

Enterprise Risk

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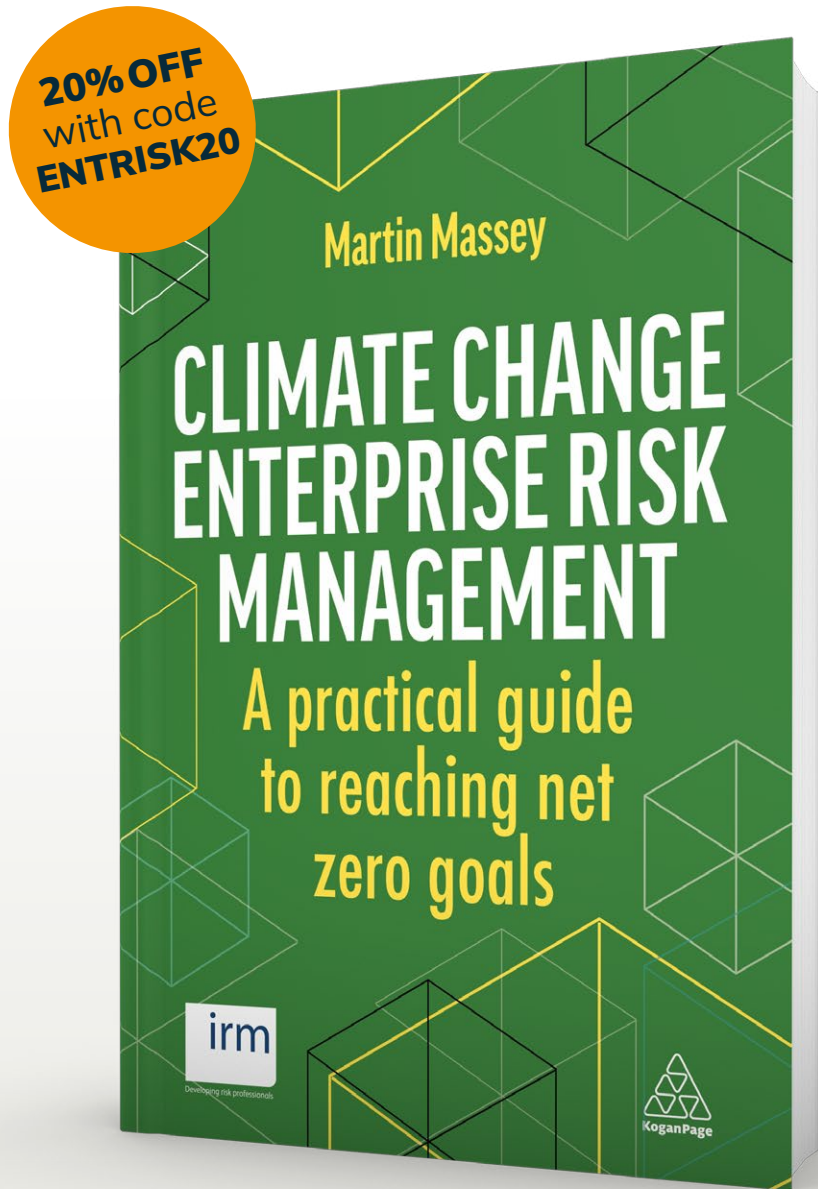
The official magazine of the Institute of Risk Management

In the thick of it: Clive Martin, the first-ever head of the government risk profession, is building a more co-ordinated approach to tackling the country's biggest threats



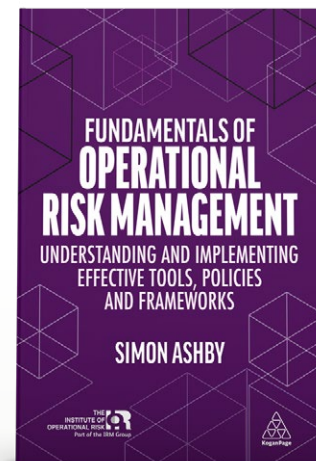
Time for action: businesses get to grips with climate change / **Setting the scene for success:** scenario planning explained / **Money revolutions:** adopting crypto and digital assets / **Continual improvement:** IRM's revamped International Certificate in Risk Management

Develop practical strategies to manage climate-related risks

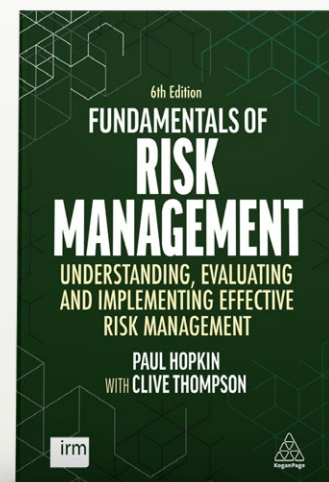


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The IRM is the leading professional
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risk to ensure organisations are ready for
the opportunities and threats of the future.

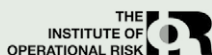
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Climate change action quickens

This year's COP27 was supposed to be a meeting designed to turn the many pledges that countries have made on climate change into action. That intention can be summed up in one word – failure.

While at the so-called African COP, which was held in Egypt in November, world leaders did agree to launch a new loss and damage fund for the worst-affected countries, the rest of the conference was mired in niggling disagreement and a lack of clear goals and vision.

Business, on the other hand, is not only preparing to mitigate risks associated with a heating planet but waking up to the idea that adaptation could be profitable. A well-cited [Bloomberg report](#) puts the value of such projects at about \$2 trillion over the next five years.

