

# CIR

**CONTINUITY INSURANCE & RISK**

▶ **Rail transport risk** Meeting the demands of tomorrow's passengers and freight customers will require big changes

▶ **Weather risk** If heatwave conditions become more common, businesses and governments face new risk realities

▶ **Brexit and trade** Amid ongoing uncertainty surrounding arrangements, much has been said about ports congestion

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▶ **Digital disruption and claims**  
Times have changed

▶ **Software Report**  
New applications for business continuity

▶ **Book review**  
Dealing with trauma in the workplace

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September 2018

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## Clever clogs

▶ AI: What's holding it back?



▶ **Industry view:** "Intangible risks represent a great opportunity and a new frontier for underwriters"

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## Comment

**B**ritish Airways this month reported a data breach involving the access of names, email addresses and credit card information belonging to some 380,000 customers.

The National Cyber Security Centre was quick to advise those who used the BA website or mobile application to purchase services while the data was at risk to contact their banks, secure or change passwords, and monitor financial accounts for any suspicious transactions.

This is the latest in a series of cyber incidents that shows how no business is immune to attack. And whilst the list of breaches gets longer and longer, the public's patience is getting shorter and shorter.

New research from the CBI shows just how important information security has become to consumers today. It is in fact the top concern for potential customers and business partners, with almost nine in ten people identifying good data security and the protection of personal information as the key characteristic they look for when deciding where to spend.

In response to the findings, the business group says a commitment to data privacy is a "fundamental part of a business's licence to operate in the modern economy". Chief policy director at the CBI, Matthew Fell, says that as businesses increasingly move from the physical to the digital, cyber security has become central to a company's very existence.

"Cyber security has a direct impact on consumer trust. Almost 90% of consumers see data security as the key characteristic they look for in a business, when thinking about where to spend their pay cheque," he says. "Responsible data use is the number one reason a customer will stay loyal to your business. And irresponsible data use is the main motive for looking elsewhere.

It's absolutely vital. And it means having a good cyber security strategy will make your business more competitive.

"Businesses must also go beyond merely having a privacy policy. When it comes to data protection every person in this room has a privacy policy. But firms need to go further. Beyond legalistic jargon. To a point where customers have a clear roadmap of how their data is collected, used, shared or erased."

The CBI is urging firms to do more in their engagement with consumers over personal data. Its advice includes going beyond the legal requirements of a privacy policy, as people identified greater transparency of how data is used and making it easier to delete data shared as key actions for firms to take. It suggests firms tell customers about their data rights – over half of consumers say they are not aware of what rights they have when sharing data. Finally, it advises firms to always check they are using personal data in the way a consumer expects – half of the respondents to the CBI's survey said they did not believe businesses have their best interests at heart when using their personal data.

These are just some of the new realities for businesses engaging with consumers in the modern economy, realities that must be faced if customers are to be retained.

Meanwhile, British Airways is facing a £500 million group action suit on behalf of passengers for the "inconvenience, distress and misuse" of private information resulting from its recent breach. Beyond what it may do to BA's reputation and coffers, this development may have wider-reaching ramifications for insurance and limits of liability.



Deborah Ritchie, Editor >

# CIR Risk Management

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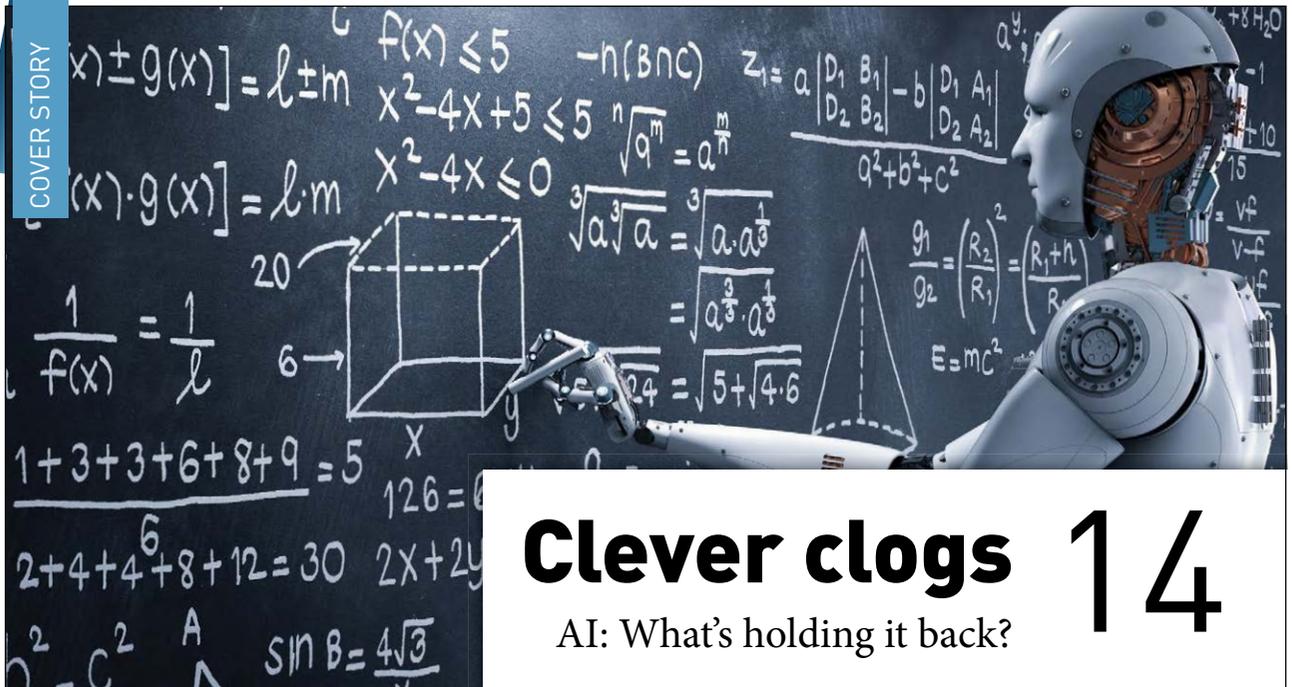


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are funded.  
Clearly, the likelihood that we may all soon be living in a warmer world means we must factor heat-related disruption risks into resilience planning, says Verisk Maplecroft research.

...says. They may need to review operational health and safety procedures and training."  
The starting point for any business should be to consider how extreme heat might affect its assets and operations. Lowe says the insurance industry is already developing additional capacity to help businesses mitigate these risks, but that "a lot more education is needed"; because, unlike risks related to storms, flooding, or snow, "heat risks are something that in the UK and Europe very few people have really thought about before". It may be that the most important long-term consequence of the summer of 2018 will be that more of us now start to do so.

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per prosecution brought by the... has increased six-fold in the... according to research from law firm... the number of prosecutions... has reduced to almost a quarter of... (from 114 in 2013/14 to... five years ago (from 114 in 2013/14 to... data obtained directly from the EA... fine was £147,575 in 2017/18... £23,731 in 2013/14. Further, there were... against company directors in 2017/18.

Government's income from Insurance Premium Tax... to £6bn for the year ending July 2018, up 22% on... £8bn collected the previous year. This represents a... greater impact on businesses and consumers... initially predicted, according to accountants UHY... Young.

Global commercial insurance prices rose, on... average, for the third consecutive quarter, according to... Marsh's Global Insurance Market Index for the second... quarter of 2018. The increase was largely driven by... insurance pricing for property lines, which continued... to be affected by 2017 catastrophe losses, and by... increases in financial and professional lines.

Global economic losses from natural catastrophes... in 2018 made disasters in the first half of 2018... £536bn – well below the ten-year average... economic losses and significantly... reported for the same period a...

News in brief

For more information on these stories and other industry news and views, visit [cirmagazine.com](http://cirmagazine.com)

The International Underwriting Association is... urging companies to scrutinise contract wording... carefully before deciding on cover. Companies are... warned that not all triggers are included in every... policy and that it is important to perform an effective... risk assessment before considering coverage options.

The Chartered Institute of Internal Auditors has called... for tougher governance of large private companies. The... audit watchdog is urging the Financial Reporting Council to... strengthen its proposed principles for large private company... by more closely mirroring measures contained within... Corporate Governance Code for public-listed companies.

AIR Worldwide estimates that in... losses from Typhoon Jebi, which mad... (US\$2.3bn) and JPY502bn (US\$4.5bn),... as a cat 3 hurricane in Japan in 25... speeds of 180 km/h (112 mph) before ma... landfall on the main island of Honshu strik... major urban centres of Kobe and Osaka.

British Airways reported a data breach inv... the access of customer names, em... credit card inform... Security...

application testing is deterministic... with a finite number of scenarios... that can be defined in advance. AI... systems require a limitless approach... to testing. There is also a need for... capabilities for evaluating data and... learning models, choosing algorithms... and monitoring for bias and ethical... and regulatory compliance."  
Algorithmic software will... regulations in future.

At the same time, AI will bring... benefits to insurers as well as new... risks. AI applications will improve... the insurance transaction process... with many benefits already apparent... Customer needs can be better... identified, policies can be issued – and... claims processed – faster and more... cheaply. Corporate risks, such as... interruptions, cyber security



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## Insurance M&A activity up as Brexit plans crystallise

✔ **Merger and acquisition activity in insurance is up for the second consecutive six-month period and, as most insurance businesses now have their Brexit contingency plans in place, the focus returns to growth**

**M**erger and acquisition activity in the insurance industry rose in the first half of 2018 with 186 completed deals worldwide, up from 180 in the second half of 2017, according to Clyde & Co's 'Insurance Growth Report', released this month. This marks the second consecutive six-month period of modest increases in the volume of transactions since the low point in H1 2017 that followed two years of steady decline.

Activity in the Americas was reported to be up, with 97 deals in the first half of this year, compared with 90 in the preceding six months – the strengthening economic outlook a key driver, in addition to shifting reinsurance market fundamentals in Bermuda.

Asia-Pacific saw an uptick in deals from 20 to 25 with Japanese acquirers accounting for the lion's share, ahead of Australia and Taiwan. Activity in the Middle East and Africa remains subdued with just four deals in H1 2018, slightly up on the three completed in the previous six months. Europe was the only region to see a decline in M&A with 59 deals, down from 65 in H2 2017, with the overhanging uncertainty around Brexit continuing to act as a brake on activity, according to the report.

**“Meanwhile, new market entrants such as Amazon and Google are looking to challenge established models and heap further pressure on traditional insurers”**

Global head of corporate insurance, Clyde & Co, Andrew Holderness says: “After a sustained period of sliding M&A volumes that bottomed out in the first half of 2017, the first green shoots of recovery that we saw at the turn of the year are now taking root. The characteristics of the operating environment haven't changed – the market remains uber-competitive and generating growth a perennial challenge – so M&A can provide potential synergies on reducing the cost base, build scale and access new customers. Deal-makers are feeling renewed confidence, buoyed by strengthening economies in the US and Asia, greater regulatory certainty in China and the Middle East, and the need to pick up the pace in Europe as the risk of a chaotic Brexit looms large.”

There have been a number of completed outbound deals involving Bermudan acquirers in the first half of the year as well as announcements of takeovers of Bermudan reinsurers such as AXA's move on XL Catlin and AIG's tie-up with Validus with an expectation of more M&A to follow.

“There is a seismic shift underway in the reinsurance market. It is proving increasingly difficult to remain relevant as a large monoline reinsurer and as a result Bermudan businesses continue to be put up for sale or look to diversify by acquiring new underwriting assets themselves. In jurisdictions around the world large reinsurers are striving to get closer to their customers by increasing their footprint in the primary market either organically or through acquisition. Carriers are looking to write risks at every level, be it from the direct side, reinsurance or retrocession and for that they need sufficient scale and balance sheet strength,” Holderness adds.

**“Deal-makers are buoyed by strengthening economies in the US and Asia, greater regulatory certainty in China and the Middle East, and the need to pick up the pace in Europe as the risk of a chaotic Brexit looms large”**

Despite an uptick in M&A in Europe in H2 2017, fuelling optimism that the Brexit lag effect was over, deal volume dropped again in the first half of 2018. However, deals are still happening and Europe remains the second busiest region for M&A, behind the Americas.

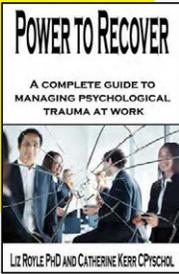
“Brexit preparations have been absorbing huge chunks of management time, taking priority over M&A. Despite continuing uncertainty over the detailed mechanics of Brexit, most affected insurance businesses now have their operational plans in place and focus will return to the growth agenda. This means re/insurers within the EU and the UK will start looking for targets again while they themselves may be targeted by acquirers from outside the region,” Holderness concludes.

A number of deals in 2018 have involved InsurTech targets such as Canada's Mnuvo and Jungo of The Netherlands. Interest in technology as a growth driver has further accelerated, a trend that is set to continue with technology companies being targeted and looking to acquire insurance assets themselves.

Meanwhile, new market entrants such as Amazon and Google are looking to challenge established models and heap further pressure on traditional insurers. In one example last week, Chinese online retail giant JD.com announced that it had received approval to take a 30% stake in Allianz China, to become its second largest shareholder.

✔ **Written by Deborah Ritchie**

## Inspiration for resilience professionals



### ▶ Power to Recover

Dr Liz Royle & Catherine Kerr, KRTS International, 2018. Reviewed by Deborah Ritchie, Editor, CIR

[powertorecover.com](http://powertorecover.com)

Some jobs are more risky than others. Individuals working in the emergency services, security, heavy industry or health and social care are clearly at greater risk of encountering psychological trauma due to the nature of their occupation. At the same time, though, very few in other, less obviously risky roles are completely immune to difficult or distressing events such as assaults on staff, serious accidents or injuries, robberies, or even the death or suicide of colleagues.

Following any traumatic event, people often suffer unnecessarily. They may not be able to function well, and could even be left permanently damaged by the experience. Even in the digital age, people risk issues are prevalent in any sector of industry... and they're quite often badly dealt with, if they are dealt with at all. It is a wonder such issues are so often referred to as 'soft' when it appears to be so hard for organisations to address them.

The second edition of *Power to Recover*, published this month, is the book for anyone involved in the management of a traumatic incident at work – be they organisational managers, personnel, mental health or welfare professionals, or business continuity, EAP or health and safety professionals. This guide aims to help the reader to first identify what constitutes a critical incident and then learn how to deal with it.

Lead author Dr Liz Royle has clinical experience of working across the full range of psychological trauma – from responding to traumatic incidents to working therapeutically with PTSD and historical trauma. She is a psychotherapist and EMDR Europe approved consultant. Royle has substantial experience of the strategic management of trauma and proactive interventions for high risk organisations, her professional experience cemented providing psychotherapy and critical incident interventions for the Greater Manchester Police, incorporating Gold Control, firearms, Child Protection, Witness Protection and the Major Armed Control Unit. Co-author Catherine Kerr is a chartered counselling psychologist, a senior accredited BACP integrative psychotherapist and an EMDR Europe approved consultant. Kerr has similar experience of working with high risk organisations and with clients with PTSD. She has a management background with local NHS Primary Care Groups, providing early preventative measures in response to mental health issues.

Both authors use their vast experience of working in the immediate aftermath of a wide range of critical incidents to examine the nature of workplace trauma, the human survival

response, the issue of managing the immediate response and how to help groups in the immediate aftermath. They go on to approach the complex area of understanding traumatic stress reactions and to dealing with a death in the workplace. A chapter dedicated to developing a proactive strategy is also included. *Power to Recover* also features a series of appendices to help support readers in gathering information for strategic purposes, suggested content for a trauma policy, an information sheet for friends and family, and an example flowchart for a critical incident, among other useful guides and tools.

**“A section dedicated to our ‘inbuilt surveillance system’ examines the two mental processing routes famously described by Nobel prize-winning psychologist Daniel Kahneman as ‘fast thinking’ and ‘slow thinking’”**

Throughout the book are a number of useful insights that both address the challenges of managing psychological trauma at work and, at the same time, make the case for putting in place such processes. Among them, advice on dealing with individuals who are perceived to be faking reactions and abusing the system in order to have time off, or for compensation or some other hidden agenda. One of the advantages of a properly considered trauma support process, the authors write, is that it deals with everybody equally: “the genuine receive the help they need and deserve and the ingenuine will find themselves being ‘managed proactively’ under the same system”. An entire chapter is dedicated to showing how this works in practice.

A section dedicated to our ‘inbuilt surveillance system’ examines the two mental processing routes famously described by Nobel prize-winning psychologist Daniel Kahneman as ‘fast thinking’ and ‘slow thinking’. This chapter tackles the issue of how these two processes impact decision-making and response in high risk settings.

The issue of trauma at work is generally easier for high risk organisations to manage than it is for smaller or lower risk businesses but, in either case, emergency procedures, business continuity and health and safety reporting will often kick in, leaving the human aspect either completely ignored or vastly misunderstood. And yet, as the authors of this book write, without healthy employees, most businesses would grind to a halt.

