said:

66 There will be a lot more Al. I don't think robots will be sitting behind desks but there will be a lot more automation. From a small claims perspective, there will be the use of smart contracts so there will be no need for human interaction. There will be a lot more firms operating like Lemonade. Chat bots will be used for initial claims.

He added that blockchain will transform the industry to being paperless, and that medical technologies such as fitbits will increasingly impact insurance policies.

A broker predicted: "There will be a shorter distribution chain and fewer intermediaries. There will be far less duplication of work."

A London insurance professional said: "In the next ten years this industry will be majorly disrupted, but it will take longer than people think. I don't think that disruption will come from the areas people think it will come from because the market doesn't fully understand the disruption. On an M&A level, there will be a lot fewer and larger brokers, with some disappearing because insurers will get to the point where they realise that now they have digital communication directly with their clients, they don't need a broker because they are creating a bespoke service for each client."

One insurance professional services provider said: "I'm an optimist so I'm hoping it will be more efficient and more interesting. I think the traditional way of delivering the product to the customer - the traditional way of buying it - will have changed fundamentally, it will have gone. We are going to buy insurance in a very different way, which will be far more effective."

A lawyer predicted insurance would look the same, however, "there will be less people doing certain less important tasks, and the remaining ones will be doing more critical tasks."

A global reinsurance executive predicted: "Some companies will fail and many will be swallowed up by the larger core vendors.

Some will survive and will become established as the next set of major players in the core

systems space. InsurTech will just be part of the way we do business."

A London-based insurance executive said:

The London market will fall behind as more nimble players will start to disintermediate and replace capacity providers in the value chain.

A broker predicted: "There will be something, some innovation, that has changed the market in a way we just cannot see now because we are too close. I think there will be fewer people working in the industry because of technology. I don't believe actuaries will completely disappear - their role will evolve."

A Swiss-based reinsurance executive said: "The world will be a very different place in 10 years. I hope people will understand our fragile planet better, and that our insurance products are more in tune with this as well. I hope technology will reduce emissions, driverless cars will be the norm, and people will behave better. Technology may change the way we behave, and the data we all have gathered about us via mobiles etc. will vastly change the way insurance is underwritten. Imagine being able to write life insurance, when your watch or phone or glasses captures your level of fitness, your heart rate and all sorts of other data?"

PLEASE RATE 1-10 THE MOST IMPORTANT ATTRIBUTES THAT YOU LOOK FOR IN AN INSURTECH PROVIDER

(WE HAVE ALLOCATED A SCORE OF 10 POINTS FOR THE MOST IMPORTANT ATTRIBUTE AND 1 FOR THE LEAST IMPORTANT)

We asked our executives what was the most important attribute they look for when working with an InsurTech provider.

TOPPING THE LIST WAS:



SCORE: 181

A demonstrable capability to the do the job

SCORE: 171

A track record of successful delivery





SCORE: 158

Customer-centric mindset

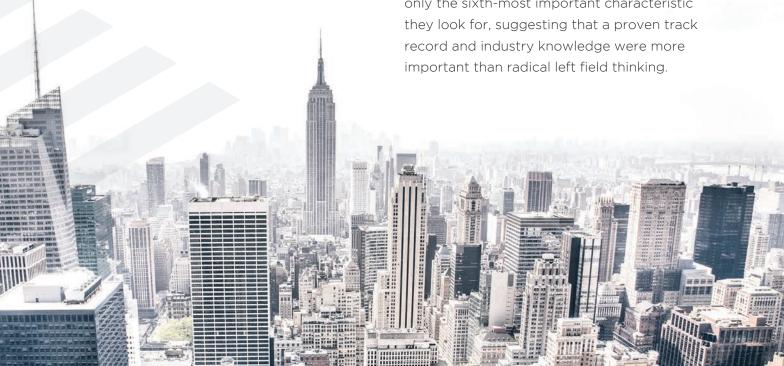
SCORE: 152

Industry knowledge and experience



RANK	IMPORTANT ATTRIBUTES	SCORE
1	Demonstrable capability	181
2	Track record of successful delivery	171
3	Customer-centric mindset	158
4	Industry knowledge and experience	152
5	Easy to do business with	141
6	InsurTech innovator	130
7	Delivery certainty and robust governance & market reputation	129
8	Commercially flexible	107
9	Financial stability	96