In fact, at the beginning of November, the UK government's [Transition Plan Taskforce](#) published what it called a new gold standard for climate change disclosure and implementation. Under the proposals, organisations must publicly declare their plans for achieving net zero. If organisations are not attracted by the carrot, there is always a stick to get them moving.

“Innovation will be key to how well businesses manage transition risk

When I attended IRM's World@Risk event in London while COP27 was in full swing, I was struck by the mood of urgent optimism among both presenters and delegates (see pages 18-21). On the one hand, attendees accepted the fact that climate change of 1.5C is now “baked in” together with all the problems associated with a heating planet. But on the other hand, there is a growing awareness that forward-looking, risk-based decisions will be one of the only things to set the winners apart from the losers.

Innovation will be key to how well businesses manage transition risk. No industry will be immune from fundamental reorganisation. In a scenario described by Swiss Re's Annemarie Büttner at the conference, for example, she suggested: “In future, airlines may not offer flights of under two-and-a-half hours where you could take a train instead.” That suggests a healthy long-haul aviation sector, but only minimal short-haul services. In other words, a totally different industry model than the one that exists today.

Every business must do these calculations across its whole operations. Fortunately, sophisticated modelling can help. But so can our collective experience of living through a pandemic. Despite the pain, innovation and collective action got us through. Organisations are beginning to apply the lessons they have learnt over the last three years (almost) to the next global challenge.

Arthur Piper
Editor

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Seeking the North Star

Providing leadership to the profession and embedding operational risk deeper into more industries are key goals for IRM's Operational Risk Group

I am pleased to have been asked to chair IRM's Operational Risk Group, which includes the Institute of Operational Risk (IOR), acquired by IRM. Together with my fellow committee members, we will aim to embed IOR's offerings deeper into various industries – focusing largely on the Certificate of Operational Risk Management. In addition, we will seek to help grow the memberships of IOR and IRM, as well as publishing thought leadership in key risk areas. Finally, we will continue the process of embedding IOR as an integral part of IRM, thereby helping to develop its various communities.

I am delighted to be undertaking this role at a time when organisations and their risk managers face challenges from multiple high-impact events that would typically come along over a lengthier period of time – numerous tail-events in quick succession, for those that model operational risk. The challenges from a war in Europe, a sharp and deep global recession and the pandemic look likely to run for an extended period. Organisations will need to rethink traditional strategies.

Ongoing impacts

The impacts of events – including shifts in social behaviours – are



likely to test the resilience of business strategies, and stretch risk management frameworks and systems of internal

control. While it is possible to hope that these events will have speedy and peaceful resolutions, organisations must prepare for the ongoing adverse outcomes and perhaps readjust notions of what business as usual means.

In this challenging landscape, we should be proud of what the IOR and IRM communities have achieved both collectively and individually to help position our members and their firms well. As a community, we have always continued to lead, thinking about what it is possible to be doing to manage the ever-changing risks landscape we now face.

But as events continue to unfold, we risk professionals may need to change our focus continually. The legacy data around risk events and impacts may need to be further stressed to model and manage operational risk. Scenario planning is proving to be a key tool in fast-changing areas. But organisations must nurture and retain the key talent and adapt their processes to new technologies to succeed.

Meeting the challenges

To meet the many challenges that lie ahead, we need to embark on a renaissance of risk management. That includes assessing quickly what new risks mean for organisations and how those can be incorporated into strategic planning, keeping pace with technological changes within organisations to manage both threats and opportunities, and demonstrating value to the enterprise by thinking about what is beyond the immediate horizon for risk management programmes.

When volatility subsides, forward-looking companies that have invested in sound risk management systems and talent will find themselves in a stronger position.

In the coming months and beyond, we will work to expand our footprint across various industries by embedding IOR and IRM offerings and continue to be viewed as an integral part of the overall risk management community. As we navigate through changing and evolving times, we aim to be seen as the North Star of operational risk management by providing guidance and insight into key risk areas. 



Paul Saunders (CFIRM) is chair of IRM's Operational Risk Group and managing director of the risk consultancy GDFM.

The latest stories and news affecting the wider business environment as interpreted by our infographics team

Most businesses have cyber insurance but gaps remain



86%



Number of businesses that have cyber insurance

54%



Those who say it meets their expectations

61%



Those who say their coverage has gaps

Meanwhile:

Respondents with cyber incident response plan

81%

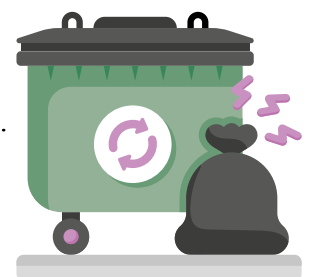
Yet, those who test those plans regularly

60%

Source: 12th annual information security and cyber risk management study from Zurich, North America, and Advisen

Global inventory waste tops \$64.5 billion

The US and UK are the worst performers as 3.4 per cent of inventory remains unused



