Exploring the insurance industry's top risks

A New Zealand perspective

pwc

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About the report

- PwC conducted this global survey in partnership with the Centre for the Study of Financial Innovation (CSFI), a US-based non-profit think tank. Established in 1993, the CSFI looks at future developments in the international financial field – particularly from the practitioners' perspective. Its purpose is to identify new areas of business and future challenges, adding to the debate about key financial issues around the globe.

- This survey describes the most urgent risks, or "Banana Skins", facing the insurance industry in the latter half of 2021. It is the latest in a series going back to 2007. Sixteen insurance industry professionals contributed to this New Zealand report. Globally, the CSFI and PwC gathered 607 responses from practitioners – life and non-life, brokers and reinsurance – and observers in 47 territories.

- Thank you to all New Zealand participants who have helped us better understand the risks and challenges facing our country's insurance industry.

The Global Context

Our research reveals insurers around the world face similar risks. New Zealand insurance companies share seven top 10 risks with global insurance company rankings: crime/cyber, regulation, climate change, technology, human talent, change management and competition. This consistency with the global results is a change to previous years where the New Zealand market had a different view, particularly relating to natural disasters and reputation risks following the Canterbury earthquake events and the Australian Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry. However, as risks relating to cyber attacks and climate change become more significant and widely discussed globally, there is now more alignment of the immediate risk profile between New Zealand and global insurers than ever before.

The rise in catastrophe risk related to climate change dominated concerns in the global non-life and reinsurance sectors in this year's survey. It is clear that the impact of climate change is a much nearer-term risk than previously perceived around the world, and in many cases the effects are already being felt. The chair of a non-life insurer in Australia said that climate change is "An existential challenge [to the industry] – both today and over the next 30 years". An underwriter in the UK said "Climate change is already having an impact. In areas prone to catastrophic weather, premiums are rising and deductibles increasing".

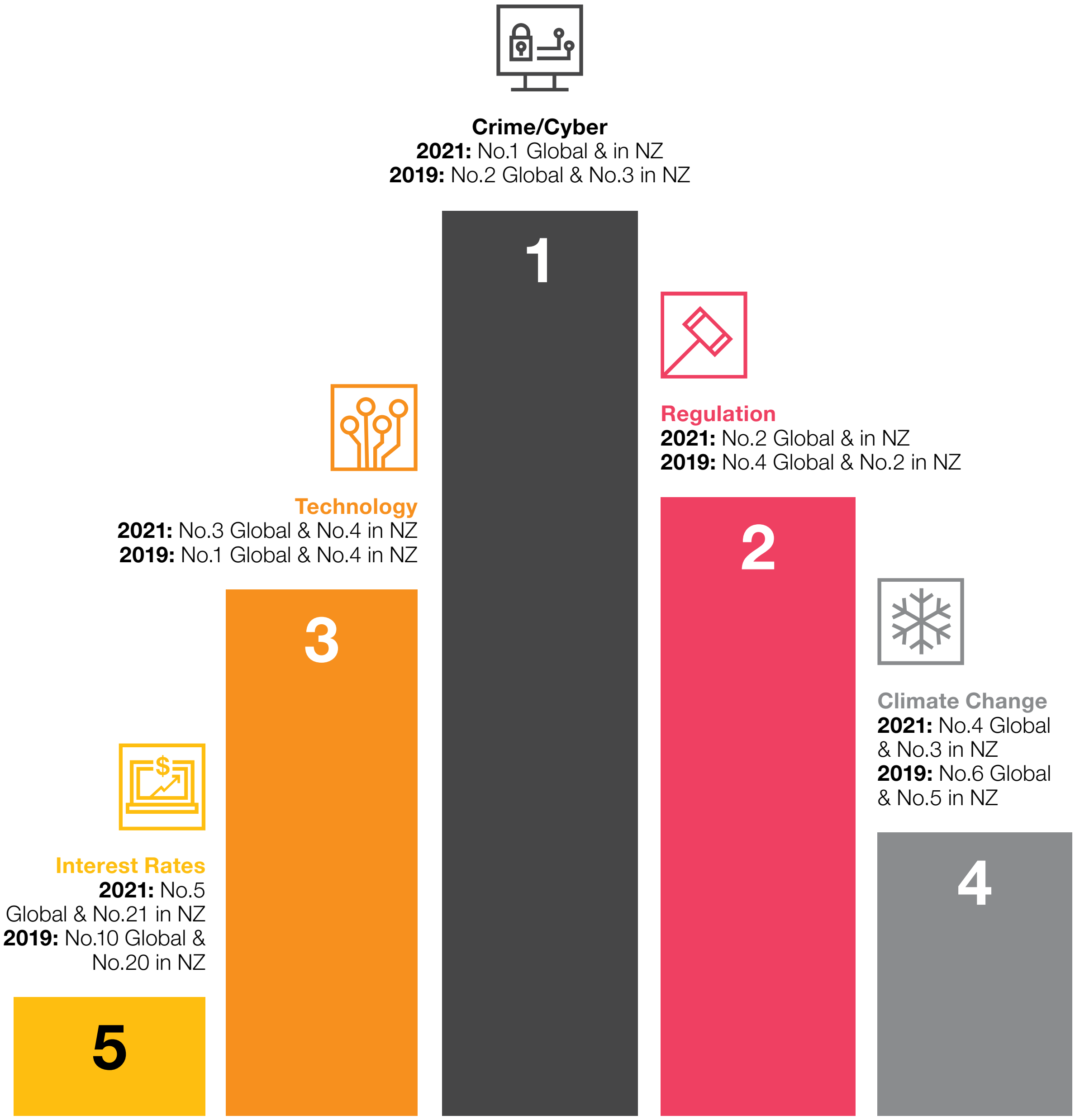
The worldwide focus on climate change as part of the wider Environmental, Social and Governance (ESG) agenda is resulting in a step-change for most insurers. Reporting requirements are increasing, and governments and regulators continue to press companies to better articulate how they are quantifying and managing the related risks.