The survey demonstrated that insurance and reinsurance customers are looking for much more than simply an IT provider; they clearly value those service partners which can prove they can do the job and, crucially, that they also have a high level of understanding of the peculiarities of the industry. Being an InsurTech innovator (130) was ranked as only the sixth-most important characteristic they look for, suggesting that a proven track record and industry knowledge were more important than radical left field thinking.



CONCLUSION

The survey has highlighted that on the one hand, there is an overwhelming recognition of the need to improve technology, but on the other, there is a concern about the rate at which the industry, as a whole, is adopting InsurTech solutions.

Whether insurers adopt InsurTech to be ahead of the game or through fear of being left behind if they don't, all sectors of the market are taking it seriously. Some companies are investing in cutting-edge technology, with three quarters (75.9%) involved in data analytics and big data, and more than half looking at projects involving machine learning (55.2%), artificial intelligence (51.7%), and blockchain (51.7%).



INTERNET OF THINGS (IOT), WHICH REFERS TO THE INCREASINGLY INTER-CONNECTEDNESS OF DIFFERENT TECHNOLOGIES AND

DATA SOURCES, IS GENERATING AN INCREDIBLE RANGE OF VALUABLE DATA. THE INSURANCE INDUSTRY IS LOOKING TO HARNESS THIS, WITH

41.4%
OF THOSE
SURVEYED
INVESTING
IN IOT PROJECTS

Although insurance companies are data-rich businesses with highly-skilled IT staff, their primary function is to understand risk and underwrite it at a profitable level - not to develop innovative software solutions for the industry. This is one reason why so many are partnering with technology providers. Our survey found that over one third (36.7%) of companies were developing InsurTech solutions in-house, and more than half (53.3%) were not. Of those not developing InsurTech in-house, one quarter were either using third parties, working with existing tech vendor parties, partnering with new tech companies, or waiting to see how InsurTech develops. Our survey has shown that the insurance industry recognises the clear value of partnering with technology providers to help them keep abreast of the fast-changing InsurTech landscape.

When it comes to picking an InsurTech provider, our executives found that the most important factor was demonstrable capability, followed by track record of successful delivery, customer-centric mindset, industry knowledge and experience, and 'easy to do business' with. These attributes were considered by our respondents to be more important than the company being an InsurTech innovator. This underscores our core belief that the market is looking for InsurTech partners who can combine deep industry knowledge and experience, with a proven track record of delivering complex IT solutions.

ABOUT THE SURVEY METHODOLOGY

Between March and April 2018, 30 insurance and reinsurance executives completed the survey by email or telephone interview.

The respondents included C-suite executives from insurance and reinsurance firms, as well as brokers and legal, accounting, analytics and technology advisers in North America, London, Bermuda, and Switzerland.

43% were from North America and Bermuda, 50% from London, and 7% were from Switzerland. Twenty-eight of the respondents were male, and two female. All responses have been anonymised to allow executives to speak frankly about the issues involved. Respondents included CEOs, COOs, CIOs, senior underwriters, partners, business owners and analysts.

Two thirds of the responses were collected by phone or face-to-face interviews, others were answered with written responses.

Some questions were not answered by some respondents for various reasons, from not being applicable to not knowing the answer or not being able to answer because of confidentiality issues.

The executives spoken to are all leaders in their fields and all have decades of experience in the global insurance and reinsurance markets. Companies included top 20 insurance and reinsurance companies, major brokers, specialist law firms, ratings agencies, modelling and analytics companies, and accountants.







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