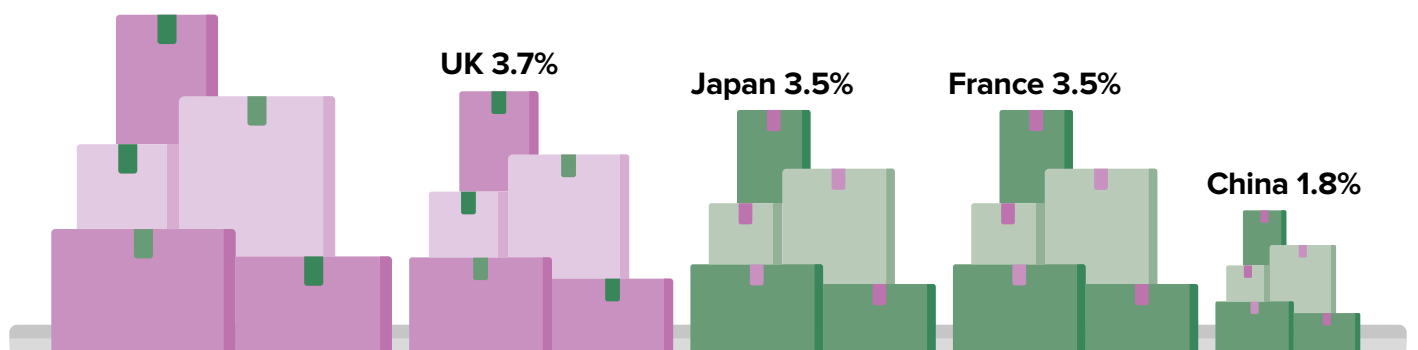
US 4.9%

UK 3.7%

Japan 3.5%

France 3.5%

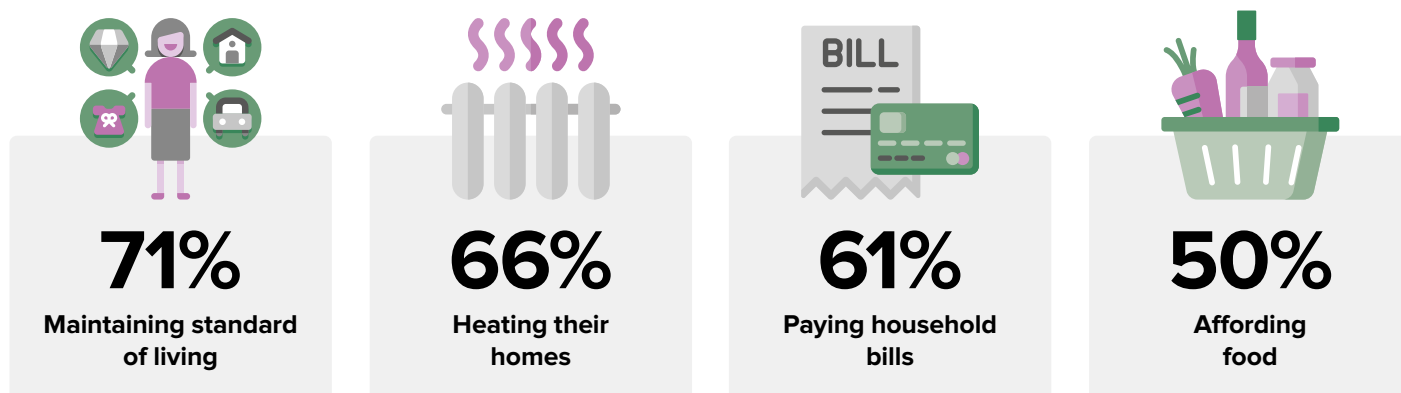
China 1.8%



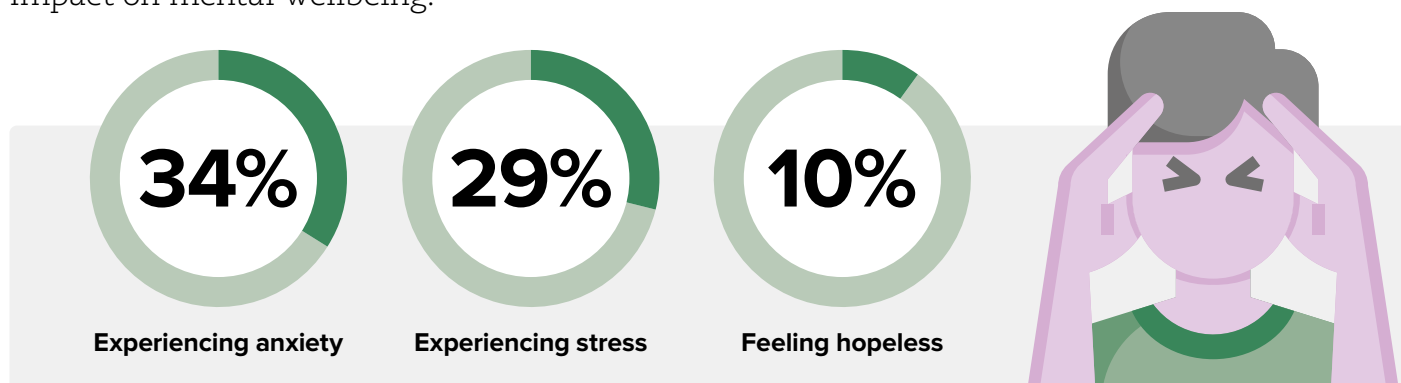
Source: The missing billions, Avery Dennison, 2022

Financial crisis raises stress and anxiety levels

Top concerns for UK citizens:



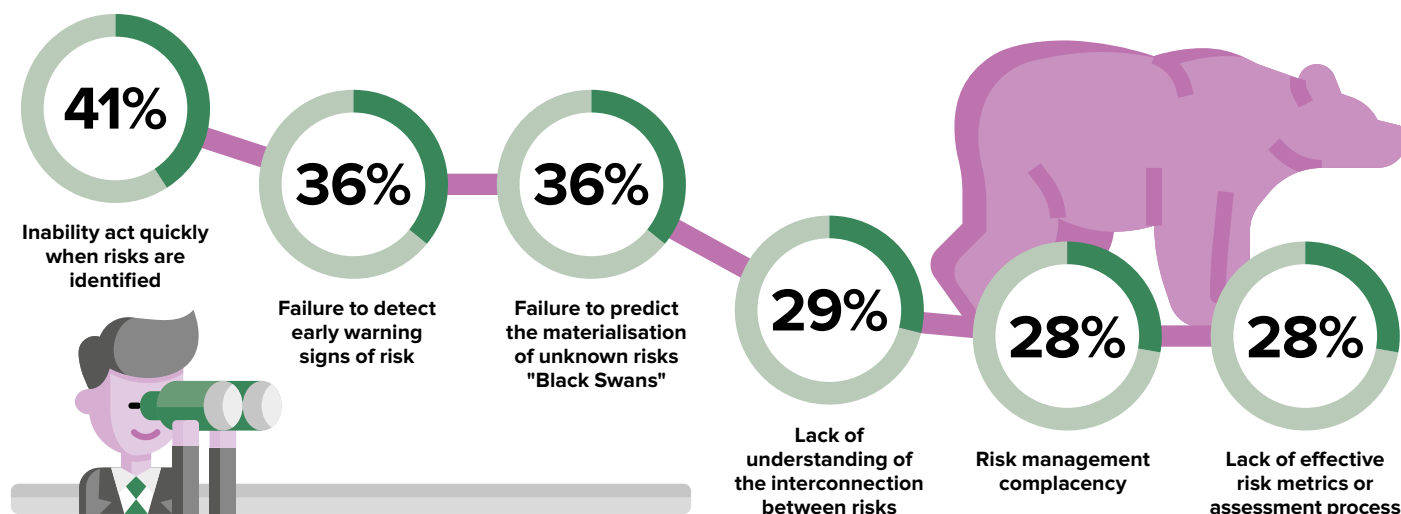
Impact on mental wellbeing:



Source: Mental Health Foundation research 2022

Institutional investors not joining dots on risk

Investors often fail to spot risk and act on it quickly



Source: 2022 PGIM Global Tail Risk Monitor Survey



In the thick of it

BY ARTHUR PIPER

The UK appointed its first-ever head of the government risk profession in the wake of the pandemic. Clive Martin explains how he has been building a more co-ordinated approach across departments to help tackle the bigger risks facing the country

In May 2022, Clive Martin, CFIRM, took the reins as the first-ever head of the government risk profession. The new post primarily aims to help strengthen the UK administration's ability to deal with large-scale risk across the wide range of government departments and affiliated organisations.

Martin, who comes to the role after a 30-year career in the private sector, says his remit covers three interrelated initiatives. First, he provides professional leadership to risk management specialists across government. Second, he heads up what he calls a "small but super "centre of excellence in

risk management. This team sits with Martin in the Treasury "to be able to anchor our work to key decisions on where public money is spent," he says. While based in the Treasury, its remit covers the whole of government and all areas of risk. And finally, Martin acts as a catalyst for improving risk management and, just as importantly, must

be able to demonstrate and articulate what progress has been made to stakeholders.

Origins

In fact, the creation of Martin's post represents the latest step by the government in its ongoing efforts to co-ordinate decision-making between departments – specifically by taking a more



Martin acts as a catalyst for improving risk management across government and being able to demonstrate and articulate what progress has been made to stakeholders



holistic view of risk. While the 2017 National Risk Register and the 2020 National Security Risk Assessment provided a welcome platform for joined-up thinking on a range of risks the country faces, Brexit and the COVID-19 pandemic have arguably accelerated the need for further evolution.

who were connected through an initiative called the Risk Improvement Group. The idea was to share knowledge and expertise and, at the time, it was one of the largest knowledge-sharing groups across government. When Martin started reaching out, he found that there were a

“ Whatever the levels of riskiness are in individual departments, we seek to understand the aggregate

The [Boardman Review](#) of government procurement in the COVID-19 pandemic (published in May 2021), for example, was a key milestone in that journey. Recognising improvements to risk management in government, the report author, Nigel Boardman, the then chair of the government audit and risk committee, emphasised that more work was needed within and across departments for better risk planning and intelligence sharing. The pandemic had effectively highlighted weaknesses in existing risk management processes that were often too focused on individual risks within departments – rather than considering how large risk events tended to impact multiple areas simultaneously. To address this, Boardman recommended that “a cross-department risk management profession with certification and training should be established.”

In July that same year, the [Public Accounts Committee](#) recommended that the Cabinet Office flesh out their response to Boardman’s proposals. Martin’s role and remit grew out of those recommendations and other ongoing work that predated the response to the pandemic.

Joining the dots

Before Martin joined, there were about 170 risk professionals working across government

lot more people who considered themselves to be risk professionals spread throughout central and departmental roles. To date, Martin has pulled together about 700 risk specialists with whom he has direct communication and expects that he may yet find more people in the months to come.

From the outside, it may seem strange that there were so many risk professionals that were working in isolation or in small groups. But government comprises not just big departments – such as Education and Health – but also many organisations that are funded by the government but not run by it. This latter group includes a wide range of bodies from the BBC to the Nuclear Decommissioning Authority.

Now there is a head of profession with whom they can communicate and make connections with colleagues. “I’m offering profession leadership for those people,” Martin says. “I am not co-ordinating their work, because they are not reporting to me. But I am seeking to bring cohesion to it by helping them help each other.”