As well as the increasing climate change reporting requirements, regulation more generally has been flagged as a concern for insurers globally. For life insurers, this is seen as the leading challenge ahead. In New Zealand, concern about the level of regulation has been driven by the implementation of broad measures such as NZ IFRS 17 Insurance Contracts (NZ IFRS 17) and changes to solvency standards, on top of regulation of conduct and financial advice through the Financial Markets (Conduct of Institutions) Amendment Bill (CoFI) and Financial Services Legislation Amendment Act (FSLAA).

Despite the rising concern about climate change and regulation, the entire industry pointed to crime as the top risk for 2021, particularly cybercrime. Although cybercrime risk has been a rising feature for several years, this is the first time it has come out on top. The rise reflects strong concern about the vulnerability of insurers' systems to cyber-criminal attack, particularly with the increase in virtual working, and the increase in the type, volume and success of cyber threats. Insurers are also uniquely impacted by the insurance policies which are sold to cover companies when they are hit with cyber attacks, and ransomware in particular. The increasing sophistication of cyber attacks globally, combined with a trend towards digital channels, is leading to more investment in protecting sensitive customer information as well as more complexity in the underwriting and claims management of cyber risk insurance.

> Cyber attacks are real, sophisticated and malicious. The risk is exacerbated by the growing dependence on the internet and connectivity, not just our corporate IT systems that may be exposed.

– Martin Mulcare, Independent Director, SCOR Global Life Reinsurance



The New Zealand Perspective

New Zealand's top risks over the last decade

The Canterbury earthquake events that began in September 2010 not only changed the landscape of the community, but also transformed the New Zealand insurance industry. In the years following the earthquakes, respondents were particularly concerned about an ongoing, increased frequency of extreme events in heavily populated and insured areas, as well as possible under-pricing of catastrophe risk. Natural catastrophe risk was the top risk for New Zealand respondents in both 2013 and 2015.

The earthquake events also caused heightened concern from respondents around reputation risks. The dual Earthquake Commission (EQC) and private insurer model that operated during this time often resulted in a slow process for claimants, with some larger claims taking many years to settle. Additionally, there was a lot of public and media scrutiny around claims being declined, or cover not meeting expectations.

Reputation risk reached its peak in 2019 as the top risk for New Zealand respondents. This was due in part to the sentiment around the Canterbury earthquake events, but also the local consequences and focus from the Australian Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry.

However, in the years since the last survey in 2019, there has been a lot of change in these areas that previously set New Zealand apart from the global view that may have led to a reduction in the perceived reputation risk relative to other risks:

- In November 2020, the Insurance Council of New Zealand (ICNZ), EQC, and eight private insurers announced a new partnership model to provide an improved, more collaborative approach to supporting New Zealanders through natural disasters in the future. Under this new disaster model, anyone with home insurance whose home or land is damaged in a natural disaster can lodge the claim through their private insurer. Customers will then work with their insurer who will assess, manage and settle their claim, ensuring a more effective and efficient response.
- In January 2019, the Financial Markets Authority (FMA) and the Reserve Bank of New Zealand (RBNZ) released their findings and recommendations from the Life Insurer Conduct and Culture review. After publishing this report, the FMA also asked fire and general insurers to review their operations to make sure there were no material conduct issues within their business. A report on these findings was released in July 2021. The findings have led to positive changes in respect of conduct and culture in the industry, perhaps now overtaken by a regulation phase.

Top Risks: NZ and abroad

2021		Global
1.	Crime/Cyber risk	**1**
2.	Regulation	**2**
3.	Climate change	**4**
4.	Technology	**3**
5.	Human talent	**6**
6.	Security risk	**13**
7.	Political risk	**12**
8	Pricing	**15**
9.	Change management	**7**
10.	Competition	**8**

2019		Global
1.	Reputation	**13**
2.	Regulation	**4**
3.	Cyber risk	**2**
4.	Technology	**1**
5.	Climate change	**6**
6.	Political risk	**11**
7.	Business practices	**15**
8.	Change management	**3**
9.	Competition	**7**
10.	Human talent	**8**

2017		Global
1.	Technology	**3**
2.	Competition	**8**
3.	Cyber risk	**2**
4.	Reputation	**17**
5.	Regulation	**6**
6.	Human talent	**9**
7.	Investment performance	**5**
8.	Social change	**16**
9.	Cost reduction	**13**
10.	Quality of management	**14**