*Power to Recover: A complete guide to managing psychological trauma at work* has been written to help address the questions about a topic that, despite its ‘soft’ reputation, are still very hard to address.

## News in brief

### ➤ The latest news for business resilience and insurance professionals

✔ The average fine per prosecution brought by the Environment Agency has increased six-fold in the last five years, according to research from law firm Clyde & Co. While the number of prosecutions against companies has reduced to almost a quarter of where it stood five years ago (from 114 in 2013/14 to 32 in 2017/18), data obtained directly from the EA show that the average fine was £147,575 in 2017/18, compared with £23,731 in 2013/14. Further, there were 22 prosecutions against company directors in 2017/18.

✔ The government's income from Insurance Premium Tax increased to £6bn for the year ending July 2018, up 22% on the £4.88bn collected the previous year. This represents a significantly greater impact on businesses and consumers than was initially predicted, according to accountants UHY Hacker Young.

✔ Global commercial insurance prices rose, on average, for the third consecutive quarter, according to Marsh's Global Insurance Market Index for the second quarter of 2018. The increase was largely driven by insurance pricing for property lines, which continued to be affected by 2017 catastrophe losses, and by increases in financial and professional lines.

✔ Global economic losses from natural catastrophes and man-made disasters in the first half of 2018 totalled US\$36bn – well below the ten-year average of US\$125bn in economic losses and significantly lower than the losses reported for the same period a year earlier.



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✔ The UK government has enacted legislation to help achieve safer flying across the country. The new laws, which will restrict drones from flying above 400 feet or within one kilometre of airport boundaries, come into effect today, 30th July 2018. Following a year-on-year increase in the report of drone incidents with aircraft – with 93 in 2017 – these measures will reduce the possibility of damage to windows and engines of planes and helicopters.

✔ The British Insurance Brokers' Association and Tokio Marine Kiln have launched a new drone insurance offering coverage for companies operating commercial UAS. Through the Lloyd's-backed scheme, BIBA members get special terms and coverage for physical loss of or damage up to a limit of £100,000 per UAS (inclusive of payloads) whilst in the air, on the ground or in transit, including theft and malicious damage (larger limits available on request); and third party bodily injury and property damage liability – inclusive of losses arising from malicious acts up to a limit of £50m each occurrence. Larger limits are available.

✔ BSI has published the revised international standard for auditing management systems, BS EN ISO 19011:2018. The document provides comprehensive guidance on both internal and external audits, covering a range of topics from the management of an audit programme to the planning and conducting of audits, as well as the competence of audit teams.

✔ The Chartered Insurance Institute is looking for industry professionals to join its flagship talent programme: the New Generation Group. The 2018/19 class will be made up of 40 professionals from claims, underwriting, broking and the London Market.

✔ The Environment Agency has launched a campaign to help businesses prepare for flooding. The agency's flood resilience community engagement officers for the North-East have been in touch with more than 700 firms there to raise awareness. Since 1998 there has been at least one serious flood a year with businesses more likely to be destroyed by flood than by fire.

For more information on these stories and other industry news and views, visit [cirmagazine.com](http://cirmagazine.com)



✔ Merger and acquisition activity in insurance rose in the first half of 2018 with 186 completed deals worldwide, up from 180 in the second half of 2017, according to Clyde & Co. This marks the second consecutive six-month period of modest increases in the volume of transactions since a low point in H1 2017 that followed two years of steady decline.

✔ The government has updated its resilience guidance for critical national telecoms. The EC-RRG Resilience Guidelines bring together advice and guidance on agreed best practice in the establishment and maintenance of resilience within telecommunications networks and services for communications providers considered to be part of the UK's CNI.

✔ New research demonstrates just how much consumers value information security today. The way companies treat personal data is the top concern for potential customers and business partners, according to the CBI's research, with almost 9 out of 10 people identifying good data security and the protection of personal information as the key characteristic they look for when deciding where to spend.

✔ The Competition and Markets Authority has launched an investigation into concerns that social media influencers are not properly declaring when they have been paid or otherwise rewarded, to endorse goods or services. Online endorsements from celebrities and influencers can help brands reach target audiences and boost sales. Where influencers are paid or rewarded to promote, review or talk about a product in their social media feeds, consumer protection law requires that this must be made clear.

✔ The International Underwriting Association is urging companies to scrutinise contract wording carefully before deciding on cover. Companies are warned that not all triggers are included in every policy and that it is important to perform an effective risk assessment before considering coverage options.

✔ The Chartered Institute of Internal Auditors has called for tougher governance of large private companies. The audit watchdog is urging the Financial Reporting Council to strengthen its proposed principles for large private companies by more closely mirroring measures contained within the UK Corporate Governance Code for public listed firms.

✔ AIR Worldwide estimates that industry insured losses from Typhoon Jebi, which made landfall in Japan on 4th September, will be between JPY257bn (US\$2.3bn) and JPY502bn (US\$4.5bn). The strongest typhoon to make landfall in Japan in 25 years, it struck as a cat 3 hurricane with 1-minute sustained wind speeds of 180 km/h (112 mph) before making a second landfall on the main island of Honshu striking the major urban centres of Kobe and Osaka.

✔ British Airways reported a data breach involving the access of customer names, email addresses and credit card information. The National Cyber Security Centre advised customers that used the website over the affected period to contact their banks, ensure passwords are secure or change them, and also monitor financial accounts for any suspicious transactions.



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# Soft stuff, hard truths

✔ Deborah Ritchie speaks to Dr Liz Royle about her work helping organisations to prepare for, and respond to, the psychological impact of trauma and crisis, and the new ISO 22301

**W**hat are the most striking elements of the new Guidelines for People Aspects of Business Continuity, the ISO 22301?

The very fact that it is a standalone document dedicated to the people aspect is encouraging and suggests a trend towards a greater acceptance of the importance of managing the people behind the operations rather than just the equipment and premises.

I think it is also clearer. For example, rather than simply saying 'offer support' it defines the different levels of support and sets out a comprehensive approach. To me, the definitions are important. After all, what does 'support' mean? And it's all a bit pink and fluffy isn't it, and unlikely to engage people.

Of course, the document is still more relevant to large organisations than it is to smaller firms. For instance, it may be beyond a smaller organisation to set up a relatives response team. But for a larger, high-risk organisation, a relatives response team is arguably a necessity. This is an important element of all this – the higher risk companies are in much greater need of this standard.

Additionally, the new guidelines are updated to reflect modern business trends, such as an increasingly mobile workforce.

**How competent are organisations in looking after staff following trauma? What does good look like?**

Whilst we are generally much better than we were 20 years ago, organisational competency is still

incredibly patchy. Some are great, others pay lip service or do nothing. The costs of this are higher staff turnover, sickness absence rates, low morale and productivity as well as potential litigation, notwithstanding the human cost.

'Good' involves being prepared in advance, considering risks, mitigating the ones we can and putting in place processes to manage those we cannot. It means having a needs-based continuum of care for those affected – not a 'counselling or nothing' approach. It requires shared responsibility between leaders, managers, employees and healthcare or human resource professionals, rather than a sole abdication of responsibility to the latter. It means taking a long-term view and considering trigger events. It also means review and evaluation. It should bring measurable results. If it does not, then it's simply a 'nice to have' initiative and, when resources are tight, will be shelved or not taken seriously.

Some companies have fallen into the trap of delegating responsibility completely to an employee assistance provider or HR. There is a lack of recognition here of the value and effectiveness of peer support. Companies miss out on the support within the workplace element if they simply delegate the task.

**How are new technologies improving the people aspects of business continuity and how is it making life more difficult?**

Technology allows us to be consistent in our approach. When it comes

to crisis mental health care, we can reach more people with the needs-based continuum of care. Technology means that information and good psychological education can be put in reach of everyone. For example, our app KRTS Power to Respond can be deployed immediately and provide guidance on self-recovery and supporting colleagues.

In some ways, if we think about technology and the people aspects, they almost feel like they should be at opposite ends of the continuum. I think new technologies can facilitate education – which is really crucial – as well as supporting communication and accountability. It can also deliver mental health support in a more engaging way and more flexibly. And it helps us to reach people we might not otherwise have been able to.

In my field, we have been able to use it with people who have been out in combat zones or isolated parts of the world, returning people to operational fitness more quickly.

Early intervention, psychological education and peer support are the three main clinically effective factors in recovery so technology makes this simple and cost-effective.

The downside, in terms of mental health care, is that it could just be another tick in the box. Instead, it should be considered as a way to improve reach rather than just relying on one approach. There is also a danger that we become too reliant on technology and forget face-to-face communication. People need to be treated as people rather than just a user of technology. In conclusion,



Psychologist Dr Liz Royle is a director at KRTS International

technology should be integrated into other systems of care.

**Which sectors are leading the way in this arena and what can others learn from them?**

I couldn't identify a particular sector. As I have mentioned, competence is patchy – even in the police services and you'd expect them to be the gold standard for managing crisis mental health, yet they vary considerably. It depends on leadership and their

priorities. A change in chief constable can shift these and the associated resources. A forward-thinking leader who genuinely recognises the benefits of managing the people aspects, and who is properly informed on the subject, will set the gold standard regardless of sector. There are concrete financial benefits in doing so, too.

Perhaps you might have expected me to point to a high-risk industry that is leading the way here, but

sometimes that couldn't be further from the truth. Often they don't feel they need it; senior management think their employees are 'tougher than that'. Often it's the people at the bottom driving change. Management can be inclined to think 'if you can't stand the heat, get out of the kitchen'.

This topic really does reveal people's attitudes and stereotypes, as well as their opinion of mental health services and whether or not they think they are effective. Regardless of leadership, as the initiatives filter down to grass-roots, some managers may be really proactive and others may be less facilitative or even block it.

I also think a negative attitude is somewhat fed by the media, which tells stories about people with PTSD who never recover. This is quite simply not the case.

**You have just published your latest book. What was the key impetus for *Power to Recover*?**

I've always believed that knowledge is power. Seeing so many people and organisations disempowered by a lack of, or insufficient facts frustrates me. This is my fourth book and I've contributed to many other titles with the aim of taking a complex subject and making it accessible. Mental health and psychological trauma are often seen as intimidating, vague or ambiguous subjects so people avoid learning. They leave it to the 'professionals' and are then ill-informed consumers. It's actually just as factual, process-led and evidence based as any other subject. I wanted this latest book to challenge professionals to think more deeply about the subject whilst keeping it simple and hopefully readable. I enjoy writing too, so that helps!

***Power to Recover* is reviewed on page 9.**

**▶ Interview by Deborah Ritchie**

The global economic growth that artificial intelligence (AI) is expected to provide by 2030 is a staggering US\$15.7 trillion, according to analysis by PwC. AI is automating tasks that require human cognition, such as fraud detection and maintenance schedules for aircraft, cars and other physical assets, and it is augmenting human decisions on everything from capital project management to customer retention and market strategies for new products.

Globally, researchers and entrepreneurs are developing autonomous AI that will not need human intervention to make even highly complex decisions, bringing the potential to create new business models across financial services, healthcare, energy and mining, industrial products, media and entertainment.

Like many much-heralded technology developments before it, some still remain sceptical that this is little more than a fad, set to be replaced by the next innovation, but the current state of play suggests that the scale of AI makes this less 'tomorrow's world' thinking and more today's priority. The driver is the significant benefits it could bring to business. According to research by Accenture, AI technologies are projected to boost corporate profitability in 16 industries across 12 economies by an average of 38 per cent by 2035.

As with any such reward, standing alongside are a host of equally large potential risks. Existing AI applications are built around so-called 'weak' AI agents, which exhibit cognitive abilities in specific areas, such as driving a car, solving a puzzle or recommending products or actions. With the first tangible benefits of weak AI applications already being felt, expectations for AI technology

# Clever clogs

- Artificial intelligence is expected to provide a staggering US\$15.7 trillion of global economic growth by 2030, with applications across most sectors
- AI will bring about new liability scenarios and challenges as responsibilities shift and interconnectivity exacerbates vulnerabilities, particularly for CNI
- New capabilities are needed for evaluating data and models, choosing algorithms, and monitoring for bias and ethical and regulatory compliance

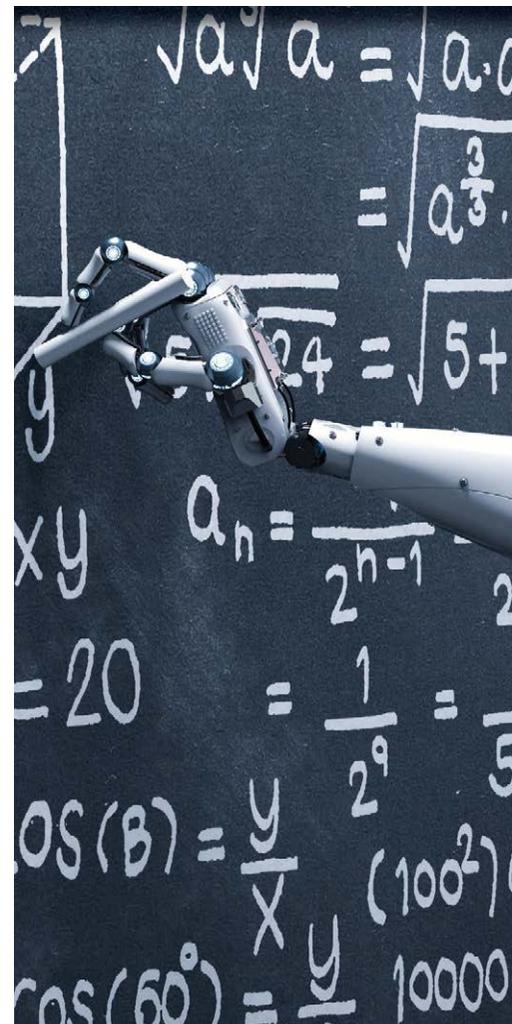
✓ **With AI becoming increasingly mainstream, the nature of its potential risks grow in complexity and number. Before we can fully harness the benefits, there are a number of potential pitfalls to consider. Martin Allen Smith reports**

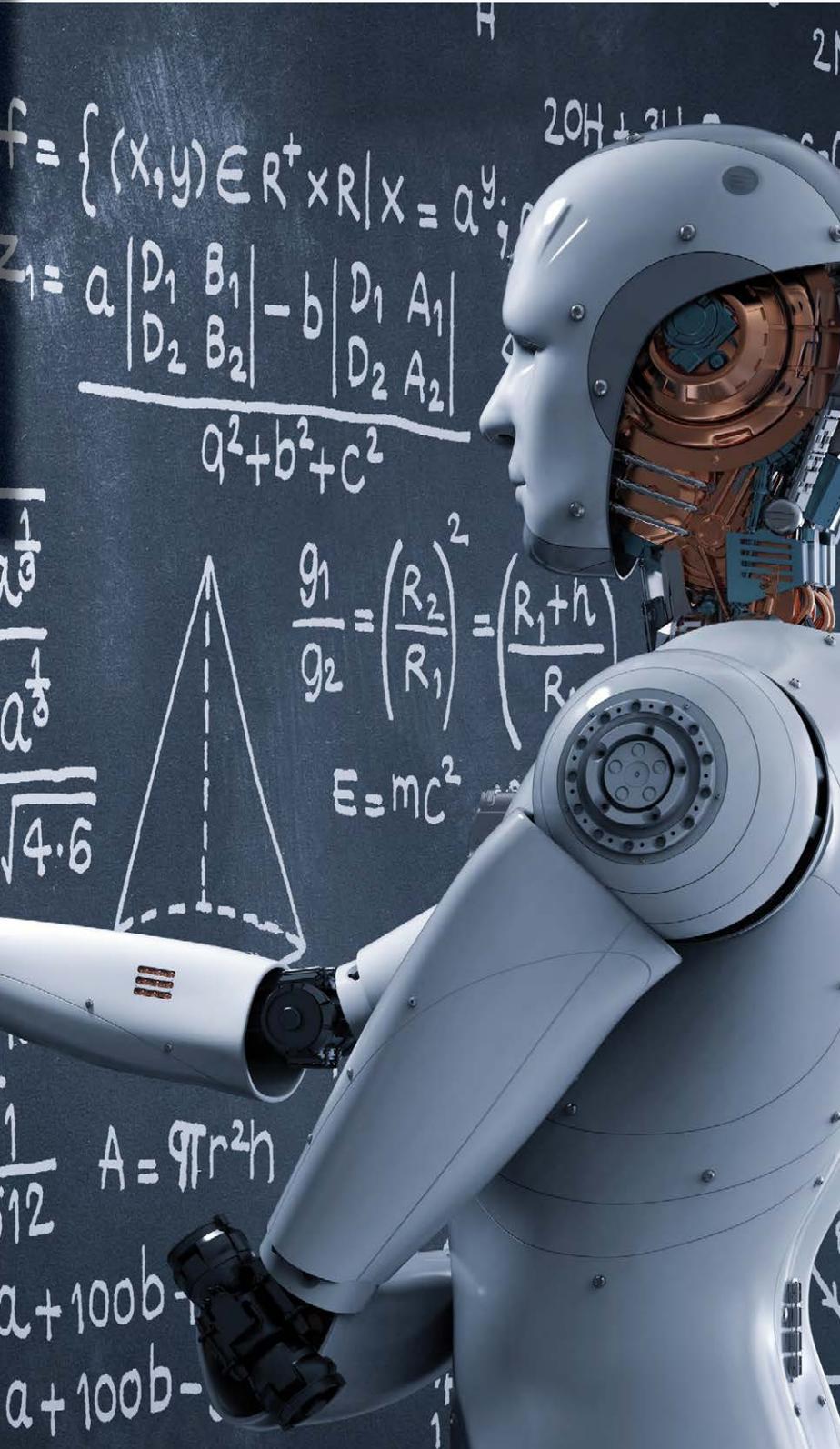
are rising, boosting the prospect for further large-scale investment in anticipation of the benefits of more human-like or 'strong' AI in future.