Balancing act

Martin’s role, though, is not just one of co-ordination. In speaking with risk professionals across departments and affiliated organisations, he is looking to see how effectively they manage

risk – where they are on their risk maturity journey. Part of his remit, as we have seen, is to report on the progress government is making on risk management effectiveness and to help set priorities and track developments. In addition, he must also pull together specific risk information from those professionals so that the actual levels of risk government faces can be considered more holistically. Where risks are isolated, they may be dealt with by individual risk departments, but the other goal is to detect whether more concerted, widescale action is needed.

“Whatever the levels of riskiness are in individual departments, we need to see how all that aggregates and adds up,” he says. “Are there systemic challenges that everyone is facing at the same time? If so, we need to be looking for those as well.”



On the other hand, government operates in a relatively decentralised way, so Martin's remit is very different from a chief risk officer, for example, who may have overall control over the risk management approach in his or

risk appetite is primarily set by each department individually. While there have been efforts to bring consistency to the way those departments express that appetite, the actual ownership of risk remains devolved.

“ Government sometimes has to grapple with risks and levels of riskiness that others cannot manage

her organisation. The big decisions in each department are made by elected representatives (ministers and permanent secretaries), and their departments have their own budgets, including their risk management capabilities. That means that

Significantly, just because the business case for an initiative looks good on paper, the government of the day sets priorities for what gets done in practice – usually via the meeting of Cabinet. That drives investment and decision-making

and ultimately determines the nature and level of risk the government takes on.

“The scale and breadth of the challenges are much greater than other sectors because – in one way or another – government spans all sectors; it has to grapple with risks and levels of riskiness that no one else can manage,” Martin says. “The numbers can be very big – the public scrutiny is extensive – and the timelines allowed to demonstrate progress can be very short.”

Martin is a civil servant, so while his role is to help the elected representatives of the day to deliver their objectives, his ultimate boss is the Crown. “It is a bit like having a direct line to the chairman of the board,” he says jokingly. The nearest thing to the kind of cross-organisation executive



CLIVE MARTIN ON HIS PERSONAL RISK MANAGEMENT PHILOSOPHY

- **Priorities:** There is always time for a priority. Some people say they have got really great risk reports but sometimes have no time to do anything else. Is that always right to prioritise reports over more pressing matters?
- **Taking risks:** Take good risks – that is what we are here to do. I wish that every risk professional started with that mantra. You take good risks in pursuit of opportunity, so let us make conscious decisions about the nature and level of the risk we are taking in pursuit of that opportunity.
- **Think overall riskiness:** We need to think about the overall riskiness rather than thinking in terms of lists of individual risks. This approach lends itself to systems thinking as put forward by Warren Black and others working in the field of complexity risk.
- **Keep it broad:** Risk management is a broad umbrella, and we need to keep it that way. Sometimes, people can be tempted to say a sub-specialism is different to risk management because it is easier for them and more comfortable to exclude that from their remit. But risk management cuts across all organisations and all activities, so I would encourage risk professionals to embrace all forms of risk and risk specialisms rather than excluding them from their work.

See *A risk management book unlike all the others*, by Clive Martin, dedicated to risk management progress fans everywhere, for more.

committee that would exist in a private sector business is the Civil Service Board. There the leaders of the different departments get together to discuss matters of common importance, but the board itself is non-executive.

Strengthening risk management

Bringing people together in a deliberately quite siloed organisation is not without its upsides. In fact, Martin says there are a wide range of specialists advising and working in government on risk issues from whom others can learn.

He has found pockets of excellence among the 700-strong risk community and, where appropriate, he has paved the way for good practices, methodologies and data to be used in other areas. Sometimes, that simply requires Martin to get agreement from those concerned – at other times, the logistics of sharing approaches or information across disparate systems must be overcome. While it is early days, this approach

has produced some early fruit.

“I’ve found, for example, some really super risk management ideas and approaches in some of the arm’s length bodies of government and, with their permission, we are beginning to share those with other parts of government,” he says.



The IRM component of our professional accreditation helps with the status of risk specialists in government

In addition, one requirement of the Boardman review that was accepted by government was to set up a formalised, recognised accreditation regime for risk management. To do so, about a dozen heads of risk from across government considered what that accreditation should contain and, since qualification would form part of that process, which organisation should

provide it. The group chose IRM as its preferred supplier.

“IRM accreditation helps with the status of risk management in government,” he says. In practical terms, that means that if people can move between departments, the new team has a clear idea of their capabilities. But more

intangibly, perhaps, it helps to boost the status of the profession. Not only is there a head of the risk profession in the person of Martin, and risk professionals with IRM accreditation, but the organisations’ online websites and forums now specifically list the risk profession alongside other professions providing an extra layer of prominence which had been previously lacking.

While the current accreditation is aimed at the entry-level cohort, he says plans are afoot to introduce a more advanced level at some time in the future.

Early successes

While it is early days, Martin says he has seen some improvements from bringing people together from across government in the way that risk is discussed, treated and communicated. That does not mean that he is aiming to introduce a standardised approach to risk – government is possibly too diverse for that – but to improve risk thinking and behaviours by better collaboration and sharing. On the other hand, encouraging people to think about the overall riskiness of their choices – rather than treating risks as stand-alone problems – is high on his agenda. Effective dialogue and persuasion are key. That is one reason why he is also keen to help risk professionals be more aware of behavioural change techniques and to work consciously at improving the use of them along with their traditional, technical risk management tools.