2015		Global
1.	Natural catastrophes	**13**
2.	Change management	**4**
3.	Distribution channels	**2**
4.	Cyber risk	**1**
5.	Reputation	**6**
6.	Human talent	**11**
7.	Products	**15**
8.	Long tail liabilities	**3**
9.	Quality of risk management	**7**
10.	Social change	**8**

1. Crime/Cyber

Cybercrime risk has risen to the top of the list for New Zealand respondents, surpassing reputation and regulation risks from two years ago. There is clearly a rising level of anxiety about cybercrime risk, heightened by the COVID-19 outbreak, which introduced new opportunities for cyber criminals to exploit. Its position as the most urgent risk reflects serious concerns about both the ability of cyber criminals to attack insurers' technology systems directly and the potential costs of underwriting attacks against policyholders.

> "Insurers operate in an increasingly interconnected world of digital opportunity. While technology can drive innovation and productivity, it also presents new risks and challenges that need to be understood to be overcome.

– Craig Maskell, Partner, Cyber Security, PwC New Zealand

2. Regulation

Regulation remains in second place. Concerns include new areas of regulation that we have seen introduced in recent years (new financial conduct regime, enhanced regulation of financial advice) coupled with the upcoming new accounting standard, NZ IFRS 17, and ongoing reviews of the Insurance (Prudential Supervision) Act 2010 (IPSA) and its supporting solvency standards. The task of addressing and implementing these new regulatory standards, in the mandated time frame, is proving to be a challenge for insurers.

While globally, insurers are concerned that increased regulation is hampering product innovation and competition, in New Zealand the concern is more around the sheer volume of upcoming change, and the accompanying cost. As one New Zealand respondent commented "There is a significant portfolio of regulation in the pipeline, which may impact on the size and shape of the industry and costs of implementation".

3. Climate Change

In this year's survey, climate change risk has risen in the rankings to take its place near the top. Respondents commented that beyond the next two to three years, climate change is the greatest threat of all to the industry. Historically, the challenge for many insurers has been that the time frame for climate change was well beyond the planning cycle of three to five years, so it has typically been overlooked. However, it is no longer possible to ignore the risks posed by climate change and increasing obligations in respect of disclosure in insurers' financial reporting. With net zero commitments being made globally, the insurance sector also has an impact on communities in terms of sending signals for sustainable behaviour.

> "Climate change poses risks to individuals, organisations and governments the world over. The planet is warming because, through our actions, we are releasing too many greenhouse gas emissions into the atmosphere. Insurers must consider the risks of these changes on their business and operating models, and seek to adapt or mitigate the impacts of those risks.

– Dr Victoria Hatton, Director, Sustainability and Climate Change, PwC New Zealand

4. Technology

Technology remains in fourth place, highlighting that the risk insurers will fail to keep up with technological change is high. One widespread concern is whether insurers will be able to serve the needs of a new generation of customers through the modern distribution channels that they are increasingly accustomed to using. Many insurers have grown inorganically through acquisitions and need to deal with ageing legacy systems that don't integrate well with digital front ends.

Financial advice can now be provided digitally under the new financial advice regime which began in early 2021. Digital or 'robo-advice' is automated advice generated by a computer program using algorithms, based on the information you provide. Few insurers currently offer digital advice in New Zealand but it's an area that's quickly growing internationally and looks to change the landscape of how insurance is sold (or bought).

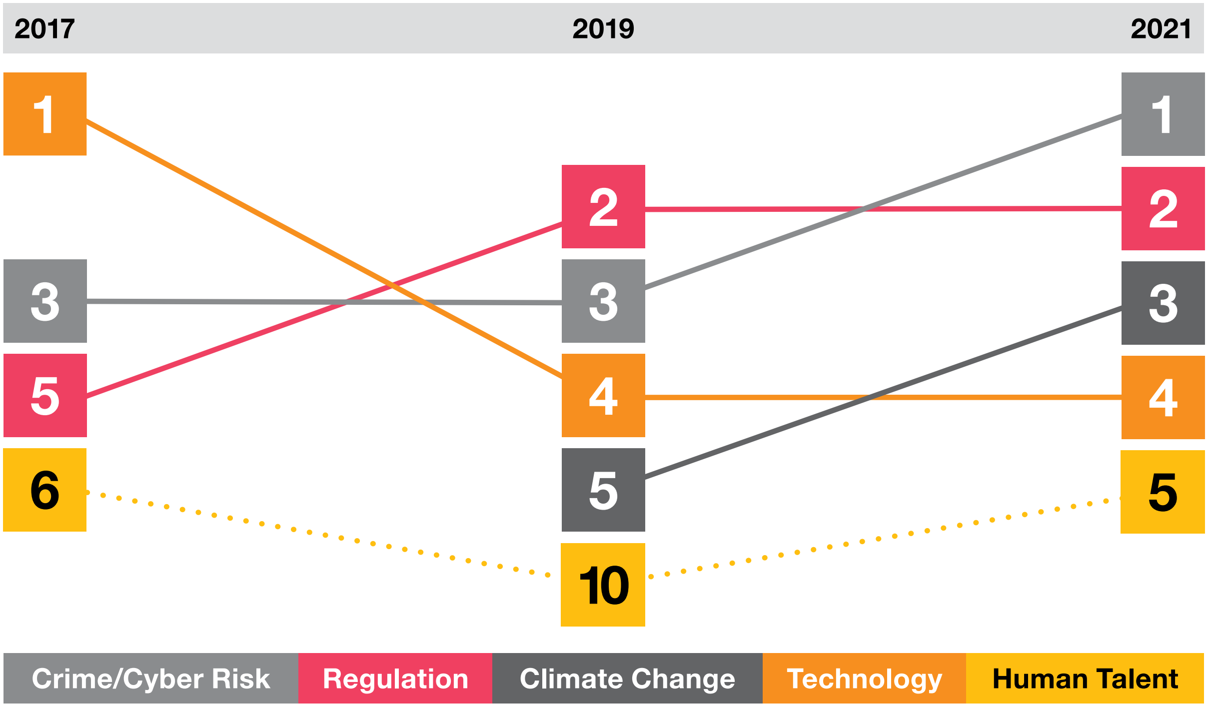
However, the cost of tech modernisation is also seen as a major concern. "Balancing long term investment in upgrading systems versus short term earnings is an ongoing challenge exacerbated when claims are high (volatility of material events) and investment returns (interest rates) are low", said a non-executive director at an Australian insurer.