Risks and benefits will appear in the short- or long-term depending on how long it takes for 'strong' AI applications to be deployed in the real world. For businesses, the potential threats could easily counterbalance the huge benefits of such a revolutionary technology. According to the Allianz Risk Barometer 2018, the impact of AI and other forms of new technology already rank as the seventh top business risk, ahead of political risk and climate change.

Companies face new liability scenarios and challenges as responsibility shifts from human to machine. Meanwhile, increasing interconnectivity means vulnerability of automated, autonomous or self-learning machines to failure or malicious cyber acts will only increase, as will the potential for larger-scale disruptions and losses, particularly if critical infrastructure is involved.

This is where things really venture into the unknown. One of the challenges of assessing business





liability and risk when AI fails is that courts assess liability and damages based on prior legal precedent. This means that AI-based systems will inextricably be judged by applying legal concepts and assumptions based on human involvement and outdated case law. Legal claims of negligence involve traditional human concepts of fault, negligence, knowledge, causation and reasonableness and foreseeability. There is uncertainty surrounding a scenario in which an incident has occurred when human judgment has been replaced with an AI programme.

One of the key benefits of AI lies in predictive analytics: the ability of certain AI software to analyse vast quantities of data and make predictions based on that data. However, the sheer scale of data sets that AI can process compared with humans means that arguably far more things are now 'reasonably foreseeable' to the growing number of companies that use AI to make strategic decisions. This means, potentially, that there is now a dramatic increase in the scope of what a company may be liable for.

The second challenge is that the appropriate standard of 'reasonable foreseeability' will become even harder for humans to judge due to the nature of AI. In the past, 'reasonable foreseeability' was judged according to the objective nature of the 'reasonable (human) person'. The increasing use of AI promises to change this standard to what a company in the same industry with similar experience, expertise and technology would reasonably foresee. This raises two issues. Firstly, predictive analytics relies heavily on the breadth and size of big data sets too large for humans to process, which means it will be difficult for humans to judge what is 'reasonably foreseeable' for a given piece of AI



software. Secondly, AI predictions depend entirely on the type of data it receives. This means that, unless two companies obtain the exact same AI software and feed it exactly the same data, even competitors with the same AI technology and markets may receive and be acting on wildly different information.

Earlier this year, Accenture launched an AI testing service, intended to help organisations to train and sustain their AI systems in order to avoid some of the potential pitfalls. “Testing AI systems presents a completely new set of challenges,” said Kishore Durg, senior managing director, growth and strategy and global testing services lead for Accenture. “While traditional

application testing is deterministic, with a finite number of scenarios that can be defined in advance, AI systems require a limitless approach to testing. There is also a need for new capabilities for evaluating data and learning models, choosing algorithms, and monitoring for bias and ethical and regulatory compliance.”

AI-powered software will undoubtedly alter the digital security threat landscape. It could help to reduce cyber risk by better detecting attacks and yet paradoxically, also increase it if malicious hackers are able to take control. AI could enable more serious incidents to occur by lowering the cost of devising cyber attacks and enabling more targeted incidents. For example, the same programming error or hacker attack could be replicated on numerous machines. Or one machine could repeat the same erroneous activity several times, leading to a large-scale accumulation of losses.

The big problem for insurers lies in trying to foresee the hidden risks in such a potentially far-reaching technological development. Traditional coverages – such as liability, casualty, health and life insurance – will need to be adapted to protect consumers and businesses alike. Insurance will need to better address certain exposures to businesses such as a cyber attack, business interruption, product recall and reputational damage resulting from a negative incident.

AI raises concerns around personal data, particularly the extent to which this can be used to increase intelligence of agents. Data protection regulation in Europe already contains conspicuous limitations to adoption of AI systems. Businesses will need to reduce, hedge or financially cover themselves from the risks of non-compliance with new data protection

regulations in future.

At the same time, AI will bring benefits to insurers as well as new risks. AI applications will improve the insurance transaction process, with many benefits already apparent. Customer needs can be better identified, policies can be issued – and claims processed – faster and more cheaply. Corporate risks, such as business interruptions, cyber security threats or macroeconomic crises, can be better predicted. Insights gained from data and AI-powered analytics could expand the boundaries of insurability, extending existing products, as well as giving rise to new risk transfer solutions in areas such as non-damage business interruption and reputational damage.

Some of the world’s biggest organisations are being open about the prospect that, lurking among all the potential benefits, AI presents some very real dangers. In its 2018 annual report, Microsoft stated: “As with many disruptive innovations, AI presents risks and challenges that could affect its adoption, and therefore our business. AI algorithms may be flawed. Datasets may be insufficient or contain biased information. Inappropriate or controversial data practices by Microsoft or others could impair the acceptance of AI solutions. These deficiencies could undermine the decisions, predictions, or analysis AI applications produce, subjecting us to competitive harm, legal liability, and brand or reputational harm.”

Such is the scale of change promised by AI developments, it seems set to remain a rapidly evolving landscape. Accepting that with the rewards comes significant risk is perhaps the first step towards mitigating some of the dangers.

 **Martin Allen-Smith is a freelance journalist**



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► *Modernisation to being fundamental shift in rail risk - Meeting the demands of tomorrow's passengers and freight customers will require big changes in rail infrastructure and services, with implications for risk and insurance*

## Rail transport and risk



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The UK has one of the safest and most utilised rail services in Europe. However, big challenges lay ahead as the rail industry addresses growing demand, while at the same time anticipating wider trends, like the emergence of driverless cars or the growth of e-retailing.

The number of passenger rail journeys has doubled since 1997, while Britain has seen the biggest shift to rail of any country in Europe since 2009, according to Rail Delivery Group (RDG). This success, however, also means that the UK now has some of the most congested and intensively used railway lines in Europe, putting significant pressure on infrastructure.

Improving reliability and boosting capacity requires major investment – the government expects to invest around £47.9 billion in railways between 2019 and 2024. Along with flagship schemes like HS2, Crossrail and the Great North Rail Project, there are moves to make better use of technology to modernise rail infrastructure, upgrade stations and introduce new rolling stock. Some 7,000 modern trains and carriages will be added by 2020, according to RDG.

### Express freight

Rail strategy and investment is also being shaped by wider changes in

# Modernisation to bring fundamental shift in rail risk

**Meeting the demands of tomorrow's passengers and freight customers will require big changes in rail infrastructure and services, with implications for risk and insurance**

society and technology, such as new technologies, the growing economic importance of cities and the need to reduce carbon emissions.

According to the National Infrastructure Commission (NIC), future rail investment plans will need to reflect the impact of connected and autonomous vehicles and demographic changes. Autonomous vehicles are likely to impact demand for some local rail services, although NIC does not believe that road transport will supplant rail in its core markets, such as in cities and long distance travel.

The digital economy could also affect demand for rail services in other ways. For example, the shift towards e-retailing and the rise of e-commerce

firms like Amazon is likely to have a profound impact on logistics, including rail freight. According to a 2017 study by Network Rail, the growing 'express rail freight' market could offer a faster and more carbon efficient alternative than road or air for the delivery of parcels and retail goods.

### Connected future

Like many other industries, the rail industry is embracing a range of new technology as it seeks to improve performance and improve customer service.

For example, the government has called for smart ticketing to be made available across the rail network by the end of 2018. The government has also committed to invest £450 million in digital technology to meet passenger demand for faster broadband connections as well as to help improve the running of the railway. Digitising the UK's rail network could save up to £770 million over the next eight years according to the NIC.

The benefits of developing technologies like the Internet of Things (IoT), robotics, artificial intelligence and Big Data are attractive. A 2017 NIC report concluded that artificial intelligence



**The secret behind the booming rail industry:**

How will infrastructure, performance and customer services keep up with demand?

#QBEInnovation



# If **rail services** are to meet the demands of tomorrow, **seven big changes** are required.

#QBEInnovation



could save billions of pounds – digital signalling could enable trains to run closer together, potentially increasing capacity by 40% on some routes.

Train companies are also beginning to use more connected sensors for performance monitoring and predictive maintenance. Further down the line, trains are likely to become more automated. Train manufacturer Thales is developing autonomous train technology, which it believes could be used on high-speed lines as well as provide a lifeline for rural rail routes.

The need to cut carbon emissions is also a factor driving innovation and technology – the government has challenged the industry to end diesel powered passenger trains by 2040.

Electric vehicles are already replacing diesel, and there is a push for more ‘bi-mode trains’ that use more than one source of power – including batteries and hydrogen cells.

### Changing risks

The modernisation of rail is likely to have important implications for risk. Better use of technology, more modern rolling stock and an improved operating model, for example, should result in increased safety. The UK’s safety record is second only to Ireland in terms of accidents per distance travelled, according to RDG.

However, modern trains will mean higher values, while increased utilisation of rail infrastructure

could have implications for business interruption exposures. For example, increased utilisation could mean tighter windows of opportunity to inspect or repair track, while outages or overruns would impact a greater number of services.

### Cyber threat

Technology will become a much greater driver for risk in the future transport sector. Electronic ticketing or the use of facial recognition software could increase exposures around privacy and data breaches, while potential security vulnerabilities in wifi on trains pose risks for customer data and train operating systems.

As rail companies increasingly rely on IT systems for ticketing and rail operations they will be exposed to the financial and reputational damage caused by outages, system upgrades or glitches. Perhaps of greatest concern is the threat posed by vulnerabilities in industrial control systems and industrial IoT, which could open the door to cyber related physical damage



“Extreme weather is one of the biggest insurance challenges for the rail sector.”

Matt Roles - Director of Property

## The rail industry faces major change.

Is this too big a job for the techies?

#QBEInnovation



and business interruption losses.

Rail companies are already reporting cyber incidents. In April 2018, Danish rail operator DSB was hit by a massive distributed denial-of-service (DDoS) attack that prevented customers using ticketing systems, as well as crippling the company's internal communications. Earlier in the year, Canadian train operator Metrolinx revealed that it had been infected with malware that is thought to have come from North Korea.

As transport services become more reliant on technology, rail operators and infrastructure providers will need to boost their resilience. Innovation and technology will bring new risks and exposures for train operators. As

operators identify these cyber hazards they will need a plan to mitigate the risks and work with their insurers to address potential gaps in cover.

### Operational risk

Modernisation is also likely to result in big changes to the industry's franchise structure. Today, 28 train companies run services on infrastructure that is owned and maintained by Network Rail. The UK government is considering plans to devolve Network Rail into more autonomous route-based businesses, which could see more responsibility and risk transferred to rail operators.

"Changes to the rail franchise structure could result in a fundamental shift in the business

model and skill set for rail companies, with important implications for risk and insurance. This would require the insurance industry to adapt product offerings to meet the needs of new operating rules and exposure responsibilities," says Matt Roles, Director of Property at QBE European Operations.

Weather is already one of the largest property risks for the rail sector, creating large and complex property damage and business interruption claims. For example, storms that caused the collapse of a seawall in Dawlish, Devon, in 2014 caused massive disruption for rail operators. QBE worked with Network Rail at the time to help get the network back on track.

"Extreme weather is one of the biggest insurance challenges for the rail sector, with significant all-year-round exposures to storms and floods," Roles says. "It's about building resilience, although we can help rail companies mitigate the risks. Insurers have the skills, knowledge and modelling tools, and can work with



"Innovation and technology will bring new risks and exposures for train operators."

Matt Lacy - Director of Casualty

our clients to highlight risk hotspots and suggest potential remedies?”

### Non-damage

While weather claims are one of the main causes of loss, no-damage triggers can also be a significant driver of loss for the rail industry. Under Basic Asset Protection Agreements (BAPAs), contractors and developers are typically liable for bodily injury, physical damage or the cost of ‘interference’ incurred by Network Rail as a result of any works carried out on, or in the vicinity of, rail infrastructure.

BAPAs create significant liabilities. While physical damage exposure is usually covered under third party liability insurance, these policies are not designed to pick up ‘non-damage’ related liabilities. For example, the contractor/developer would be liable under a BAPA for Network Rail’s costs related to an unexploded ordinance, a fire on site resulting in smoke obscuring signalling, or an unsafe structure, such as a construction crane or scaffold close to rail infrastructure.



“Changes to the rail franchise structure could result in a fundamental shift in the business model.”

Matt Roles - Director of Property

QBE has been working with a number of clients and their brokers to adapt third party liability policies and provide cover for certain non-damage exposures. This bespoke solution can be used to cover the cost of over-running works related to a non-damage incident, although it will not cover losses related to general operational issues, such as staffing problems or mismanagement.

There are many events that could foreseeably arise that could result in disruption with rail services – including some less obvious events, such as closure of a site due to an HSE or police investigation, weather related delay, damage to the works themselves, machinery failure or

breakdown. None of these scenarios would trigger the third party policy – unless the death on site was to a third party. These are insurable risks.

### Modernisation

Modernisation is likely to bring about the biggest changes to risk for the rail sector in many a decade. Over the coming years, rail companies and insurers will have to work closely on building resilience to challenging risks, like cyber and extreme weather. While flexible and innovative underwriting, coupled with increased use of data analytics, will ensure that insurers like QBE are a willing and able partner to rail operators as they take on more responsibility and risk.

## Rail infrastructure faces a major revamp.

To what extent can technology help?

#QBEInnovation



By the time you read this, the summer of 2018 will probably be a distant, perhaps barely believable memory. It was, if you will recall, exceedingly hot. In much of the country the weather was consistently hotter than a typical UK summer, and, as is always the case with the weather in Britain, we all made a lot of fuss about it.

For the most part, the heat was welcomed, but, elsewhere throughout the northern hemisphere, more intense conditions brought about widespread and deadly wildfires, water shortages and power outages in parts of North America, Europe, Africa and Asia. Temperatures rose above 40°C in Tokyo for the first time and above 30°C in several locations inside the Arctic Circle.

In the UK, businesses sustained significant disruption beyond buckling train tracks; and the longer-term effects will be felt, in various ways, for months to come. Farmers will be dealing with lower crop, fruit and vegetable yields and scarce supplies of animal feed that will be needed in winter. The knock-on impact on the supply chain will make itself apparent across a number of sectors.

Agriculture, commodity-based industries and many manufacturing processes are directly dependent on water, the supply of which may need to be restricted during a heatwave. In agriculture, construction and other sectors based on intensive, outdoor labour, there comes a point when it is just too hot for workers to continue working without falling ill. The more that such conditions are present, in any location, the greater the impact heat will have on the food supply, construction projects and other economic activity directly dependent upon those sectors.

Global head of resilience and

# Beating the heat

- Political debate about climate change aside, temperature data analysis suggests that summers like this year's could become much more frequent
- Agriculture, commodity-based industries and manufacturing processes are directly dependent on water, the supply of which is restricted in a heatwave
- Business and industry should consider how extreme heat might affect assets and operations; and consider risk mitigation through parametric insurance

 **If heatwave conditions become more common in the UK and other developed, but usually temperate countries, there will be additional challenges for businesses and governments as they adapt their infrastructure to cope. David Adams reports**

sustainability at Aon, Greg Lowe, is pleased that more risk managers and insurers now appear to be paying more attention to heat-related risks. In addition to insurance losses caused by wildfires, he expects the impact of heat-related risks on insurance for agriculture-based business will lead to more use of parametric insurance. "There will be more interest in weather-based products that provide more flexibility where traditional crop yield products don't make sense," he explains.

Heat also creates significant problems for transportation. Small-scale disruption was visible in the UK this summer, when railways were disrupted by problems related to track and signalling equipment caused by heat, but in hotter locations the effects can be more dramatic. Planes may be being grounded, either because runways are melting, or because extremely hot air is so thin that it becomes impossible for planes to take off. Falling water levels can create problems for inland water transport: in August, Germany's Ministry of Transport warned that ships on the Rhine were only able to carry half the usual volume of freight as a result of unusually low water levels.