“Risk professionals can lead the way on behavioural change,” he says, “by coming up with creative and smart ways to communicate. In many cases that will mean doing it differently to what they have conventionally done – but that is what holds the key to the next wave of success.”

On a practical level, that means taking a step back to understand how risk professionals are perceived by others in the specific part of government where they work. He says while some of the feedback risk specialists receive is encouraging, “some can be painful to hear.” Yet understanding why people see risk management in a certain way is the key to unlocking change.

“If we want others to behave differently, and we want them to listen more to what we say as risk specialists, then we need to know what pushes their buttons – and we need to have more flexible style

toolkits to be able to use,” he says. Using well-established behavioural change techniques as part of an overall risk management strategy is often neglected or under used, he believes. While getting the details right about what behaviours are needed to improve risk management is easy,

risk worked in a whole range of things, from gambling machines to espionage. This sparked his life-long interest in risk and how organisations deal with it.

“What I saw from the off was that it was not all nailed down – there was lots to play for and lots of new space to move



Risk professionals can lead the way on behavioural change by coming up with creative and smart ways to communicate

professionals often need to think smarter about how they are going to bring that about in practice.

“Some people love logic, but others do not,” he says. “So, if you are just pushing something that is logically strong, that is not always going to have the desired effect.”

Routes

Martin had a 30-year career in private-sector risk management before accepting his current post. When I suggest his trajectory to the civil service through various private sector roles – including becoming a partner at the consultant EY and setting up his own practice, among other assignments – is not obvious, he wonders if I am kidding. “This has the potential to be the best risk management role in the world. The scale and complexity of government challenges are immense,” he says. “It is brilliant to play such a role at the centre of risk management. It provides such a strong sense of professional purpose for the benefit of the country.”

Atypically, Martin chose a career in risk management in the late 1980s, electing to sit for a degree in the subject after attending an open day at Glasgow Caledonian University. He recalls being hooked on the subject when the speaker of the day, Professor Gordon Dickson, explained how

into,” he says. “While some bits of risk management have got a bit stale, I see plenty of new opportunity for progress.”

One of those areas is complexity and systems thinking– he admires the work of Warren Black (see, *Complexity and risk*, *Enterprise risk* magazine, Autumn 2022) and others working in the field. He believes that younger people coming into the profession could do worse than to get to grips with these areas, which is likely to see plenty of professional progress over the next decade or so as organisations start to consider the interactions between the risks on their portfolios in a more holistic way. Similarly, while technical skills are a given, he also believes that honing professional influencing behaviours is a must if risk managers are to get their messages across in a way that changes how people act for the better.

“Future risk management leaders will do all of that and more – they will understand how to influence people, boards and behaviours, groups of people, other professions, project management disciplines – to spark imagination and ideas. I would encourage people to try things out which are different to normal but understand that you are doing it to create necessary change.” 📌

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Time for action

BY ARTHUR PIPER

IRM's first World@Risk event concluded that the research on climate change and ESG-related issues is in. Now it is time for the work to begin

The top driver for Environmental and Social Governance (ESG) action in 2023 will be geopolitical tensions, according to Cvete Koneska, head of advisory at Dragonfly, speaking at [IRM's Climate Change and ESG Forum](#) meeting in London in November 2022. Why? Because climate change is a global phenomenon that demands collaboration across countries and sectors, she said.

Risk management's role would be to help organisations of all sizes and locations to think through the issues and plan for action to meet those challenges. That challenges would also be present for a global economic downturn and the ongoing energy crisis, she added. The event was IRM's first World@Risk gathering and was organised in collaboration with [Strategic risk magazine](#).

Waking up to ESG

Cristina Martinez Garcia, group chief risk officer at SACYR, said that chief executive officers are now becoming aware that the strength of a good risk management system depends on how well it is tied to the organisation's goals and strategy. "The world is waking up to the idea that ESG is central to their goals, strategies and to an organisation's resilience," she said. But lack of leadership on these issues – and poor corporate cultures – were risks that "nobody is talking about", she said.

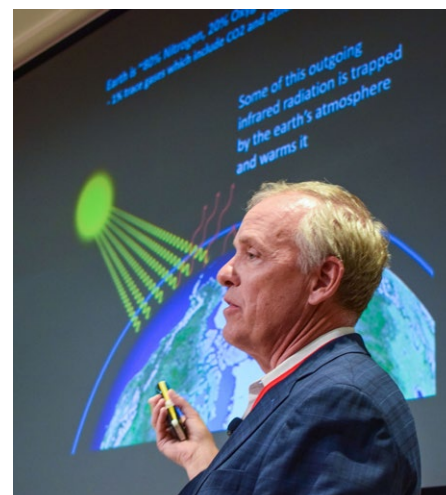
Nick Faull, speaking at the same opening session, said that the recent COP27 meeting had shown that the current climate change commitments would fail to restrict future global temperature increases to 1.5C. "We will see a lot more nature-related risk now and over the next few years," he

said. Some consequences would be unexpected. For example, recently Taiwanese computer-chip manufacturers have had to transport water by truck to cool their production plants because the reservoirs that normally serve them have run so low. "These are the kinds of events that will impact boards and companies," he said.

Adaptation

Risk managers will not be able to simply mitigate these risks, according to Swenja Surminski, managing director, climate change sustainability at Marsh McLennan, in a keynote address from the recent COP27 meeting.