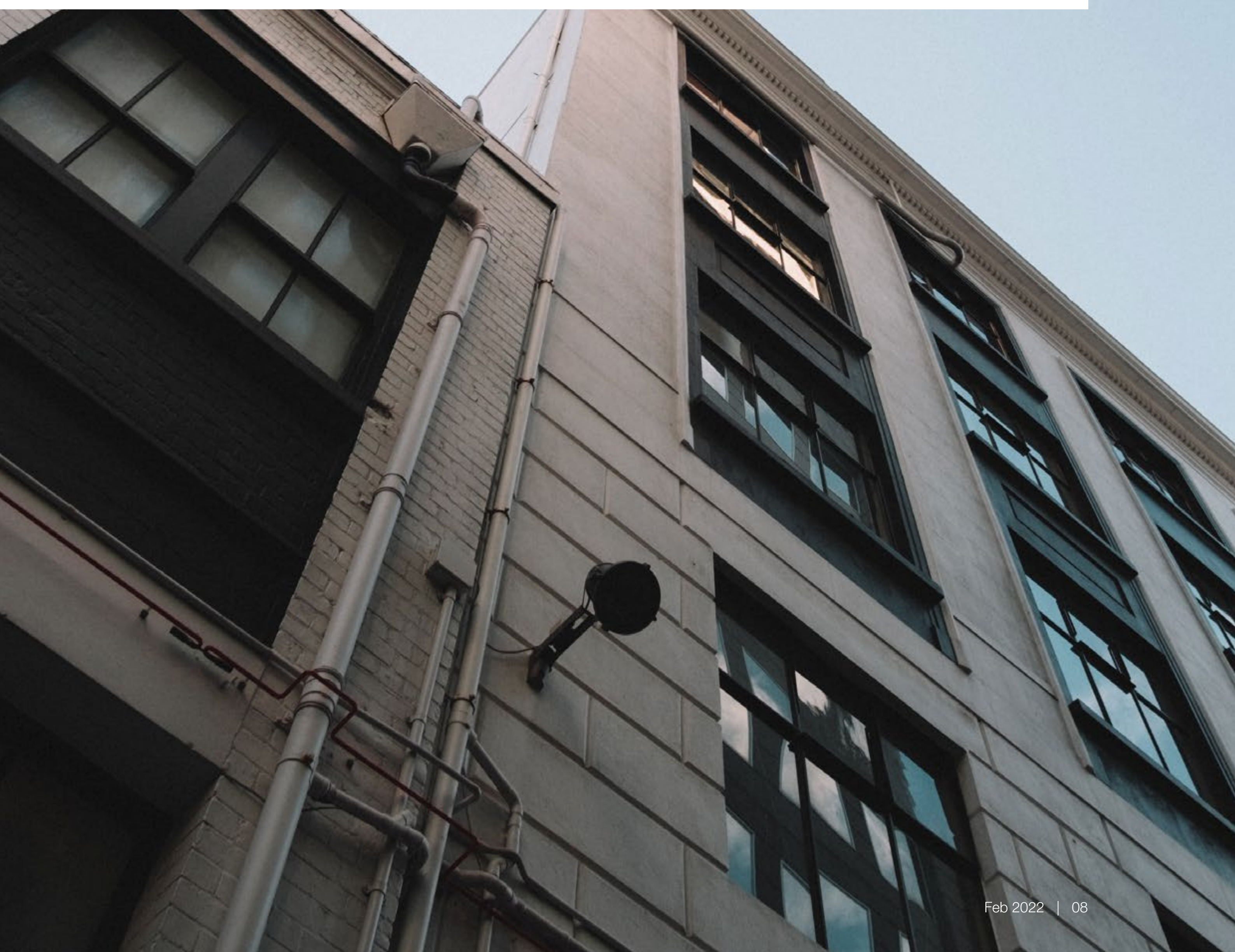
5. Human Talent

Human talent remains in the top 10. Attracting talent to our corner of the world and retaining that talent has always been difficult. These challenges have been sharpened by COVID-19 border closures and travel restrictions. "A very difficult environment for talent is only going to get worse in the next few years with limited migration", said the chair of a property and casualty insurer in Australia.