Office-based businesses may be affected by heat disrupting telecommunications networks, or the cooling equipment that protects IT resources – either in businesses' own premises, or in the data centres where the cloud IT infrastructures upon which so many now rely are actually located.

Lowe also invites risk managers to consider what would happen if, during a heatwave, the heating, ventilation and air conditioning (HVAC) systems in a glass and steel office block failed, rendering the building effectively uninhabitable.

## Stifling power

Drought reduces the supply of water available for hydroelectric power generation, or for coal-fired or nuclear generation. Some renewable energy infrastructures, such as wind generation, may also be adversely affected by heatwave conditions. In August, French energy company EDF was forced to shut down four nuclear reactors in power stations in order to prevent environmental damage that would have been caused by overheated water being returned to rivers after being used to cool the reactors.

At the same time, heatwave conditions also cause spikes in demand for energy, as demand for air conditioning increases. The International Energy Agency suggests global energy use for cooling reached 2,000 terawatt hours in 2016, but could triple by 2050. Demand will increase particularly quickly in countries where urban populations are growing fastest, in parts of Africa or in India, for example, but heatwaves can disrupt power supplies anywhere.

In July 2018, power outages affected thousands of people in the Los Angeles region in the US, where electricity distribution systems were overwhelmed by demand during the heatwave. Spikes in demand for energy also increase volatility in energy and commodity prices, creating further operational and financial risks.

Political debate about climate change aside, temperature data analysis conducted by the Met Office suggests that the effect of climate change will mean that the conditions experienced during heatwave summers like 2018 could become much more frequent over the next two decades – all of which puts the need for weather risk management in a completely different light.

Or at least it should. Financial analysts are well aware of the potential for extreme weather conditions, including heat, to affect the financial performance of businesses. A report published by S&P Global and Resilience Economics in June concluded that “the effect of climate risk and severe weather events on corporate earnings is meaningful”; and that if left unmitigated that impact could increase, “as climate change makes disruptive weather events more frequent and severe”.

In August 2018 Verisk Maplecroft



published a report examining the impact of rising temperatures and increased heat stress on emerging economies. It suggests that 10.8 per cent of the export value in West African economies will be at risk from heat stress by the middle of this century, along with 7.9 per cent of the export value of economies central Africa, 6.1 per cent of that in the Middle East and North Africa, 5.2 per

cent in South-East Asia and 4.5 per cent in South Asia. The most direct impacts would be felt in industries that rely on intensive, outdoor labour, such as agriculture and mining. Its study concluded that economies in northern Europe would be the least affected directly by rising global temperatures, though they would be indirectly through the supply chain.

### Adapting to new conditions

Nicholls suggests that a much broader range of industries and public sector institutions would need to implement more mitigation and adaptation measures: retrofitting air conditioning into factories, offices, hospitals or schools, for example. There will be some difficult questions to answer around how these measures are funded.

Clearly, the likelihood that we may all soon be living in a warmer world means we must factor heat-related disruption risks into resilience planning, says Verisk Maplecroft research analyst Alice Newman. “Companies may need to think about building design, or about diversifying into different locations,” she says. “They may need to review operational health and safety procedures and training.”

The starting point for any business should be to consider how extreme heat might affect its assets and operations. Lowe says the insurance industry is already developing additional capacity to help businesses mitigate these risks, but that “a lot more education is needed”, because, unlike risks related to storms, flooding, or snow, “heat risks are something that in the UK and Europe very few people have really thought about before”. It may be that the most important long-term consequence of the summer of 2018 will be that more of us now start to do so.



## Mind over risk:

# The secret behind cyber resilient businesses and the people who insure them.



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CONTINUITY INSURANCE & RISK



➤ **The next level** - New technologies are fundamentally changing the ways in which insurance business is conducted and many of the benefits have already been realised within claims management. Graham Buck takes a closer look at some of the developments p28

➤ **Claims, disrupted** - Times have changed since brokers visited the lead insurer's office to show a claim for the claims handler to scratch. CIR spoke to Tokio Marine HCC's Carlos Fane about the impact of digital disruption and claims management on insurance claims p30

## Digital disruption & claims management



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Digital disruption has set the winds of change sweeping through all insurance departments, from underwriting to claims handling. As new technology triggers demand for products ranging from drone insurance to 'on-demand' cover for single items such as a laptop, it is also the catalyst for approaching claims management differently.

"New technology has assisted in the management of large volumes of data and storage retrieval," reports Carlos Fane, Senior Claims Council in the Financial Lines Sector of insurer Tokio Marine HCC. "That's reduced the need to instruct external counsel to do the 'heavy lifting' in trawling through information.

"There is also some downside in that digital technology also makes it easier to generate more communications, so to an extent it's undermining progress by creating greater volumes."

Fane adds that the use of artificial intelligence (AI) is increasing across insurers' underwriting operations and is likely to extend to their claims departments. "It could be very useful in classes such as warranty and indemnity insurance. If you have a case where the seller maintains that a material fact was disclosed and the buyer insists otherwise, AI can help in refining the search."

Ideally, insurers will have a fully integrated system linking both underwriting and claims. Tokio Marine HCC believes in investing in insurtech to maintain a competitive edge, although as Fane notes: "Implementing a new system involves a great deal of upheaval and also the risk that it will swiftly become outmoded – so there is a case for outsourcing some elements of insurtech."

Nonetheless, other pan-European insurers have also made major investments in insurtech in relation to

## The next level

✔ **New technologies are fundamentally changing the way in which insurance business is conducted and many of the benefits have already been realised within claims management. Graham Buck takes a closer look at some of the developments**

consumer lines. Allianz, for example, set up Allianz X as an investment unit to identify and invest in digital growth companies that are part of insurance-related ecosystems. Among these is Lemonade Insurance, a three-year old New York-based company operating in 18 US states.

Lemonade uses AI and bots and specialises in tech-powered renters and home insurance for Millennials. Its claims handling has already gained much publicity: claims can be submitted via a mobile app, AI then runs 18 anti-fraud algorithms and if instantly approved, payment can be made within seconds.

In Europe, Allianz's customers in Austria use a smartphone app, Schadenexpress (claims express), to photograph damage to their cars and submit the evidence. The cost of repair work is assessed via 3D computer modelling and claims can be paid in a couple of hours.

The group's Turkish customers can use a single mobile app, My Allianz, for a range of services. They include viewing the progress of a claim, checking their policy information, uploading documents, viewing customised informational videos, and live chat with an Allianz employee. The app also includes one-touch emergency services for calling roadside assistance or an ambulance.

### Moment of truth

Digital disruption is accelerating

change, but a claims notification still represents the 'moment of truth' for both insurer and insured, notes Harriet Parkinson, head of portfolio claims for Hiscox UK and Ireland. "For a customer, this is the first time they will truly know the quality of the product and service they have purchased.

"We find that in these stressful and often emotional moments, many customers still prefer to pick up the phone and talk directly to claims experts. This gives them reassurance that the matter is in safe hands and immediate guidance on how we will assist."

The efficiencies offered by digital disruption can be used to meet the key points of customer demand, which are still giving an indication of when they can expect the claim to be paid or how quickly they can be back on the road, adds Gareth Hemming, director of SME insurance at Aviva UK. "We use both analytics and classic business process engineering in order to simplify the process – focusing on what do we need to find out from the customer and how can we use automation most efficiently?"

Parkinson reports that where Hiscox has noted a shift in digital expectations is post-notification, with customers requiring convenient methods to stay up-to-date with the progress on their claim. "For a growing number of customers the most convenient option is email or



online,” she says. “We expect this trend to continue to grow and also anticipate additional digital channels, such as Alexa and Google Home, will become the norm for our customers.

“After claims notification, one of the key customer needs we identify is speed. While some claims will inevitably require more time to bring to resolution, the smaller value, low complexity ones are prime for an easy and quick settlement.

“New technologies give insurers the opportunity to further improve settlement times, through solutions such as automated repair cost validation and video calling.

Combining this technology with claims underwriter expertise will be vital, to balance speed with a pragmatic and human approach.”

Among the new technologies being applied to claims handling is cognitive document processing (CDP). Developed jointly by professional services and business consultancy group Capgemini and cognitive automation provider HeavyWater, CDP is a solution that evaluates the type, state and relevance of documents and prepares them for secure storage, presentation and sharing.

“Most insurers will tell you they’re digitised, but this may only involve claims documents received to produce an image in the form of a JPEG or similar,” says Michael Carroll, global insurance services leader at Capgemini Financial Services. “In recent years, that process has moved a step further and insurers now input data based on the image and can transfer this work to low-cost locations.

“The development of new technology and robotics enables them to do more with the document once it has been converted into an image. Optical character recognition (OCR) – a technology enabling different

types of documents, such as scanned paper documents, PDF files or images captured by a digital camera to be converted into editable and searchable data – has developed rapidly over the past couple of years. OCR now has capability to read all forms submitted – even handwritten ones – and extract all of the relevant data.”

“So, for example, on a motor claim form you can extract the relevant info and put it into an XML file before intelligent automation software such as WorkFusion adds it to the claims set. OCR and robotics have taken over the work of putting claims data into the system. Despite this, it hasn’t made claims examiners redundant but instead freed-up their time for more valuable work.”

A newer development is concept extraction; technology able to spot key features about an individual and formulate concepts on that person. For example, a worker’s compensation form submitted for a 50-year old employee with a cut foot might reveal that he/she takes insulin. Cognitive artificial intelligence (AI) will pick up this detail and investigate whether the employee is diabetic.

Photo estimating is becoming increasingly sophisticated and UK company Tractable, utilises AI to extract valuable information from photos. By checking the X-ray of an oil pipeline to identify any faulty or sub-standard welding, pre-emptive action can be taken to prevent a potential claim.

### Back to basics

Speed of settlement continues to be a key element in customers’ assessment of their insurer, confirms Matthew Wright, business insurance analyst at NFU Mutual. “New technology is helping loss adjusters get a better understanding of the extent of damage, for example the use of drones to



### “Concept extraction is able to spot key features about an individual and formulate concepts on that person”

reach areas quickly that they wouldn’t normally have been able to inspect without the use of scaffolding or other means. This produces more accurate estimates and reduces both time in assessing the extent of the damage and the number of surprises when repairs begin.

“Telematics and the considerations of technological developments in vehicles themselves, with features such as integrated computers and smart window screens, are developments affecting the motor insurance market. These require the claims teams to develop knowledge of more than just the vehicles themselves but also an understanding of computer technology, mostly in terms of time and cost estimates, as well as picking the right garages when sending the vehicle for repairs.”

Finally, does digital disruption mean the end of the traditional claims form? “For the moment it still has a place, but as with Aviva’s ‘Get a Quote, Not a Quiz’ campaign, we’re applying similar thinking to claims management,” says Hemming.

“The basic questions are ‘what’s happened?’ and ‘what would you like to see happen next?’ which means the claims form will become outmoded over time.”



### Digital innovation brings both benefits and challenges – in equal measure?

A decade or so ago, it was commonplace for a broker in the City to visit the lead insurer's office to notify a claim. The broker would 'show' the claims file to the claims handler who would 'scratch' it with his comments and then show these to each member of the following market. Generally, business was transacted in person to a far greater degree than it is now. Those days have been swept away by digitalisation. A key aspect of this, which has been developing over recent years, is the widespread use of the Electronic Claim File (ECF) and the Claims Loss and Advice Settlement System (CLASS). This change has created opportunities for streamlining and efficiencies. The increased outsourcing by brokers of many of their functions to operations outside Europe is one example.

Digital innovation has also increased the possibility of instantaneous communication of claims developments. Decisions can be made rapidly, and service levels monitored, irrespective of how dispersed geographically the parties involved may be. However, ease of communication has also encouraged brokers on behalf of insureds to err on the side of caution when deciding whether or not to notify (for example, to excess layer insurers). This has led to an increase in claims notifications and administrative demands (on brokers as well as insurers) without always reflecting any increase in the number of losses.

Earlier this year, the Single Claims Agreement Model was introduced in the London Market. This model increases the scope for a London slip lead to bind all followers on a risk, provided this has been agreed by insurers at placement. Such

# Claims, disrupted

**Times have changed since brokers visited the lead insurer's office to show a claim for the claims handler to scratch. CIR spoke to Tokio Marine HCC's Carlos Fane about the impact of digital disruption and claims management on insurance claims**

initiatives reduce the number of stakeholders who have to be consulted in relation to claims, thereby reducing the number of communications required when handling each claim. This may be viewed as a welcome counterweight to the trend towards an increased number of communications that digital innovation generates. As the insurance industry seeks to adapt to the digital age, we are likely to see more developments in this area.

### How is Tokio Marine HCC using digital technology to improve the customer experience?

During the past year Tokio Marine HCC has introduced a new electronic underwriting and claims management system in its continental European operations. This innovation allows claims responses to be monitored closely and ensures consistently high service standards apply to all aspects of our client-facing activities. These changes have been complemented by the increased use of cloud-based storage of underwriting and other information, improving access for claims professionals to the information they need to adjust claims, which improves service levels.

**“These changes have been complemented by the increased use of cloud-based storage of underwriting and other information”**

### How are disruptive technologies changing approaches to policy wordings at Tokio Marine HCC?

A disruptive technology or innovation is often understood to mean a new technology or innovation that radically changes the market for goods or services in a particular sector. The introduction of the Ford Model T motor car is an example of a disruptive technology or innovation, as the mass-production techniques it introduced to the automobile industry made cars more affordable and caused them to be seen as less of a luxury item and more of a household necessity. The availability of insurance apps and other innovations affecting the distribution of insurance products may in this sense be disruptive. However, while this kind of disruptive innovation may have reached consumer lines insurance, it has yet to make a significant impact on business lines insurance, which continues to operate along traditional lines.

### How is Big Data changing the way Tokio Marine HCC does business?

Big Data is clearly having an impact on the way we do business on the underwriting side, given the implications it has for the availability of information. A recent example of this is the 2015 Insurance Act in England and Wales. Those responsible for drafting the act considered it necessary to add a provision which prevented “data dumping” by prospective insureds.



Therefore, they made it a requirement of the duty of Fair Disclosure to not engage in these practices. Undoubtedly, the increasing trend is too much information, not too little.

Technology developed for use in legal proceedings to assist with disclosure/discovery can assist underwriters with sifting through large volumes of information. This possibility is particularly attractive to underwriters working in lines of business such as warranty and indemnity insurance (W&I), where it is often not practical for an insured to “filter” the information it discloses to underwriters.

On the claims side, the impact of Big Data is felt due to its effect on the frequency of third party claims faced by insureds. One aspect of Big Data is that anything anyone says can be recorded and, once recorded, will remain available for years to come to anyone with internet access. Adverse publicity, perhaps due to a whistleblower going public with allegations of wrong-doing, consumer complaints or short-selling activism, combined with media interest, can lead to companies and senior executives finding themselves in the regulatory spotlight. The widely publicised investigation of the state-owned oil company Petrobras, ‘Operation Carwash’, in Brazil, is a case in point. Increasingly, we are seeing third party claims and related notifications under the D&O liability policies Tokio Marine HCC writes arising in this way, due to a combination of Big Data and media interest that in turn prompts regulatory interest.

Big Data (sometimes on its own, sometimes having been brought to light by media and/or regulatory interest) also provides a rich source of potential claims for the plaintiff bar to pursue, mainly in the US but also, increasingly, in other jurisdictions.

The plaintiff bar has been quick to exploit this opportunity by filing class action complaints in the US and other kinds of group action lawsuits in other jurisdictions. Such complaints and lawsuits have been further encouraged by an increase in the number of litigation funders.

These are all developments that insureds increasingly wish to see reflected in the D&O liability cover they take out with Tokio Marine HCC and other insurers. We have adapted to this environment by tailoring policy wordings and by working with stakeholders to find innovative ways to accommodate these requirements. Sometimes this can involve pricing adjustments. It may also involve extensions of cover and changes to sub-limits and retentions.

#### How might regulatory frameworks need to change to address some of the emerging challenges?

Digital and other technological innovation in the insurance industry brings many potential benefits. However, it also brings the possibility of operational disruption due to, for example, potential cyber attacks and technological failure, which can impact service levels negatively. It is, therefore, important that insurers manage their businesses in ways that minimise potential disruptions and ensure that, in terms of severity and duration, they do not reach levels the business cannot withstand. This issue, as it applies to the financial services sector generally, is the focus of a recently published Bank of England (BoE) Discussion Paper, ‘Building the UK financial sector’s operational resilience’.