"We need systemic responses, and when we think about adaptation versus mitigation and emissions reduction, it can't be either/or; it needs to be both," she said. That is because the climate has already changed. "Translating



Conference presenters discuss how to turn strategy into action.

“**Businesses are waking up to the idea that ESG is central to their goals, strategies and to an organisation’s resilience**

resilience talk into action is what we want to see,” she said.

She said that organisations were often geared to reacting to events rather than anticipating them. Adaptation would require a change of approach so that they could get ahead of the challenges. She added that investment in nature and nature-based solutions

CLIMATE CHANGE ENTERPRISE RISK MANAGEMENT

Develop and execute a resilient climate change enterprise risk strategy

Developing a practical roadmap for integrating climate change into a business’ enterprise risk strategy is not easy. Martin Massey’s new book offers guidance in several key areas. Using the tools in the book, risk managers can build a robust framework to identify and manage climate threats and opportunities for their businesses. In addition, it provides advice on how to increase the visibility of climate risk management activities at board level. And it shows how and when to implement techniques such as thresholds, mitigation strategies, monitoring capabilities and risk appetite metrics.

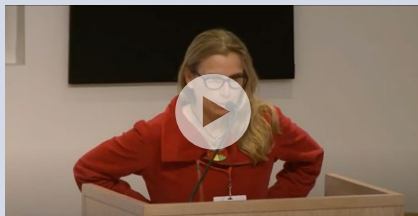
Familiar risk management tools can be adapted to work for climate enterprise risk management. But new techniques, such as stakeholder mapping, also need to be learnt and applied. Climate change enterprise risk management (IRM members receive a 20 per cent discount using the code: ENTRISK20) shows how. It provides global examples, interviews and case studies representing a wide range of companies and industries. Martin Massey is chair of IRM’s Climate Change Special Interest Group.

WATCH THE CONFERENCE SESSIONS



The world today – are we heading in the right direction?

Joe Rippon, Sizewell C financing programme manager, EDF Energy. Cristina Martinez Garcia, group chief risk officer for SACYR [Virtual]. Nick Faull, head of climate and sustainability risk and innovation, Marsh. Cvete Koneska, head of advisory, Dragonfly. John Scott, head of sustainability risk, Zurich Insurance Group.



Keynote: an update from COP27

Swenja Surminski, managing director, climate sustainability, Marsh McLennan.



The journey to sustainability

Interviewer: Gareth Byatt, independent risk & resilience consultant. Sarah Gordon, CEO, Satarla.



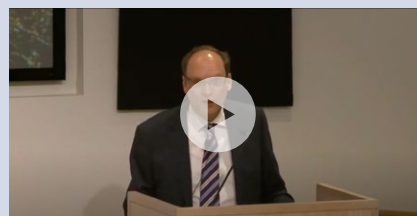
It's not easy being green

Nigel Brook, a partner at Clyde & Co LLP. Clive Thompson, technical director at Institute of Risk Management and project director at Willis Towers Watson.



Adaptation to climate change

Mike Lutomski, rocket scientist and risk management expert formerly at NASA and SpaceX.



Practical strategies in managing climate-related risk

Martin Massey, chairman, IRM Climate Change Special Interest Group. Laurent Sabatié, co-founder, executive director, Skyline Partners.



Taking control of climate-related risk

Abhijit Akerkar, head risk services corporates, Swiss Re Corporate Solutions.



Quantifying climate change risk

Joe Noss, senior financial director, Willis Towers Watson. Annemarie Büttner, lead climate risk solutions, Swiss Re Corporate Solutions.



Where risk meets sustainability/ESG

Mark Boulton, director, Boulton Consulting. Adrian Clements, President, AT-IPIC.

had been a cutting-edge topic at COP27, but that the sums involved were currently small.

Conflicting elements

Sarah Gordon, chief executive officer of Satarla, said that integrated risk management was a mechanism through which to realise sustainability objectives – including those set out by [the United Nations](#). One of the first challenges to recognise is that there will be conflicting elements to the alternative sources of

materials that companies may choose to adopt. For example, there are non-renewable elements in the renewables supply chain. In addition, while organisations may be able to assess their environmental impact, their effect on societies is more difficult to measure.

“Organisations should ask, what can we contribute to the sustainability agenda that goes beyond the financial? What is our sparkle?” she said.

One approach is to break

“**Translating resilience talk into action is what we want to see**

the problems down into their component parts. Mike Lutomski, rocket scientist and independent risk management expert, said that the science showed that the earth’s

population is now “fully committed to living on a higher-temperature planet because changes are baked in.” But adapting required organisations to get to grips with the data. And risk managers needed to work out how to make that data actionable. “We need to stop emphasising data and start talking about action,” he said.

Stakeholder activism

Non-governmental organisations (NGOs) have started taking organisations to court over their environmental advertising. Nigel Brook, partner at Clyde & Co, said that law sustainability-related suits were accelerating. While advertising claims have been a recent target for such actions, he said that NGOs had also begun launching actions on the contents of annual reports and accounts, directors’ fiduciary duties and whether organisations have a duty of care to the environment.

“Duty of care is evolving because what we know about climate change has altered,” he said. While some organisations and investors have complained that sustainability is being put ahead of profitability, growing legislation and climate-related research mean that some businesses could be creating a large legal risk if they act without regard to ESG, Clive Thompson, IRM’s technical adviser, said.

Opportunity

Risk managers need to look across the whole of their organisations because sustainability impacts them all. While this is a challenge, it could also be an opportunity.