However, this difficulty in attracting global talent to New Zealand is perhaps second to the concern about what has been dubbed 'The Great Resignation'.
The global pandemic has made many people rethink the role of work in their lives and some are voluntarily leaving their jobs in search of change.

Insurance Banana Skins: NZ risk ratings since 2017





Cybercrime is now the greatest risk

Crime: The risk to insurers from fraud and cybercrime.

Although cybercrime risk has been a rising concern for several years, this is the first time it has ranked at the top. This demonstrates the concern about cybercrime for insurers both locally and globally is growing rapidly.

Cyber criminals are also becoming more agile and sophisticated in their approach. The increasing corporation of attackers, such as with 'ransomware as a service' (RaaS) where ransomware developers lease their malware in exchange for a share of the criminal profits, is enabling and multiplying sophisticated attacks. The rise of cryptocurrencies which operate outside of the mainstream, regulated, financial sector has also made it easier for cyber-criminals to operate with anonymity and impunity.

Bobbie Ramsden-Knowles, PwC UK Partner in Crisis and Resilience, said in a November 2021 press release: "It's impossible to ignore the threat from ransomware attacks as criminal groups become more brazen and scale their operations through 'RaaS' and the use of affiliate criminal groups. At PwC our threat intelligence team has already tracked more ransomware incidents globally, up to September 2021, than in the whole of 2020."

This recent increase in cybercrime corresponds with heightened concern from survey respondents. In some cases, cyber criminals first infiltrate insurers to find out who their cyber risk policyholders are, and then subject those insured to a ransomware attack, knowing that ransom demands will be met by their insurance policies. Insurance Journal confirms that cyber criminals now routinely try to learn in advance how much cyber risk coverage ransomware targets have: "Knowing what victims can afford to pay can give them an edge in ransom negotiations".

Concerns about insurers' ability to underwrite cyber risk are high in part because these events are difficult to model. As a result, cyber insurance policy applications have turned from a simple process that could be completed by a general manager to a long form that needs specialist IT skills.

One worry is that insurers are underestimating the potential costs of cybercrime when writing policies. "With significant increases in cyber incidents around the world – pricing is looking to be inadequate for cyber coverage that has been provided in the market", said the vice president of a reinsurer in Singapore.

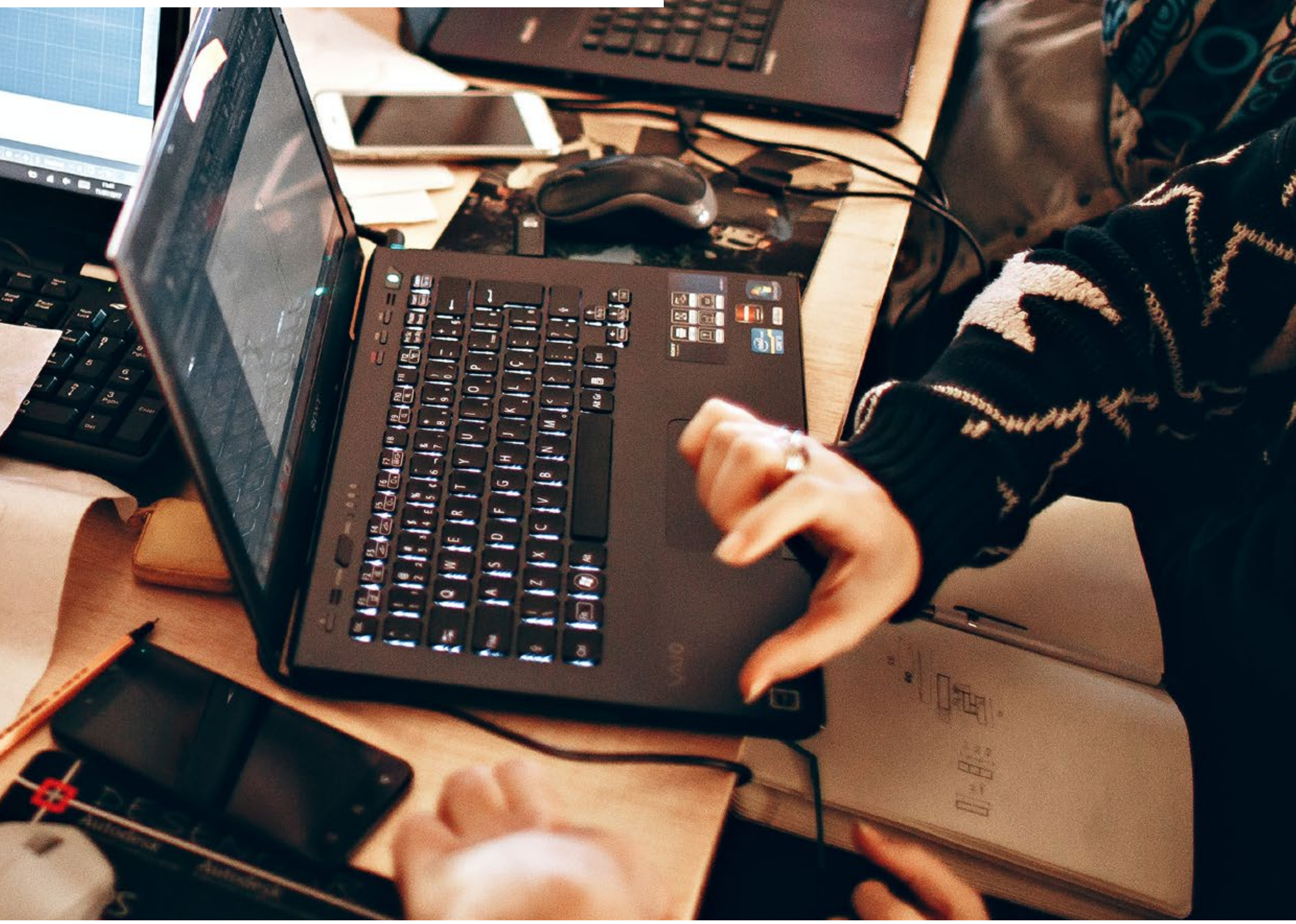
On the other side of the coin, these insurable cyber threats also pose a risk to the insurance companies themselves. In January 2021, the Reserve Bank of New Zealand suffered an illegal data breach of a third party file sharing application, which resulted in the Privacy Commissioner issuing its first-ever compliance notice under the Privacy Act 2020. This attack demonstrated the risk of exposure of customer personal data, whether inadvertent or malicious, direct or indirect, for insurance companies. Data breaches can incur significant financial losses through remediation costs, potential fines and lawsuits. The insurance sector revolves around trust between customer and supplier, and a fundamental consequence of a cyber attack is the potential loss of trust in that relationship.