The BoE points to aspects of the existing regulatory framework for UK insurers that indirectly address the need to ensure operational resilience. For example, the BoE refers to the

requirement under Solvency II on insurers and reinsurers “to have in place an effective risk management system comprising strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report, on a continuous basis the risks ... to which they are or could be exposed”. The BoE also refers to the PRA’s Threshold Conditions requiring businesses to act prudently and specific PRA rules on risk management, monitoring and reporting and planning. A recent insurance sector specific development in this area, referred to by the BoE, is the forthcoming extension to insurers of the PRA’s Senior Managers and Certification Regime. As part of this, there is also the requirement to have a senior management function responsible for internal operations and technology.

New regulatory requirements, contemplated by the BoE to ensure operational resilience include requiring insurers (and financial institutions generally) to identify intolerable levels of disruption to their most important business services (‘impact tolerances’) and the circumstances under which it would be acceptable to breach these impact tolerances. It is envisaged that this would increase transparency, allowing supervisory authorities to work with companies more effectively to ensure greater operational resilience.



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Millions of trucks arriving by ferry and Channel Tunnel shuttles, food rotting in lorries, medicine shortages at NHS hospitals and stalled production lines... this is what the doomsayers are warning will happen if Britain cannot reach a deal with the European Union.

Meanwhile, others point to Theresa May's July UK-EU Future Relationship White Paper, which includes plans for a Facilitated Customs Arrangement – a frictionless free trade agreement that involves the UK becoming a Combined Customs Territory. Defenders of the soft-Brexit Chequers plan say it would enable mutual recognition of standards and for trade between the UK and the EU to be free from customs controls and checks.

Wherever you stand on Brexit, the fact remains that we don't yet know for sure what the final arrangements will be, so it makes sense to consider all the potential ramifications of a range of outcomes. So, alarmism and politics aside, what are the real risk issues for businesses of the ongoing ports saga?

"Our greatest concern in leaving the EU has been disruption to the flow of trade at ports" comments David Dingle CBE, chairman of Maritime UK. "This white paper, if realised, would preserve the free flow of trade at our borders with the EU. Industry on both sides of the channel has been calling for frictionless trade, and shared rules would remove many of the barriers."

Without an agreement, goods travelling to and from Europe will be subject to new authorisations and other requirements as of March 2019. New border processes could be most challenging for freight on lorries travelling through roll-on roll-off ferry port gateways such as Dover, Holyhead, Immingham

# No big deal?

- Much has been said in recent weeks about ports congestion and availability of goods relating to the ongoing, less than productive, Brexit discussions
- On the one hand, fears were stoked earlier this year with the publication of a Lords Sub-Committee report, Brexit, food prices and availability
- Meanwhile, the UK's Major Port's Group says the UK's container ports are ready to cope with whatever trading arrangements are put in place

## Amid ongoing uncertainty surrounding trade arrangements, much has been said about ports congestion and transportation of goods. As the UK faces new border controls, Ant Gould considers the risk management issues

and Portsmouth.

Ro-Ro ports collectively facilitate most of the UK's EU trade. Currently, the Customs Union and Single Market allows roll-on/roll-off vehicle traffic to call at a port without prior reservation. This avoids congestion and helps businesses that rely upon just-in-time logistics. The reintroduction of border controls could potentially create bottlenecks at those ports, so those with established supply chains should consider the implications in terms of goods and timing.

James Hookham, deputy chief executive, the Freight Transport Association, expresses his point of view: "without an agreement... there is a very real prospect of severe road delays on both sides of the Channel, and, ultimately, a significant threat to the UK's complex supply chain on which we all rely, from both a business and a personal point of view."

Fears were certainly stoked earlier this year with the publication of a Lords Sub-Committee report, Brexit, food prices and availability, which concluded: "We do not believe the UK's ports and airports will be able to cope with the additional workload that new checks will create, and this

will add significantly to the import timescales. Significant delays will disrupt the 'Just-In-Time' supply chains that food manufacturers and retailers depend on and could affect the availability of food."

That report also gave Project Fear more fuel for its fire with its calculations from KPMG that "one day of delay for a lorry will easily cost a business €600 to €1,000" and that delays would mean "businesses will have to make more frequent use of 'last minute' carriers charging premium rates", which could add 20 to 25 per cent to transport costs.

Risk management and contingency planning are fundamental for all businesses impacted, particularly as insurance can only provide limited support. As Martin Bridges, technical services director at the British Insurance Brokers' Association confirms, customs delays cannot be covered by suppliers' extensions to business interruption insurance "as actions and delays by officials and port authorities are not insurable."

Meanwhile, what are the government and the ports authorities doing to help mitigate any potential issues?

The European Sea Ports Organisation defines the challenge quite simply; if border controls are reintroduced, some ports will have to reorganise the layout of their terminals, as well as to make investments in the development of innovative IT solutions and additional workforce to cope with the increase of administrative burden.

The UK's Major Port's Group says the UK's container ports are ready to cope with whatever trading arrangements are put in place. Chair Charles Hammond points to recent investment in inspection facilities, more capacity and warehouses for goods to be checked before they enter the UK. He adds that its members are creating capacity to handle more lorries as well as containers and that many of the ports within the group already must make sure goods from outside the EU have paid the appropriate customs and meet regulations.

The UKMPG includes companies managing container ports in Belfast, London, Southampton, Essex, Humberside and Teesside. However, it does not include the port of Dover which handles most lorry traffic in the UK coming from continental Europe, or Holyhead, the main route for imports travelling by sea from Ireland.

There were 2.5 million lorries entering the UK through Dover in 2015 and just over a quarter of a million through Holyhead, according to government think tank the Institute for Government. Research from Imperial College London also claims that adding just two extra minutes to vehicle checks could lead to motorway tailbacks in Dover up to 29 miles long.

According to a survey by the British Chambers of Commerce and the Port of Dover earlier this year, about a third of companies believe delays at ports would affect their

administration, costs and operations, yet one in three lack contingency plans to cope with likely new customs procedures; and one in three (33%) affected by the implementation of new customs procedures aren't planning for checks and declarations between the UK and EU.

Significantly, despite the UKMPG's optimism, 67 per cent of respondents said it was unlikely their business would switch to a different UK port in the next three years.

One option for Dover – and other ports – is to move the clearance checks away from the ports, inland. However, this is easier said than done under the UK's planning regime. The government's original plan for an overflow lorry park at Stanford West, near Folkestone, for example, had to be scrapped in November last year, after being challenged in the courts.

**“CDS has a capacity of 300 million – ample in theory to cope with the anticipated 255 million declarations a year – but it is not yet known if it will be fully functional by March next year”**

This summer, the Department for Transport unveiled a new contingency plan to convert part of the M20 motorway into a lorry park as a temporary stopgap. Called Operation Brock it is like Operation Stack and relates to a 13-mile stretch of the coastbound section of the M20, between junction 8 and junction 9, earmarked to hold heavy goods vehicles, and would effectively become a temporary lorry park holding around 2,000 vehicles.

Border controls mean HMRC will need to employ an estimated additional 5,000 customs officials by 2019 supported by a new digital

IT system, the Customs Declaration System. The existing system, Chief, handles about 55 million declarations a year and has a capacity of 100 million. CDS has a capacity of 300 million – ample in theory to cope with the anticipated 255 million declarations a year – but it is not yet known if it will be fully functional by March next year.

The first release of CDS was implemented in August with a selected group of importers. The government insists “the majority of importers will start using CDS from November, once their own software provider or in-house IT team has completed development of CDS-compatible software. Exporters will follow this. Chief will continue to operate in parallel while the transition of traders takes place.”

Kevin Franklin, HMRC's customs transformation programme director, says: “We have been engaging closely with trade representatives including software developers, Community System Providers, freight forwarders, and traders themselves about CDS and we value the support from these organisations in preparing importers and exporters for the upcoming changes. Our priority now is to make sure software developers, agents and their clients are ready, and we will continue to work closely with them throughout the transition.”

In the final analysis, the ports, the government and businesses are all preparing for an unknown future – and the solutions involve long-term planning. Wherever you stand on Brexit, the clock is ticking. By the time you read this, a deal for frictionless trade may have been agreed – to the great relief of business, the ports and government; however, based on the progress of talks to date, not to mention political manoeuvring, that seems increasingly unlikely.

# Shadow-Planner WINS BCM planning software of the year 2018



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► **Your plan, just better** The business continuity software market has a lot to offer – from simple solutions for small firms to complex tools designed for multi-site usage and more extensive roll-outs. Angelique Ruzicka takes a look at what's on offer for potential buyers p36

► **Out of the shadow, into the spotlight** Colin Jeffs talks to CIR about this year's winning business continuity management planning software, Shadow-Planner p38

## BUSINESS CONTINUITY SOFTWARE REPORT 2018



**D**emand for business continuity software is changing – and the market is changing along with it. And while some of the traditional drivers for deployment of these products remain in place, offerings have had to become more sophisticated to keep up with a more demanding client base.

This in turn seems to be down to two key factors: the principal driver the corporate move towards an ever-more resilient organisation; and a concurrent continued pressure on budgets.

Businesses are faced with the challenge of doing more with less, in terms of resources. Most clients are therefore using software to create a smarter workflow management; implement corporate policy uniformly throughout the operation; provide data extract reports and gap analysis to see where there is a need to improve systems/practices and ensure that there is good governance, and to lead end users in the business through an easy to use process to build effective plans,” explains CEO at ClearView Continuity, Charles Boffin.

**“Whether the right team are in place in the IT, risk or business continuity department itself makes all the difference”**

“We have built our software so that it is highly configurable by clients through self-administration systems. We support and help in this process as part of the implementation procedure, but we believe that the key is to have software that is flexible to meet the needs of all clients, without the requirement for costly customisation.”

In addition to these tasks, users are turning to ever more sophisticated

# Your plan, just better

**The business continuity software market has a lot to offer – from simple solutions for small firms to complex tools designed for multi-site usage and more extensive roll-outs. Angelique Ruzicka takes a look at what’s on offer for potential buyers**

mobile apps to support teams in anger.

While business continuity software is not a silver bullet for all forms of incident, it does help to deal more swiftly with issues during an incident, in particular by giving the right people the ability to access the necessary data at the right time.

As head of business continuity management consultancy at Daisy, Colin Jeffs, puts it, “Customers are becoming less tolerant of any type of disruption, so businesses say they can’t allow for it and if it does happen then it must be to the absolute minimum.

“When it comes to paying customers, they don’t expect any downtime. If you have a bank account that you can’t draw money from because [the system] has gone down, it’s incredibly easy to move to another. Customers absolutely expect zero downtime – whether it’s right or wrong.”

**Value recognition**

There is a growing sense of the value of business continuity systems beyond the business continuity or risk functions themselves, according to some commentators. CEO of Fusion Risk Management, David Nolan, says that having the right system in place can mean the difference between securing or losing a client.

“There are cases in the US where companies that did not have effective [systems] have lost business. It’s now all about how third party risk is playing a part. The driver of the investment

has shifted from ‘I had to do it for compliance’... to ‘If you want to do business with me then I want to make sure you can be trusted and you need to demonstrate that,” he explains.

“It has to do the job better, allow you to be nimbler, more economical and it’s going to do that through automation. You’ll be able to analyse, visualise and report. It will provide access to a wider group of people to respond to a situation, manage and reduce the level of business impact from what is essentially an inevitable event,” says Nolan.

Nolan believes that, at the most basic level, the right tool should help businesses to do things better, faster and cheaper. Pricing varies wildly in this sector, and will naturally vary according to the size and complexity of the buyer organisation. But cost should not necessarily be the driver for the final decision.

Given how difficult it is to change processes and systems in most organisations, spending the due time and care during the tender process is a wise investment. The buyer organisation’s culture matters considerably at this point. Whether the right team are in place in the IT, risk or business continuity department itself makes all the difference. Which often brings the conversation back to budget.

“It can cost anywhere between £5,000 and £50,000 maybe even more if you take [the customer’s] own internal costs,” Jeffs explains. “It can



go way up depending on how they are structured, how complicated they are, how many sites and locations they have, how many staff require training, how much data there is to bring in, and so on.”

But he adds that if companies take the time to invest in the right software, they will see ROI in spite of the upfront cost. “This is because it will take away a lot of the manual work that team members have to do. The software makes the data easier to access and control than if you were to do it manually. Businesses need to ask themselves ‘how long it will take software to do what a team can do,’ and whether they have the time and the experience to do it all manually.”

That is not to say that any software can completely take over the job of business continuity management. As CEO of Sentinel Yudu, Richard

Stephenson, points out, software is no substitution for thinking and understanding of risk but good software has intelligence and adaptability.

“It is a tool that can assist in the formation of a plan and help keep it up to date. Software can also help during an incident and be used in simulations with the learnings from these events fed back into the system to deliver better resilience for the next incident,” he explains.

“DIY solutions that attempt to emulate professional business continuity software are potentially the worst option; it would be better to have paper plans. Systems need to be robust, resilient and secure so they are operable when required.”

This is, after all, the entire *raison d'être* of this marketplace. Asked which tasks are currently providing the

greatest ROI with current offerings, ClearView’s Boffin points to gap analysis and reporting, workflow management, audit and governance, accuracy of data (inputs and outputs) and practical usability to assist/support in time of need (events).

ClearView’s own future for developing the software include enhanced technical functionality as new technology appears in other markets and areas; and interlinked/interfaced systems to provide macro solutions – that is to say not business continuity management in isolation.

In addition to greater functionality and accessibility, these appear to be among the major developmental areas for this market as it continues to invest in solutions that help user organisations achieve the levels of resilience they need, at a price they can afford.



Colin Jeffs is the head of business continuity management consultancy at Daisy and is also responsible for the Shadow-Planner software. A highly-respected BC professional and long-standing member of the BCI, he has over 23 years of experience in business continuity management and resilience.

Colin has held senior roles in BCM and crisis management at several investment banks and online retail banks as well as in the travel and software sectors. In addition, he spent two years as a member of the Securities Industry BCM Group (SIBCMG) as well as serving many years working as a business continuity consultant in industries including law, energy, defence, finance and the public sector. Colin has implemented numerous BCM software tools over the years and understands the benefits they can bring to organisations.

**Why is Daisy's success in the 2018 Business Continuity Awards so significant?**

Mainly because we only enter when we have new functionality that has been tried, tested and validated by our active and engaged users. You can't create something new, roll it out and canvas meaningful feedback within one year, so when we do enter, we are showcasing our new developments. The

# Out of the shadow, into the spotlight

## Colin Jeffs talks to CIR about this year's winning business continuity management planning software, Shadow-Planner

last three awards we have entered with Shadow-Planner, we have won and this is immensely gratifying.

To be shortlisted is both great kudos and great success for us because it means that we have truly met the judges' criteria – and we celebrate that as a business. But to then go on to win on the night is an added bonus and we just want to share it with everyone – without all turning into sales people!

For me personally, the benefits of BCM software for any BC manager are so worthwhile, especially now that the role of BC is more strategic to the business than ever. Using software equips forward-thinking BC managers with more time and greater insight into risks and dependencies to really contribute to the success of the organisation.

In short, Shadow-Planner doesn't claim to do everything for everyone, but rather, it does the things that really matter, exceptionally well.

**How does BC software make life easier for BC managers in practise?**

Managing a BCM programme takes a lot of commitment and input from many areas of an organisation as well as vast amounts of time and patience due to the sheer volumes of data involved.

Making sense of all that data can be a real challenge and ultimately impacts how accurate and robust any plan will be. This is where software is incredibly valuable as it takes away the burden of chasing people up and combining and analysing the data in a sensible and easy to understand way. These two things alone can, and do, soak up huge amounts of a BC manager's time whilst not always guaranteeing the end

**“Shadow-Planner doesn't claim to do everything for everyone, but rather, it does the things that really matter, exceptionally well”**



results have identified all gaps and risks. The really big payback comes from real time data analysis that instantly shows the user where they have gaps in requirements which translate to potential risks. Understanding this manually can take weeks of effort.

One of the most challenging things to keep on top of is changes to plans where multiple copies of the plan exist. Any decent software should allow you to make a change once and have it filter through to everywhere the plan is used. Therefore, having to make the same change in multiple places becomes a thing of the past.

Finally, the ability to put plans and contact information onto mobile devices significantly reduces the risk of people not having access to their plans and the information they require when they really need it. Not many people will carry a paper plan around with them but almost everyone carries a mobile phone.

### What is different about Shadow-Planner?

Shadow-Planner has been designed by BC professionals for BC professionals with significant input from its active user group – many of whom are leading BCM practitioners in the industry in their own right. It also has a hugely powerful dependency mapping capability with gap analysis, flagging risks and deficiencies all monitored in real time.

In addition to this, Shadow-Planner allows BC managers to ‘manage by exception’, allowing them to focus their attention on those areas that are out of date, overdue or have risks associated with them.

The system takes care of all other tasks in the system by ensuring reminders and escalations are sent out if or when required.



### What’s next for Shadow-Planner?

Shadow-Planner has been at the forefront of BCM software for many years now and Daisy is committed to maintaining that trend. With BCM software seen as a valuable asset to many organisations and becoming even more important with world events around IT hacking and data theft etc., resting on your laurels and remaining static is a fundamentally flawed approach.