Reducing cyber risk while working remotely

Alongside an increase in ransomware and phishing attacks linked to COVID-19, insurers need to consider how the shift to more remote working might have increased the risk of cyber incidents. Organisations may have bypassed existing cyber security procedures and good practice or taken shortcuts which now need to be reviewed.

Three areas insurers can focus on to reduce the immediate risk of a cyber incident are:

- Secure newly implemented working practices and supply your workforce with updated guidance on what suspicious activity looks like and how they might be targeted.
- Ensure you have visibility of your digital landscape to detect and respond to the growing threats and be prepared with cyber incident management plans and crisis simulations with your business leaders.
- Ensure you have greater confidence in your identity governance and access control processes. Remote working places greater dependence on managing privileges and removing access to systems and applications.



Climate change risk is increasing for insurers. And it's urgent.

Climate change: The risk to the insurance industry from climate change, both as an underwriting and an operating risk.

Environmental, Social, and Corporate Governance (ESG) is a term that covers a range of issues facing the world today, all of which may impact on the sustainability of social and economic activity in the long-term. Climate change, ranking as the third highest concern in the latest survey, highlights that this is one of the most pressing issues facing the insurance sector here in New Zealand.

Climate risks are typically considered in the following categories:

Physical risks

Risks arising from changes to the climate or extreme weather events.

- Acute physical risk: Risk from worsening short-lived extreme weather impacts e.g. flood or drought.
- Chronic physical risk: Risk from impacts due to slow insidious change such as increasing temperature or water stress.

Transition risk

Risks arising from the process of adjusting to a low carbon economy.

- Policy and legal risk: Risk from emerging regulation aimed at addressing climate change or from litigation e.g. increased compliance costs.
- Market and economic risk: Risk from shifting supply and demand curves as economies react to climate change e.g. company or securities valuations, business model viability.
- Technology risk: Risk from emerging technologies aimed at supporting the low carbon transition e.g. write-offs for investments in disrupted technologies, investment in new technologies.
- Reputation risk: Risk of damage to brand value and loss of customer base from shifting public sentiment on climate change.

What is there to worry about?

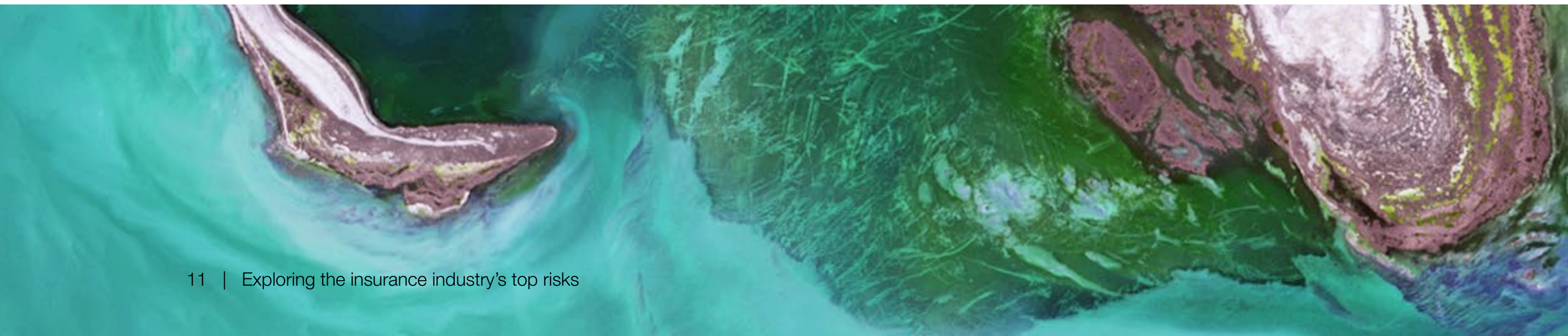
All insurers will be affected by climate change and these emerging risks, but potentially in different ways depending on the line of business. As we transition to a low carbon economy, insurers will need to rebalance their investments and and consider what impact on the climate the companies have, that they hold investments with. Property insurers will need to adjust their pricing to allow for increased frequency and severity of weather related claims, and consider the effect of the climate on demographics of where people live and the resultant impact on their strategy. Life insurers should consider the longer term chronic physical risks on their policyholders' mortality and morbidity if temperatures continue to rise.

Insurers should carry out impact assessments to attempt to ascertain how climate change is likely to impact their business across their assets, liabilities and operations, and the materiality of such impacts, and develop action plans to help mitigate these impacts.

Climate change and regulation

There is an increasing regulatory focus on the insurance sector and the wider ecosystem to embed sustainability, particularly the impact of climate change, within both the corporate structure and financial products offered.

In 2015, the Financial Stability Board created the Taskforce on Climate-related Financial Disclosures (TCFD) to improve and increase reporting of climate-related financial information. The Taskforce published a report setting out recommendations for entities to voluntarily disclose climate-related information. This included requirements for insurers to carry out scenario testing consistent with increased physical climate-related risks to assess how resilient their strategies are to climate-related risks and opportunities.



> Climate change has systemic impacts – pressure is put on economies by physical climate changes and regulatory pressure to evolve and adapt. This may make insurance unaffordable for some and change insurance expectations of consumers.

– Dr Victoria Hatton, Director, Sustainability and Climate Change, PwC New Zealand.

In September 2020, the New Zealand Government announced its intention to implement mandatory reporting on climate risks and tasked the External Reporting Board (XRB) with developing reporting standards to support the new reporting regime, based on the TCFD recommendations. In October 2021, the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Bill was passed and received Royal Assent. As a result, the XRB has a mandate to issue climate standards as part of a climate-related disclosures framework. The mandatory reporting regime takes effect for accounting periods that start on or after when the XRB issues the first climate standard, currently anticipated in December 2022.

Climate change-related opportunities for insurers

Innovative products

- Targeted climate-related insurance or reinsurance products that relate to specific magnitudes and/or type of weather event, rather than value of losses.
- Expand into new markets (e.g. the Pacific Islands) where climate change is driving changes in risk and demand for insurance across economies.

Better pricing

- Insurers who incorporate climate change into their projections and stress-testing will be able to price risk more accurately and better understand future profit sources.
- Pricing strategies may be implemented to encourage more business from low emission companies, which should be more sustainable in the long-term and improve retention rates.

Risk mitigation

- Demand for products that include risk mitigation will increase. For example, rebates or discounts for more flood-proof home constructions would help customers understand and manage risks while decreasing the likelihood of future claims.
- Insurers may start to select which individuals or companies it insures so that it isn't exposed to insurance of high emission assets that would be very expensive (if not impossible) to replace.

Sustainable business model

- A public shift to a more sustainable portfolio and business model is likely to attract customers.
- Assets will be less exposed to risks associated with transitioning away from high-emitting industries.
- More accurate understanding of expected future claims and the need for reinsurance.

How PwC can help

We are a community of solvers combining human ingenuity, experience and technology innovation to deliver sustained outcomes and build trust.

Insurance Services

More than 40 partners and directors make up the specialist insurance side of PwC New Zealand's financial services team. We can support you with:

- Managing your financial, operational and reputational risks
- Audit and assurance services
- Managing your regulatory requirements and financing reporting
- Finding merger and acquisition opportunities
- Actuarial services including modelling, risk management and appointed actuary functions
- Governance, risk and compliance
- Internal audit.

Sustainability and Climate Change Services

PwC's Sustainability practice helps organisations plan, source, deliver, finance and measure the wider impact of products and services. We're helping to future-proof businesses by making them more resilient, agile and sustainable. We can support you with:

- Sustainability and climate change strategy development
- TCFD and climate-related disclosure standards readiness assessment
- Climate risk assessment and scenario analysis
- ESG supply chain audits, sustainable procurement strategy and supplier assessments
- ESG due diligence
- Zero carbon strategy development
- Responsible investing framework development and screening.

Technology Consulting

PwC's Technology Consulting team advises New Zealand organisations on every aspect of technological change, and how to get the most from it. We can support you with:

- Developing and delivering innovative technology strategies
- Implementing new technologies and managing the business change required
- Core technology vendor selection and implementation
- Information management strategies
- Key performance metrics and KPIs
- Data and integration between systems
- Partnerships with technology vendors.