As the UK’s leading BCM service provider, Daisy has already started the process of designing a brand new version of Shadow-Planner. Technology and market trends have changed over the years and Shadow-Planner is evolving to not only keep up with those trends, but to be at the cutting edge.

### “The last three awards we’ve entered with Shadow-Planner, we’ve won – that’s immensely gratifying”

Most of the new functionality and technology are closely guarded secrets, but with the impressive combined experience of our both our customers and ourselves, the new product will break new ground in BCM software look, feel, functionality and technologies.



**Colin Jeffs is head of business continuity management consultancy at Daisy**



### SHADOW-PLANNER DAISY GROUP



Daisy's Shadow-Planner is a multi-award winning SaaS solution that streamlines structured BCM to make it quicker, more efficient and cost-effective.

The solution comprises a suite of integrated software modules designed to support the BCM lifecycle. These include business impact analysis (BIA), planning, testing and exercising, risk management, recovery desk planning and emergency mass communications. It helps firms of all sizes achieve strong and effective business continuity plans that are continually updated. Shadow-Planner's emergency notification functionality and award-winning mobile device capability provides organisations with powerful incident management capability providing the right plans and contact information to the right people exactly when they need them most.

Organisations within financial services, the public sector and other regulated industries use Shadow-Planner to help deliver best practice and support their compliance with business continuity standards such as ISO 22301.

Key to Shadow-Planner's design philosophy is the way in which it supports the three tiers of a BCM stakeholder model:

- **Tier 1** represents the executive nominated to lead the BCM programme. This may be a full-time professional or team of professionals or an individual for whom BCM is just one part of their role. These individuals need to know the overall status of the programme and which areas require more focus or support. Needs to 'manage by exception'.
- **Tier 2** represents those individuals who have a role in supporting the Tier 1 executive. These individuals are typically interested in BCM but only able to give a small proportion (maybe a day or two per month/year) of their time to the BCM programme. These people typically own a BC plan or have some involvement in completing the BIA.

- **Tier 3** comprises those individuals who are subject matter experts in one or more areas that are relevant to an effective BCM programme. These people may be required to give only 30 minutes of their time per year to keeping key data up-to-date. Each of these tiers has different demands. Shadow-Planner makes it easy for each tier by giving automated reminders when something needs to be done.

#### Key features and benefits:

##### Business impact analysis (BIA):

- Customisable impact assessment and risk identification
- Helps identify most critical processes/activities including internal and external dependency chains and return on investment (RTO)
- Powerful dependency modelling and gap analysis to compare recovery point objectives vs achievable times

##### Business continuity planning:

- Efficiency achieved through reduced documentation by controlling centralised templates thereby reducing the need for content to be held in multiple documents; input once and share to many areas. If a change needs making, change it once and it automatically filters to wherever that document is used.
- Simple to the end-user – they only see what is relevant to them
- Easy-to-follow plans using our structured action plan (playbook) type approach

##### Notification:

- Mass notification and message broadcasting and response tracking via SMS and/or email within Shadow-Planner
- Can integrate with other mass communication tools

##### Implementation & development:

- Software commissioning and project management by our highly-qualified and experienced BCM practitioners
- Customer-centric product development supported by our active user group

**Contact Daisy Group for more information.**  
0344 863 3000  
enquiry.dcs@daisygroup.com  
daisygroup.com

## ALIVE-IT CONTROLLIT AG

alive-IT was designed to support user organisations carry out business continuity management and ITSCM tasks. With this product, users are able to carry out lifecycle procedures, complete data models, control recoveries and access the latest, active documentation.

This vendor's software aims to provide a "master model for business continuity management and ITSCM requirements", and allows administrators to create new resource classes and connections between them or to instantly add attributes to existing classes.

Process mapping is an essential element of this tool, as it contains essential information for successful recovery. These may be organisational or technical tasks. The structure of processes is table oriented with graphics automatically generated.

Users of this software can connect existing documents with activities, which are available online and in the emergency manuals.

This system aims to reduce resource requirements for the maintenance of data and can be used at multiple locations.

Bespoke configurability makes this a particularly useful tool for crisis management. The complete application, including all functions, are available via a web browser, negating the need for complicated or costly installations.

[control-it.de](http://control-it.de)

## BCP BUILDER BCP BUILDER

BCP Builder is an online business continuity plan template. With this tool, user organisations can design and build their own unique business continuity plan or management system.

In creating BCP Builder, the developers have focused on producing solution that is more sophisticated than Excel-based plans, yet less complex than some of the more involved packages on the market. As such, BCP Builder says its users will have no need for training.

While the simplicity of this tool makes it suitable for small businesses, larger organisations can scale to the provider's multi-plan document library for wider or more complex deployments.

BCP Builder is based on the Business Continuity Institute (BCI) Good Practice Guidelines, as well as the requirements of the international standard for business continuity, ISO 22301.

Small businesses can access a single plan online, with both monthly and annual pricing available.

Larger user organisations, requiring bespoke multi-plan document libraries, can choose from a range of standard templates or develop their own templates. They can complete planning using their own resources, or engage the provider's consultants. This version can also integrate with notification software.

[bcpbuilder.com](http://bcpbuilder.com)

## CATALYST AVALUTION CONSULTING



Catalyst provides comprehensive business continuity and IT disaster recovery planning functionality to prepare organisations for disruptive incidents. Designed for the global enterprise but scaling to address the needs of any organisation, Catalyst is designed to make continuity planning simple and actionable, both for the manager and the end user.

A set of fully integrated modules simplify the user experience and streamline plan development and programme maintenance.

The Business Impact Analysis module uses on-screen guides to help ensure department owners submit the correct information, and then leverages that information in all subsequent planning phases.

The Risk Assessment module enables teams to clearly identify key risks to the organisation's most critical activities and resources, allows management to quickly identify where risks exceed their risk appetite, and sets the stage for developing business continuity strategies.

The Recovery Strategy Identification module takes the guesswork out of strategy identification. Catalyst uses the information captured during the business impact analysis and risk assessment to help clients clearly identify and establish response and recovery strategies. When planning,



Catalyst offers an intuitive plan development process, with access to a wide variety of highly customised planning templates and content.

The Task Scheduling feature allows teams to assign start and end times to recovery tasks and establish task dependencies to better plan for a disruptive incident.

Catalyst's Exercise module enables teams to improve the preparedness and resiliency of the organisation and confidently respond in the event of an actual incident.

Catalyst Insights uses all the data in the system to automatically produce business continuity programme metrics that help users quickly identify and address preparedness gaps and report on the organisation's true level of preparedness.

The Live Incident Management module provides an online location for teams to collaborate and share information about a disruptive incident in real-time, including announcements, situations reports, and recovery status.

Catalyst Bullhorn enables users to quickly and easily connect by sending emergency notifications and surveys to internal contacts via email, text message, or voice phone call.

Avalution Consulting offers hosting options across the United States, Europe, Canada, Australia, and the United Arab Emirates. The provider offers a free trial to those wishing to familiarise themselves with the product.

[avalution.com](http://avalution.com)

### CLEARVIEW CLEARVIEW CONTINUITY



ClearView's software is used by organisations of all sizes, in all sectors around the globe. Designed to be easy to use and intuitive, occasional users can get up to speed quickly, while more advanced users have a complete set of features necessary for managing all aspects of the business continuity management lifecycle. Functionality includes a business continuity management system, including risk assessment, BIA and plan development, exercising and notification plus dynamic incident management. An integrated notification module provides two-way SMS, push notifications, email, voice and conference call options. A mobile application is also available. ClearView offers a flexible reporting suite with dynamic report creator and executive dashboard showing gap analysis and key metrics in easy to use/view graphic formats with full data export/download. A considerable range of self-service functionality is available to users wishing to tailor the platform, and integrations capabilities enable a seamless interface with all other key data sources and third party systems to enable all activity to be managed through one portal.

ClearView is available in public sector, enterprise, or small business versions and is fully consistent with ISO 22301 and all other major industry standards.

[clearview-continuity.com](http://clearview-continuity.com)

### CONTINUITY LOGIC CONTINUITY LOGIC



Continuity Logic offers a full scope business continuity software solution delivered as SaaS on the IBM Cloud. Commissioned with support from the vendor's specialist consulting team, the solution delivers deep BIA flexibility; data-driven business continuity management through a series of analytical tools including drill down dashboards, geo-data, and what-if analysis; high quality plan and reporting output through integration with Microsoft Word and PowerPoint templates, with fonts, layouts and document design entirely controlled within the Microsoft Office environment, which helps provide familiarity for users.

For ease of use, Continuity Logic's GuideMe technology takes users step-by-step through tasks. Alongside the solution's customisability, this supports the widest possible engagement with little to no training required. Mobile performance through a range of mobile apps (iOS and Android) plus full HTML5 compatibility enable all-function use on any modern browser-based device. Continuity Logic provides a number of out-of-the-box templates for fast implementations; and can customise configurations for larger, more complex organisations. The recent addition of a template library makes Continuity Logic suitable for both large and small organisations.

[continuitylogic.com](http://continuitylogic.com)

# catalyst →

## FOCUSED, ACTIONABLE BUSINESS CONTINUITY SOFTWARE INFUSED WITH AVALUTION'S EXPERTISE.

Catalyst provides comprehensive, yet easy to use, business continuity and IT disaster recovery planning functionality to prepare organisations for disruptive incidents. With Catalyst, business continuity planning is simple, scalable, and actionable – for the programme manager AND end user.

[avalution.com/catalyst](http://avalution.com/catalyst)

UPCOMING FEATURE RELEASE:

## CONTROL+COMPLY

Looking for a way to efficiently manage your controls and compliance requirements – ensuring they are consistent with stakeholder expectations and tailored to your organisation's risk profile?

Ask our team about Catalyst Control+Comply.



### CONTINUITY MANAGER PEER VALUE



Continuity Manager is an intuitive, flexible and powerful business continuity management system that enables helps user organisations manage and follow up business continuity management programmes in one single place.

This product focuses on the essentials in getting business continuity management operational. With a user-friendly interface, it makes it easy to keep track of critical products and services, and determine requirements and follow-up status.

Continuity Manager is designed to meet industry best practice and standards, and features the key elements of business continuity management, including governance, compliance and follow-up, business impact analysis, continuity plan status tracking, business continuity management requirements repository, dashboards and reporting functions enabling easy follow-up and dependency tree highlights relationships and statuses. An intuitive maturity assessment tool and dashboards and reporting functions are available for ease of use. A dependency tree highlights relationships and statuses, and financial value at risk is calculated based on continuity status. This product is provided as a scalable and secure SAAS solution.

[peervalue.se](http://peervalue.se)

### CRISES CONTROL CRISES CONTROL

Crises Control is an enterprise business continuity management platform integrated with a mass communication tool.

This solution notifies stakeholders of business continuity incidents and delivers business continuity management plans across a variety of devices, and to suit a variety of budgets.

Crisis Control was designed to help business continuity professionals prepare for any business disruption, and aims to provide a secure way of sending the right information to the right people in a crisis situation, and at the same time tracking who is engaged.

The Crises Control platform can be used from a laptop or desktop PC with full functionality available on the mobile app itself.

The app for this product is downloadable for free for iOS, Android, Windows and Blackberry platforms.

[crises-control.com](http://crises-control.com)

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### FUSION FRAMEWORK SYSTEM FUSION



Designed to engage employees in incident response, safety and security, the Fusion Framework System includes integrated business impact analysis and risk assessment, plan development and activation, crisis/incident management, exercises and simulations, integrated risk management and mobile and enterprise communities.

This product supports vendor risk, facility risk, cyber risk and other related risk agendas, and supports integration with the major E&MN and ITSM providers.

[fusionrm.com](http://fusionrm.com)

### INONI PRO INONI

Inoni Pro is a multi-user SaaS online business continuity management system that delivers BIA, risk assessment, planning, validation and maintenance in a single, integrated package. It is designed to support organisations' alignment or compliance with ISO 22301, but can also assist in other aspects of best practice, including resilience, crisis management and ITDR.

This product aims to support organisational individuality and expressions of risk appetite and tolerance to loss. The system delivers materials that are practical and useful

# RESILIENCE FOR THE 2020s



## Document-Driven and Data-Driven BCM

It's well recognised that an effective business continuity program generates a trove of corporate data, and that this data can offer deep insights into both risk and operational management challenges.

Continuity Logic provides the structures and analytical tools to maximise this data-driven capability. On-demand reports, drill down dashboards, geo-data, and what-if analysis all contribute to an unrivaled ability to deliver value to the business.



## Total Engagement Across the Organisation

Many BCM solutions fail to deliver organisation-wide engagement and thereby end up as a central repository used by a select few alone. Continuity Logic has worked hard to overturn this limitation.

GuideMe technology takes each user step-by-step through the tasks they need to complete, while the solution's customisability accommodates even the most complex organisation. All this leads to the widest possible engagement with minimal training.



## Power Out-of-the-Box with Customisation on Demand

Continuity Logic provides a number of out-of-the-box templates for clients who want a solution to be implemented quickly and then improved over time – providing for a rapid return on investment.

But customised solutions can also be delivered for those larger, more complex organisations who have learned over time – often through hard experience – that a highly specific BCM approach is essential for their success.

**4 x LEADER** Gartner<sup>®</sup> Magic Quadrant



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in a major disruption online, via mobile devices and physical cards. At the same time, it satisfies the peacetime requirement for detailed documentation for training, audit and compliance.

Integral to the Pro software, the provider's approach draws on familiar organisational structures to facilitate design, delivery and training, with the aim of encouraging greater interest and engagement, improved capability, stronger linkage with other risk disciplines and requiring less user time. Information is gathered via online interviews with question texts that can be adapted to reflect the way each client organisation thinks and operates.

Although primarily a SaaS solution, Inoni also deploys the platform both within country jurisdictions, and self-hosted within organisations' own closed IP environments.

[inoni.co.uk](http://inoni.co.uk)

### LOGIC MANAGER LOGIC MANAGER

LogicManager's software features integrated risk, governance, and compliance tools that aim to enable organisations to make proactive decisions based on comparable data and established goals. These integrated applications include enterprise risk management, IT governance and security, compliance management, third-party risk management, audit management, incident management, policy management, business continuity, and financial reporting compliance. The core functionalities LogicManager that extend across

solution areas are identifying, assessing, mitigating, monitoring, and reporting on risk.

Delivered as a SaaS solution, this vendor looks to provide new features on at least a quarterly basis.

Earlier this year, LogicManager released an initial set of native APIs which allow customers to integrate with other systems internally to streamline data and reduce manual processes. Common API examples include collecting and categorising vulnerability data from scanning tools such as Nessus, Qualys, and Rapid7, or connecting with Oracle Accounts Payable systems.

This year, the vendor also released its Automation Rules Engine – its first foray into the world of artificial intelligence; and released a GDPR-specific compliance suite including an audit readiness checklist, a data library assessment and a security incident form.

[logicmanager.com](http://logicmanager.com)

### MATACO SAVANT

Mataco is a cloud-based business continuity software system that aims to provide full support for business continuity management, disaster recovery and incident management processes.

Provided on a SaaS basis and hosted by Savant's partner IOMart Server Hosting, the software is available for tablet, smartphone and desktop PC.

Mataco offers a flexible database

repository in which to record and maintain all relevant information, documentation and tasks required for an effective, robust, and complete implementation of business continuity planning.

Public sector buyers can obtain Mataco via the G-Cloud framework on the government's Digital Marketplace. Private sector companies should contact Savant directly.

Mataco is available for all iOS & Android smartphones and tablets – enabling mobile access to disaster recovery plans in-the-field and via the mobile phone network.

[savant.co.uk](http://savant.co.uk)

### MIMS CONTINUITY WEST

MIMS (Major Incident Management System) is cloud-based system that aims to bring together all the information necessary to managing any type of incident.

Initially developed by Continuity West for academies, which are required to have contingency and business continuity planning, MIMS is now also being used throughout the public sector.

The current version of this product was updated in July 2018, and features an enhanced layout and improved functionality – including the ability to use the system from tablets and mobiles.

Within MIMS, there are three levels of user: the Major Incident Team, Staff and Other. The Major Incident Team

is responsible for managing incidents with each of the tasks in a plan having an owner, usually by a member of the MIT.

The product comes pre-populated with 25 standard plans including loss of utilities, bomb threats, pre- and post-flood and loss of building plans.

Most documents (Word, Excel, pictures, PDFs) can be uploaded and attached to plans as well as to contacts.

This software can be used to send SMS messages and emails to users or contacts in its MIMS system – whether during an incident or in peacetime.

[continuitywest.co.uk](http://continuitywest.co.uk)

### ORBIT4BC ORBIT ITALY

ORBIT4BC was designed to offer a complete software solution that helps companies manage business continuity and disaster recovery processes.