Cyber Security

PwC's Cyber Security team is one the largest dedicated security and privacy cyber teams in New Zealand. We're focused on solving the biggest cyber problems facing organisations today. We can support you with:

- Managed cyber defence and security operations as a service
- Managed IAM services
- Identity governance and privileged access strategy, roadmap and implementation
- Security in the cloud, with integration, implementation, operation and governance
- Information conscience for privacy and data sovereignty and protection
- Proactive global threat intelligence services
- Cyber crisis management and incident response services
- Security architecture and execution augmentation
- Risk and opportunity assessment
- Certification and accreditations
- Security training and awareness
- Virtual CSO/security co-source partnership
- Strategy and governance
- System architecture design and build
- Offensive security with penetration testing.

Forensic Services

PwC's Forensic Services team uses global methodology to closely manage the risks associated with business fraud, financial crimes and other irregularities. This can be critical support if your business ends up being a victim of a financial crime or a cyber attack. We can support you with:

- Anti-money laundering services
- Forensic accounting
- Fraud prevention
- Integrity due diligence
- Shareholder and director disputes
- Crisis management
- Forensic technology solutions
- Incident response
- Investigations
- Protected disclosure and whistleblower services.

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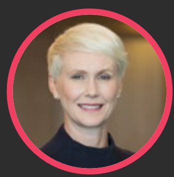

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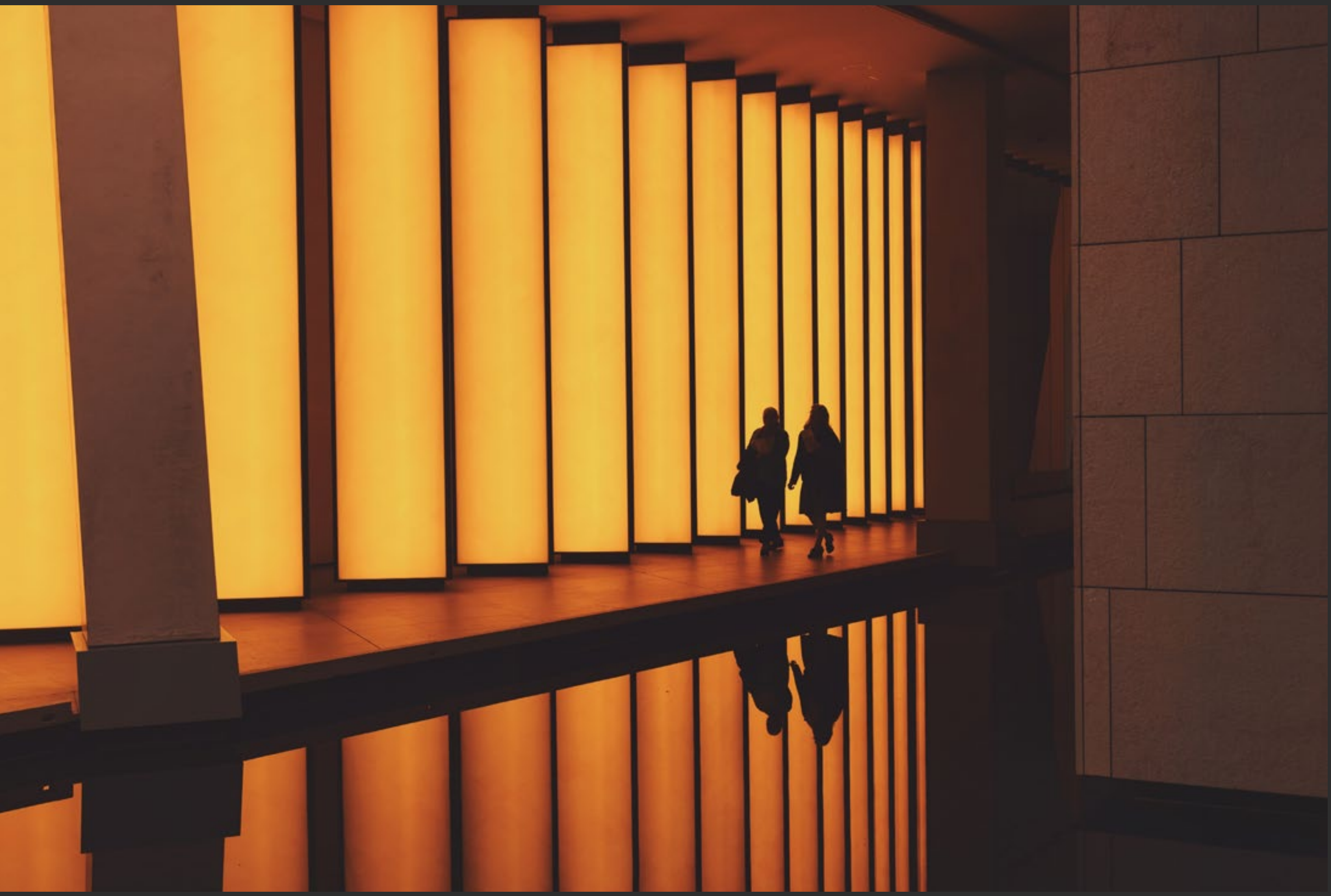

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