By collecting and classifying data, the

software allows users to define, implement and update business continuity and disaster recovery plans, and carry out risk analysis.

This product is designed to provide corporate governance professionals with the appropriate means to accurately address the different requirements of a business continuity management and disaster recovery programme, following them in every step of the process lifecycle.

ORBIT4BC allows customers to manage all the data that must be gathered to comply with international business continuity management and disaster recovery standards, including ISO 22301, BCI Guidelines and ITIL, for instance.

ORBIT4BC has also a built-in integration with several mass notification systems for give a two-way real time communication through SMS, call bridge and other technologies.

Founded in 2000, Orbit Italy is a business continuity consulting firm, IT service provider, and software developer.

[orbititaly.com](http://orbititaly.com)

### PARASOLUTION CONTINUUM



ParaSolution is a web-based tool that encompasses business continuity, risk, emergency and IT disaster recovery management. Users can also access information through a mobile app.

With this tool, incident/crisis response is integrated, using information gathered in the planning phase, and mobilising through the notification module, while capturing and monitoring task completion. Roll-ups and dashboards provide current state of readiness and requirements, contact information and gap reports to enable informed decision-making.

ParaSolution was built with industry best practice and standards in mind, whilst also being highly customisable. A selection of business continuity and emergency management, BIA, risk assessment and IT disaster recovery plan templates can coexist, factoring in business unit specificities as well as different regulatory environments.

The tool can also measure compliance with ISO 22301 using integrated ICOR self-assessment tools, with guidance on remedial processes provided.

Popular in the financial and manufacturing sectors as well as in government agencies, ParaSolution SaaS is hosted on secured and audited servers and can also be hosted by the user organisation.

[premiercontinuum.com](http://premiercontinuum.com)



## Emergency & Mass Notification Software Report 2018 -19

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### PDRWEB SERVICES CONSEILS

PDRWEB can be tailored to suit a range of users, from SMEs to large multinational organisations. The product features a dashboard showing the status of different plans, BIA progress, maintenance status of plans, message centre, logged in users and completed activities.

This tool has a web-based customised survey form, which, once completed, will automatically establish RTOs using customised weight factors and activity dependencies. Reports are then generated by site departments and dependencies. Upon review and acceptance of all reports, PDRWEB automatically creates different business continuity and disaster recovery plans. During the creation of plans, the product links the different activities using prerequisites and a decision tree. The software also links the required resources to the activities. It can also link multiple plans and produce dependency mapping. PDRWEB has a built-in maturity analysis based on BS 25999. Once users have filled out the related web-based survey, the solution produces graphical reports on the status of the analysis.

Users can also receive automated alerts that notify them of their respective activities, providing all the information required for the execution of the task, including resources, contact information, and diagrams. PDRWEB also offers an integrated notification module via email and/or SMS, recording each step and all messages in relation to it.

[rdiinc.com](http://rdiinc.com)

### RPX RECOVERYPLANNER



RPX is a fully integrated resiliency software that centralises business continuity, disaster recovery, operational risk, cyber security planning, crisis/incident management, vendor management and emergency notification. It is used to standardise, simplify, view and assist with the management of these processes, providing the functionality, scalability and flexibility for a frequent user, yet is simple enough for the casual one.

RPX's app is designed to ensure that, even without an internet connection, users can manage or participate in an incident, crisis communications, access plans and files and distribute and manage tasks. The app is available in both iOS and Android.

With cloud-based datacentres in Europe, the US and Canada, RPX can be hosted in the cloud as SaaS or provided on-premise. The RPX system is designed to support localisation and automatically detects the user's language preference which can be switched with a click. Live RPX Help Desk Support is available in all time zones and in a variety of languages.

RecoveryPlanner has been in the resiliency software and consulting business since 1999, its products used by organisations of all sizes and industries, public and private, throughout the world.

[recoveryplanner.com](http://recoveryplanner.com)

### RESILIENCEONE STRATEGIC BCP

ResilienceONE is designed to help users navigate obstacles within business continuity, disaster recovery and strategic IT planning and has been in the market since 2004.

StrategicBCP reports over 350,000 users of its tool for building and maintaining action-based plans that can be implemented in the event of business disruption.

This tool comprises business processes, recovery mappings, compliance wizards, policy libraries, and exercise and test management features, along with GRC tools.

The current version of ResilienceONE is v8.0. The product is offered in the cloud and on-premise.

[strategicbcp.com](http://strategicbcp.com)

### THEONEVIEW EGTON

TheOneView is a web-based software solution that brings the user's business continuity, risk and compliance needs together in one place.

TheOneView brings together the relevant information on organisational risks and aligns them through BIA process to the business recovery objectives and plans. The interactive BIA, improved risk management toolset, in-built audit capabilities and enhanced reporting suite are key product innovations within this tool.

Intuitive reporting functions provide insight, monitor SLAs and define



# Discover What's Possible



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Integrated  
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[fusionrm.com/discover](https://fusionrm.com/discover)



Features	Shadow-Planner	alive-IT	BCP Builder	Catalyst	ClearView	Continuity Logic	Continuity Manager	Crises Control	Fusion Framework System	Inoni Pro
Plan navigator	•	•	•	•	•	•			•	•
Dependency mapping	•	•		•	•	•	•	•	•	•
Graphical call list	•			•	•	•			•	•
Location resource manager			•	•	•	•		•	•	•
Recovery site layout planning	•			•	•	•				
Reports – preformatted	•	•	•	•	•	•	•	•	•	•
Reports – own build	•	•	•	•	•	•	•		•	•
Process modelling capabilities	•	•		•	•	•			•	•
Technology modelling	•	•		•	•	•			•	
‘What if’ analysis	•	•		•	•	•			•	•
Data collector	•	•	•	•	•	•	•	•	•	•
Automatic analysis	•	•		•	•	•	•		•	•
Simulation capability		•		•	•	•		•	•	•
Dynamic updating from database	•	•		•	•	•	•		•	•
Education and training	•	•	•	•	•	•			•	•
Test and exercise	•	•	•	•	•	•	•	•	•	•
Test scripting	•	•		•	•	•			•	•
Dynamic incident management				•	•	•		•	•	
Dynamic question setting/reviews		•		•	•	•			•	•
RTO/RPO desired/actual analysis	•	•		•	•	•	•	•	•	•
Standards compliance	•	•	•	•	•	•	•	•	•	•
Integrates with GIS mapping				•	•	•			•	
Integrates with HR system, Active Directory or other	•	•		•	•	•			•	
Workflow management with email alerts and reporting	•	•	•	•	•	•			•	•
Multi-language capability – interface	•	•		•	•	•	•	•	•	
Multi-language capability – user data	•			•	•	•	•	•	•	
User roles and groups	•	•		•	•	•	•	•	•	•
Document update management	•	•	•	•	•	•	•	•	•	•
Comprehensive audit trails	•			•	•	•		•	•	•
Mobile device support	•	•	•	•	•	•		•	•	•
Templates available	•	•	•	•	•	•	•	•	•	•
Change control and tracking	•	•	•	•	•	•	•	•	•	•
Screen customisation	•	•	•	•	•	•			•	•
Help	•	•	•	•	•	•	•	•	•	•
24/7 live support	•	•		•	•	•	•	•	•	•
Internal search engine	•		•	•	•	•	•	•	•	•
Charts, reports, graphs	•	•	•	•	•	•	•	•	•	•
Filters	•	•		•	•	•	•	•	•	•
Personal filter	•	•		•	•	•	•	•	•	•
Drag and drop	•	•	•	•	•	•			•	•
Mobile app for offline viewing	•		•	•	•	•			•	•
Integrates with EMN software	•	•		•	•	•			•	
Remote hosting	•	•	•	•	•	•	•	•	•	•
SaaS option	•	•	•	•	•	•	•	•	•	•

LogicManager	Mataco	MIMS (Major Incident Management System)	ORBIT4BC	ParaSolution	PDRWEB	RPX	ResilienceONE	TheOneView	YUDU Sentinel	
										Plan navigator
										Dependency mapping
										Graphical call list
										Location resource manager
										Recovery site layout planning
										Reports – preformatted
										Reports – own build
										Process modelling capabilities
										Technology modelling
										‘What if’ analysis
										Data collector
										Automatic analysis
										Simulation capability
										Dynamic updating from database
										Education and training
										Test and exercise
										Test scripting
										Dynamic incident management
										Dynamic question setting/reviews
										RTO/RPO desired/actual analysis
										Standards compliance
										Integrates with GIS mapping
										Integrates with HR system, Active Directory or other
										Workflow management with email alerts and reporting
										Multi-language capability – interface
										Multi-language capability – user data
										User roles and groups
										Document update management
										Comprehensive audit trails
										Mobile device support
										Templates available
										Change control and tracking
										Screen customisation
										Help
										24/7 live support
										Internal search engine
										Charts, reports, graphs
										Filters
										Personal filter
										Drag and drop
										Mobile app for offline viewing
										Integrates with EMN software
										Remote hosting
										SaaS option



standard processes.

Egton reports over 15,000 users from a range of sectors including healthcare, finance, education, local government, retail, and distribution, among them TUI, Technicolor and Mark & Spencer's.

TheOneView is designed for scalability and multi-location organisations, providing access via any web-enabled device as well as its custom built app, available on iOS and Android.

The system aligns to ISO 22301 and 27001.

[egton.net](http://egton.net)



### YUDU SENTINEL YUDU



YUDU Sentinel is an app-based crisis management solution that offers an independent communication channel, offline documents and instant conferencing in one mobile platform. It is hosted on a secure, single-tenant cloud server to ensure reliability.

Sentinel features an employee directory that links with HR databases via API, ensuring that contact details are up-to-date and GDPR compliant. The provider says its tool allows incident managers to check that everyone in their organisation is safe in under 60 seconds.

A broadcast centre allows users to message individuals, groups or everyone. Users can also groups made up of internal contacts, external agencies/suppliers/clients or hybrid groups.

SMS, email and in-app messaging give users the greatest possible chance of reaching everyone, with real-time feedback to yes/no questions provided through a polling feature.

Sentinel's newest feature – Secure Instant Teleconferencing (SIT) – allows users to instantly set up a conference call with key crisis management team members, with no PINs or dial-in numbers.

A document centre allows users to upload vital documents for offline viewing.

Sentinel can provide immediate instructions for how to respond to a range of incidents by sharing pre-prepared action cards. Bespoke content can be created by specialist consultants and uploaded onto the system, providing staff with a playbook of the scenarios they are most concerned about.

YUDU has recently partnered with KRTS International to make the online, self-lead course Power to Recover available through Sentinel soon. Produced by experts in trauma counselling, this module is designed to guide people through recovery from a workplace trauma such as a terrorist attack.

[yudu.com/sentinel](http://yudu.com/sentinel)

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Not all business continuity management planning software is created equal. We like to think that our multiple-award-winning Shadow-Planner software reaches parts that other leading brands do not reach – why not contact us for a demonstration to find out for yourself? It only takes an hour of your time, there's no obligation and if you want to find out how BCM software can help you, it will be incredibly useful. Shadow-Planner also has an award-winning, innovative mobile app that drives business continuity planning for the digital age. If you're looking for BCM software that meets your specific requirements, we're flexible in how we deliver Shadow-Planner to ensure optimum use of the system so that you receive all of the associated benefits it brings.



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## FOCUSED, ACTIONABLE BUSINESS CONTINUITY SOFTWARE

Catalyst provides comprehensive, yet easy to use, business continuity and IT disaster recovery planning functionality to prepare organisations for disruptive incidents. Developed from Avalution's considerable experience building and operating the most effective, efficient, and strategy-aligned business continuity and IT disaster recovery programmes, Catalyst was designed for the global enterprise organisation but scales to address the needs of any organisation. With Catalyst, business continuity planning is simple, scalable, and actionable – for both the programme manager AND end user.

### PROGRAMME DEVELOPMENT

- Business Impact Analysis and Risk Assessment
- Plan Development and Management
- Recovery Task Scheduling and Visualisation
- Automated Exercise Planning and Management

### PROGRAMME MATURATION

- Automatic Programme Analysis and Reporting (Insights)
- Corrective Actions Management
- Management Review

### CRISIS/EMERGENCY/INCIDENT MANAGEMENT

- Live Incident Management
- Built-in Emergency Notification (Bullhorn)

### READY TO LEARN MORE?

Please contact our team to learn more. We look forward to connecting with you.



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ClearView is a global leader in BCM software with a web-based platform that empowers organisations to manage their business continuity activity as efficiently and cost effectively as possible.

With clients across both private and public sectors, ClearView has built an enviable reputation for excellence and innovation; and the software provides both ease of use and powerful functionality.

Building on the vision of 'making the complicated simple' for clients, ClearView provides a highly experienced implementation team to help new clients get up and running quickly; as well as making moving from competitor software to ClearView easy.



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Continuity Logic has been at the forefront of business continuity management software since 2006 and prides itself as a thought leader. The company's software is deployed with some of the world's largest corporations and leading brands, supporting often highly sophisticated requirements. It is also deployed with a wide range of mid-sized organisations who want a more immediate 'out-of-the-box' solution for their needs. Continuity Logic has been a Leader in Gartner's BCM software Magic Quadrant on the last four consecutive occasions. It is a recognition of which we are proud as we strive to keep our solution positioned at what we believe to be the pinnacle of our market.



**Peer Value**  
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**Tired of overpriced tools with complex interfaces and functionality that you dont need?**

**With Continuity Manager you get an intuitive, flexible and powerful Business Continuity Management system that enables you to manage and follow up your organization's BCM work in one single place.**

Based on many years of practical experience working with BCM in different organizations, Continuity Manager focuses on the essentials in getting BCM operational. With a user friendly interface it makes it easy to keep track of critical products and services, determine requirements and follow up status. Continuity Manager makes the BCM effort easy and effective for all involved parties in the organization.

Continuity Manager in short...

- Industry best practice and standards
- BCM Governance, Compliance and follow up
- Business Impact Analysis (BIA) tool and repository
- Intuitive BCM Maturity Assessment tool
- BCM Requirements repository and intelligent inheritance
- Dashboards and reporting functions enabling easy follow-up
- Dependency tree highlights relationships and statuses
- Financial value at risk calculated based on current continuity status
- Continuity Plan status tracking
- Role based administration and reporting
- Scalable and secure SAAS solution

**Please contact us to schedule a demonstration and get a free trial of 30 days!**



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Fusion helps your company prepare, manage, and act in any situation with our unique combination of consulting services and software solutions, including our award-winning software, the Fusion Framework System. The Fusion Framework creates tailored and engaging experiences for all contributors, automates much of the administration workload, and establishes an information foundation that can be used to make better decisions. Check out how Fusion can redefine your business continuity, disaster recovery, and risk management programs.



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ParaSolution is a web solution simplifying and managing Business Continuity, Disaster Recovery, Risk Management and Emergency Management over the last 15 years. ParaSolution is proven in large and small organizations including the financial sector, manufacturing and governmental agencies. With always the client at the heart of our considerations, here are key features:

- EASY TO USE, thanks to its workflow and seamless update functionality, no end-user training and remembering passwords are required.
- EFFICIENT, since information captured in the BIA is automatically available in other steps of the lifecycle and connected to a centralized and integrated database including stakeholders contact information.
- MULTILINGUAL, the solution communicates with users in their preferred language (interface and notifications).
- ParaSolution comes with standardized approaches, based on industry best practices such as ISO 22301 and BCI Good Practices, while allowing EXTENSIVE CUSTOMIZATION to suit your organization's needs.
- MEASURE compliance to ISO 22301 using integrated ICOR self-assessment tool and obtain guidance in progression.
- ParaSolution SaaS is highly available, hosted on secured and audited servers and can also be hosted by your organization.

Premier Continuum Inc., proud developer of ParaSolution, is a training partner of the BCI and of ICOR and a consulting firm with hands-on experience, established for over 20 years.



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YUDU Sentinel is an app-based crisis management solution that delivers resilience via an independent communication channel, offline document distribution and instant conferencing in one mobile platform. Sentinel allows incident managers to check people are safe in under 60 seconds via 2-way in-app, SMS and email messaging.

Sentinel is threat agnostic, allowing organisation to respond to any crisis from cyber attacks to terror attacks. The broadcast centre allows you to send SMS, emails and in-app messages to groups or everyone in your organisation, with two-way polling giving you real-time answers to yes/no questions (e.g. "Are you safe?"). The document centre provides groups with controlled access to business continuity and other vital documents offline and in a mobile-friendly format. YUDU also work with specialist consultants to provide bespoke in-app content, such as emergency action cards and workplace trauma response videos.



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Twitter: @RP\_BCM

#### RPX BCM Software

Depth, Flexibility & Scope for a Planner, Simple Enough for the Casual User  
RecoveryPlanner's cloud-based RPX software brings together a variety of risk management areas that are typically managed in silos to deliver a mature integrated solution for resiliency.

#### RPX Includes Full Functionality for:

- Operational Risk
- Business Impact Analysis (BIA)
- Reports and Analysis
- Compliance Tracking
- All Plan Types, such as, BCP, DR, Cyber, Vendor, etc.
- Vendor/Contract Management
- Emergency Notifications
- Crisis/Exercise Management

The RPX platform assists organizations to address operational concerns, compliance requirements, managing and assisting with a maturing continuity program, standardization and meeting customer demands.

#### Key Features:

- One Complete Mature Package
- Cloud-based
- SaaS or On-premise License
- Unlimited, Concurrent Licensing
- RPX Continuity App
- Multi-lingual UI & Support
- Global Data Centers
- Strong Security
- Rapid Implementation
- Customizable & Flexible
- Collaboration Tools
- Excellent Support

Ask about our EU Data Centers and Support!

## Industry views

▶ What is the point of corporate insurance? Until recently that would have seemed a strange question. However, against a backdrop of disruption to business models, a shift from tangible to intangible assets and associated changes to risk profiles, businesses are seeking new insurance solutions and services appropriate to the digital age.

Today's business is typically brand-led, highly leveraged and gives great ROI. But it is vulnerable to catastrophic loss of reputation or to disruptions in the supply or value chain. In this scenario traditional insurance can be too slow to respond and will likely offer poor protection to the balance sheet. The new business world is looking for transparency of cover and speed of claims settlement. Boards are demanding that risk and insurance professionals find solutions for risks previously incompatible with the traditional insurance market.

The challenge now for insurers is to remain relevant at a time when its traditional strength – covering physical assets – is becoming less important to corporate UK. It is equally a challenge for Airmic members, who are keen to acquire meaningful cover for intangible risks. Airmic is well aware of the difficulties that insurers face. Intangible events can be very difficult to define or quantify, the data demands daunting and the aggregate exposures unknown, especially at the reinsurance

level. Buyers, meanwhile, sometimes lack the knowledge to understand or the willingness to pay the kind of premiums that underwriters consider to be an adequate reflection of the risk.

Nonetheless, this is something we must crack together as capital providers, brokers and buyers. Part of the solution is for underwriters to become embedded in their clients' businesses as strategic partners as opposed to just insurance providers. That would give them the knowledge to provide meaningful cover for classes of insurance that would otherwise be in the 'too difficult' category. Emerging solutions such as parametrics have great potential. Now that insurance rates for physical assets have remained depressed for so long that there is little point in referring to a 'soft' market, intangible risks represent a great opportunity and a new frontier for underwriters.



▶ It will soon be ten years since David Cameron declared that the "age of irresponsibility is giving way to the age of austerity". The austerity programme was initiated in 2010, since which time organisations delivering vital services to communities have faced tough challenges and difficult decisions. At the same time, it has also led them to embrace the risks posed by large funding cuts and to take forward some ambitious change programmes.

Eight years down the line, we are certainly seeing the effects of sustained funding pressures. The NHS celebrated 70 years since its formation in 1948, celebrations that were somewhat muted by continual reports of the institution being at breaking point. Local authorities too are feeling the pressure, probably most highlighted by the issues at Northamptonshire County Council. However, adult social care provision is believed to be at near breaking point and the extreme hot weather over the summer will have been a particular pressure on the vulnerable. And, ahead of the Autumn Statement, a number of people are expecting a further increase in the Insurance Premium Tax, potentially adding further pressure on budgets.

Throughout these challenging times ALARM continues to support its members, providing great networking and learning opportunities, and an annual conference that goes from strength to strength. We pride ourselves on being an

organisation run by members, for members, and thereby have an understanding of the issues important to them. We have recently rebranded and relaunched our website, giving a new digital offering to members with a discussion and networking area, and we continue to offer excellent guidance. Our latest offering is a 'back to basics' guide on insurance.

Over the last five years, there have been significant changes in personnel across the country. In acknowledging this we have attempted to fill a gap for those with little or no experience in insurance. Our guide draws on the expertise of local authority professionals, insurers and brokers, with over 150 years of combined experience. I am sure it will also be of great interest as an *aide-memoire* to the seasoned professional too.



What's your view? Email the editor at [deborah.ritchie@cirmagazine.com](mailto:deborah.ritchie@cirmagazine.com)

▶ Every risk manager measures conduct risk with more than half an eye on the regulator, and for good reason. However, regulators do not always have the last word in how their rules are interpreted; they are accountable to politicians, and politicians are accountable to the public.

As the deadline for PPI approaches, we are reminded of a product that gradually became less and less tolerated by regulators as public opinion hardened against it.

So if it's the public, and not the regulators, pulling the strings on conduct risk, how do we know where its judgement is heading? The public doesn't publish guidance or thematic reviews, so how can we gauge what may be in its sights?

At the CII, we've made an attempt to identify the pinch points in the public's attitude to insurance and insurers (and, by extension, what the key areas of conduct risk are now and into the future) with a tool that we call the Public Trust Index.

Through a process of interviews, video diaries and other qualitative measures, market researchers at Deliberata identified nine key areas of trust in retail general insurance, from price and speed of claims, to respect shown to the customer during the claims process. They then tested the potential for improvement against these nine factors through a survey of 2,000 consumers and 1,000 small businesses.

Unsurprisingly, the loyalty factor showed the most room for improvement. It's a useful reminder that it's frequently collective conduct that really shapes public attitudes and regulatory responses.

Reintroducing a stronger sense of loyalty to customers is an issue that the ABI and BIBA are addressing through their Guiding Principles and Action Points for General Insurance Pricing. This provides the basis for the profession to eliminate 'excessive differences between new customer premiums and subsequent renewal premiums that unfairly penalise long-standing customers.' In a world where public opinion rules, it is this kind of collective action that makes by far the biggest contribution to managing conduct risk.



▶ The IRM is pleased to see that the new Financial Reporting Council (FRC) Corporate Governance Code places greater focus on risk. This includes an explicit mention in Section 1 'Board Leadership and Company Purpose' – as recommended in the response IRM submitted to the FRC earlier in 2018.

Section 1 states that the board should establish a framework of prudent and effective controls, which enable risks to be assessed and managed. The provisions further state that companies should describe in their annual report how opportunities and risks to the future success of the business have been considered and addressed.

The new Corporate Governance Code adds greater impetus for all risk management professionals to take a leading role working with companies who follow the Code in addressing both current, emerging risks and opportunities. Food for thought for risk managers.

In other news, we're delighted to be able to announce that we'll be working with the University of Warwick on our new Digital Risk Management Certificate. This jointly developed specialist qualification has been designed to equip individuals to apply and develop their skills in an increasingly digital world. It will look at how to carry out digital risk assessments, provide a detailed grounding in cyber security principles and practices

and also look at the ethical issues surrounding both privacy and machine learning. We'll be open for enrolments soon, but meantime you can find out more and take the digital quiz on our website to test your knowledge.

We're also open for bookings for our 9th Annual Risk Leaders Conference – Risk Management the Next Generation. The IRM's 2017 research report 'Setting the Risk Agenda: Exploring the future of the risk management profession' highlighted a number of key issues facing the profession, amongst them technological change, including AI and big data; geopolitical volatility; culture and behaviour; and professional practice. Risk Leaders 2018 will provide a forum for debate and discussion of these issues. We look forward to welcoming you.



## No quick fix

 **A new study reveals a decline in public confidence in businesses. Delivering sustained improvements in reputation will require firms to adopt a clearer focus on issues the public care about most, the report warns**



**H**igh-profile failures, such as the recent collapse of Carillion, have contributed to a decline in public confidence in businesses. This is according to a Confederation of British Industry / Porter Novelli survey, which notes a nine per cent fall in confidence since the previous review in October last year. Business reputation declined in 10 out of the 12 regions in the UK, it said.

At the same time – and somewhat ironically given this lack of confidence – the public wants businesses to be more outspoken on today’s social issues, including immigration, climate change, data protection and gender pay gaps. More than 92 per cent of the public are in favour of this, according to the survey. In fact, 72 per cent of the public are prepared to champion companies that stand up for what they believe and challenge politicians. The report’s authors point to another striking statistic – that 77 per cent say firms should do more to value women’s equality.

Commenting on the findings, CBI deputy director-general, Josh Hardie, said: “While complicated arguments about customs and regulations won’t set many pulses racing, the public do want to hear more from businesses about the issues that impact their lives. Speaking out can be tough and firms will need to decide when and how they do this, but it’s clear there is public appetite to hear from them. Moreover, our poll shows that the gap between business leaders and people narrows when firms speak up on issues they know about.

“Yet there’s no hiding from the hit caused by the likes of the collapse of Carillion, which has seen the reputation of business fall by nearly 10 per cent within a year.

Director of corporate reputation and purpose at Porter Novelli, Eleanor Turner, added that the opportunity to manage reputation is available to all businesses, but it requires “long-term commitment and investment beyond just trying to avoid the next crisis”.

### Reputational risk: No short-term fix

Despite the recent dip in confidence, the foundations for improved business reputation are slowly being put in place with the public’s knowledge about the contribution of business up (54 per cent) and an improved public perception of business leaders (up 10 per cent since May last year), according to the data.

Delivering sustained improvements in business reputation will require firms to address weaknesses where they exist and adopt a clearer focus on issues the public care about most. This means treating employees well, paying a fair share of tax, tackling unfair pay. These issues are firmly on the public’s radar.

Getting business practices right, making a difference and showing how businesses contribute to a more prosperous society are all steps business can take to improve their reputation.

### Additional findings:

- 56% think the reputation of UK business is good
- 78% report a positive relationship with their employer
- 54% understand how a company works
- 67% agree the heads of business are far removed from the lives of “ordinary people”
- 92% say businesses should take a public stance on key social issues
- 75% say it is important that companies are environmentally friendly and oppose climate change
- 77% say firms should do more to value women’s equality
- 75% say businesses should work with ethical suppliers and partners
- 71% say their employer’s contribution to society is positive

Source: CBI

# PROFESSIONAL SERVICES GUIDE

## BUSINESS CONTINUITY SOFTWARE



Contact Daisy to find out more about the unique benefits of Shadow-Planner:  
Call +44 (0)344 863 3000  
Email [enquiry.dcs@daisygroup.com](mailto:enquiry.dcs@daisygroup.com)  
<https://daisygroup.com/campaign-shadow-planner>



Daisy Shadow-Planner enables you to plan, develop, test and execute more streamlined and structured Business Continuity. Taking the pain out of the entire process, Shadow-Planner helps your people work smarter and faster and enables your business to deliver against its BC commitments more quickly, efficiently and cost effectively.

Designed by BC specialists, this suite of integrated software supports the entire Business Continuity Management (BCM) lifecycle: from impact analysis through developing plans to testing and reporting. Daisy supports you every step of the way, helping you create the strongest and most effective plans to minimise downtime and ensure you can work 'business as usual'.

Shadow-Planner is based on four core modules:

- Business Impact Analysis (BIA)
- Business Continuity Planning
- Notification
- Mobile Plans

Organisations in the financial services sector, public sector and others in regulated industries have used Shadow-Planner to help comply with business continuity standards such as ISO 22301 and other specific codes of practice.

### How you benefit

A low-cost solution, requiring no local cap ex or hardware investments, you can:

- Get rid of inefficient, inaccurate and risky manual approaches - Word documents and spreadsheets
- Ensure all essential data (plans, contacts, documentation and more) are in a single secure location, at your fingertips
- Be assured that all data is regularly reviewed, updated and consistent
- Achieve faster ISO 22301 BC certification



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## Emergency & Mass Notification Software Report 2018-19

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### Sungard AS Business Continuity Management Planning Software

#### Assurance<sup>CM</sup>

Brand new to this edition of the report is Assurance<sup>CM</sup> which was designed by users, for users. This next-generation business continuity software and risk management solution removes the barriers to organisation-wide engagement and builds greater confidence in contingency plans. It's about extending beyond simply addressing compliance requirements. It's also about knowing teams are prepared to recognise threats to the business and empowering them to engage locally before incidents lead to major disruptions.

So far our users rate the Assurance<sup>CM</sup> experience as:

**Intuitive** – Simple and easy, get your program up and running with minimal training

**Aware** – Merge external happenings with enterprise plans and gain real-time contextual insight to act decisively

**Alive** – Eliminate manual data management and trust that your data is accurate and up-to-date

**Efficient** – Yet secure to help you work smart, engage users and delight stakeholders on program effectiveness

**Independent** – SaaS and mobile, connect quickly to people and information that matters the most

And a 100% SLA availability guarantee.

Plans and testing do not deliver outcomes, people do. Sungard AS Assurance<sup>CM</sup> is about enabling you to take what we learn back into the business continuity/disaster recovery planning cycle and share it across the company for better outcomes.

#### ASSURANCE<sup>NM</sup> (NOTIFICATION MANAGER)

Introducing our new powerful emergency notification tool, designed for when you need it most to ensure the effect send of critical alerts to your key recipients at any time, using any device, and get the response you need.

Assurance<sup>NM</sup> Alerting and Mobile Services from Sungard Availability Services (powered by Send Word Now<sup>®</sup>) leverages a variety of communication methods to transmit tens of thousands of voice and text messages in minutes. The Assurance<sup>NM</sup> communication solution is built on an award winning platform that is used by both public and private sector organisations worldwide, offering them market leading capabilities and superior performance which Sungard AS customers can rely on. For more information please contact Sungard AS:

## BUSINESS CONTINUITY, DISASTER RECOVERY & ALWAYS ON INFRASTRUCTURE



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Daisy has become the UK's go to partner for resilient, secure and always available communications and IT infrastructure managed services.

As the UK's business continuity industry leader with over 25 years' experience, Daisy is embedding resilience into its entire service portfolio, focussed on enabling today's digital business in the key areas of always-on infrastructure, connect & protect and agile workforce.

#### Business Continuity Management:

Daisy's BCM consultants and Shadow-Planner software work with you to deliver digital business resilience and address the new risks of the digital economy. We advise, deliver, support and manage all or part of your business continuity management, including emergency response planning; crisis and reputational risk management; operational and business recovery planning; infrastructure process and IT risk analysis; supply chain risk management; authentic exercising, maintenance and awareness.

#### Workplace and FlexPlace Recovery:

Daisy has got your offices and your people covered from 18 specialist business continuity centres available UK-wide, mobile and virtual office solutions delivered to the home and complex call centre and financial trading positions. We usually have customers up and running within an hour and not just for business interruptions, but to cope with peak or seasonal trading and the flexibility digital businesses now demand.

#### ITDR, FlexTech and Data Availability:

Daisy's flexible IT and data recovery services will protect your technology, data and communications, available when the need arises and for test and development scenarios. We have nine resilient UK data centres and an award-winning portfolio of data availability services, applauded by industry analysts. For replacement IT onsite fast, we have over 1,000 servers and seven ship-to-site, mobile data centre units, all ready to dispatch if disaster strikes. This can be a safe roll-back recovery option in the event of cyberattack.

## BUSINESS CONTINUITY, LOGISTICS



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LinkedIn: <https://www.linkedin.com/company/10540515/>

CMAC Business Continuity Transport makes moving your people safely, simple. We believe that everyone should be moved safely, whether it is in an emergency or as a planned exercise. We want everyone to feel secure in the knowledge that if they can no longer work at their usual location, they will be safely moved, just by making one phone call to our 24/7/365 call centre. We were established in 2007 and have become the UK's leading dedicated provider of business continuity transport.

A large graphic for CIR Software Reports. It features a stack of report covers on the left. The top cover is titled 'BUSINESS CONTINUITY SOFTWARE REPORT 2018' and includes the text 'Your plan, just better' and 'Out of the shadows, into the spotlight'. The background of the graphic is a dark blue and black space with glowing orange and white lines representing a network or data flow. On the right side, the 'CIR' logo is prominently displayed in large, bold, black letters, with 'CONTINUITY INSURANCE & RISK' written in smaller letters below it. Below the logo, the text 'CIR Software Reports' is written in white on a black background. Underneath this, a grey box contains the contact information for advertising in the next report. At the bottom, the text 'Perspective Publishing' and 'Sixth floor, 3 London Wall, Buildings, London EC2M 5PD' is displayed.

# CIR

CONTINUITY INSURANCE & RISK

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## CLAIMS HANDLING & RISK MANAGEMENT SOFTWARE SOLUTIONS



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In business since 1992, JC Applications Development Ltd take great pride in our ability to develop world class software solutions and associated services that enable our clients to manage risk, compliance and claims more effectively. As a result they are better placed to achieve their corporate ambitions, save time, money and offer a superior service to their stakeholders. This is proven by our last customer satisfaction survey where 98% of respondents said that they would recommend us.

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## CLAIMS HANDLING & RISK MANAGEMENT SOFTWARE SOLUTIONS



Ventiv Technology  
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