“We have a real opportunity to brand ourselves differently,” Mark Boulton, director of Boulton Consulting, said. “If my job is to advise the C-suite and the board, I need to get purpose risk and business model risk on the agenda. We need to make them aware of the longer journey so that they are making strategic decisions for the next 10 to 20 years, rather than the usual three years that is so common today.”

GET INVOLVED

IRM Climate Change Special Interest Group

The [IRM Climate Change Special Interest Group](#) brings together risk practitioners for regular meetings and several events a year. The group:

- researches and collates climate change risk management best practices and solutions
- aims to develop a strong committee with a wide representation of members across different industry sectors
- supports IRM’s goals for increasing membership and developing educational training for members.

In 2021, the group published guidance specifically targeted to risk managers working on climate change issues – [Climate change risk management guidance](#). The document underlines the importance of Environmental and Social Governance (ESG) issues to global businesses and the pivotal role that risk managers will have in helping to address the climate crisis. It shows that effective action for risk managers means understanding the implications of climate science for your business and acting to create a new status quo where acting, instead of waiting to see what happens, is the default position. This means getting to a place where sustainable forward-looking climate change risk mitigation measures are built into business plans now.

IRM Environmental and Social Governance Special Interest Group (SIG)

The [IRM Environmental and Social Governance Special Interest Group](#)’s definition of Environmental and Social Governance (ESG) is the governance of purpose-driven organisations with the intention of fulfilling their social responsibilities in an ethical and sustainable manner. To that end, the group supports the [United Nations Sustainable Development Goals](#) – which are now widely recognised by organisations operating in the private, not-for-profit and public sectors.

The purpose of this SIG is to address ESG matters taking a risk sector-wide and global governance perspective. The group:

- provides a forum for the international IRM risk community to share knowledge and experience on ESG matters
- co-ordinates the ESG activities already being undertaken by IRM members on behalf of the Institute through, for example, governance conference, articles, thought leadership, webinars, international standards making and liaison with academic and professional bodies
- works with other IRM Interest Groups on current ESG matters
- aims to gain recognition of the pivotal role the risk professional has in the ESG space
- supports IRM to stand out as a leader in the field of ESG.

Read the interview with the group’s chair, Anita Punwani, in [Enterprise risk magazine](#).

Setting the scene for success

BY GARETH BYATT



While risk managers cannot predict the future, the judicious use of scenario analysis and scenario planning can help organisations navigate through challenging times

Broadly speaking, scenario analysis and scenario planning is a process of examining and evaluating possible events – scenarios – that could occur in future, and using this analysis to inform activities to achieve our objectives. How far we look into the future with scenarios depends on the context of what we are doing.

The [Task Force for Climate-](#)

[related Financial Disclosures](#) (TCFD) says scenario analysis is a tool to enhance critical strategic thinking. In addition, it says, a key feature of scenarios is that they should challenge conventional wisdom about the future. In a world of uncertainty, scenarios are intended to explore alternatives that may significantly alter the basis for “business-as-usual” assumptions. ISO 31000:2018 (*Risk management – guidelines*)

includes the use of scenarios in describing risk analysis, as do other ISO standards such as ISO 22301:2019 (*Security and resilience – Business continuity management systems — Requirements*).

Supporting strategy and tactics

Scenario analysis and scenario planning can be combined with strategy and business planning tools, and also with

CONTEXTS AND SCENARIOS

EXAMPLE CONTEXT	EXAMPLE ASPECTS OF SCENARIOS
Organisational/business plans that stretch over a certain time horizon	<ul style="list-style-type: none"> How your external environment could change in various ways over different time horizons Signals to watch for, and which factors could be sensitive to change, for example, linking to sensitivity analysis How your internal environment could evolve over a chosen time horizon, and signals to watch for How changes could affect business planning and financial models, and SWOT analysis.
Particular strategies and areas of focus	<ul style="list-style-type: none"> How an area of focus could evolve over a time horizon. For example, how do different climate change scenarios can impact what you do? How do those changes link to supply chain scenarios and specific product scenarios?
Projects of various types, sizes and time frames	<ul style="list-style-type: none"> How a project could progress across different metrics – for example, time, scope, budget, stakeholder positions and project risks Pre-mortems and pro-mortems (as described by Dr Gary Klein) to imagine worst-case and best-case outcomes Using scenarios to inform project quantitative risk analysis (QRA) such as Monte Carlo methods.
Your organisational resilience, including your preparedness to respond to a crisis situation or a business continuity problem	<ul style="list-style-type: none"> How a crisis/organisational disruption event could unfurl in different time frames, and how you can anticipate, act and respond purposefully How to demonstrate co-operative resilience in adverse scenarios for the benefit of all your stakeholders How you may respond to a specific situation such as a cyberattack.

POINTS TO CONSIDER

ASPECT	CONSIDERATIONS
Agree what you want to do and achieve with scenario analysis and scenario planning – agree the scope and extent of activities, and your objectives (which may include some form of training/skills development)	<ul style="list-style-type: none"> ■ Review and discuss ways and models of using scenario analysis and scenario planning for your scope and context. For example, is it linked into existing work you are doing/have already done – such as horizon scanning, a risk review or a series of planned reviews? Or can you use certain data and data analysis at your disposal to help review scenarios and supporting models? ■ If the situation is urgent, such as responding to a crisis event, you may default to a pre-agreed method for response ■ Are there preferred methods and tools for using scenarios in your organisation? (See a few examples below.) ■ How many and which types of stakeholders do you want to involve, and in what style – for example, brainstorming and focused reviews? ■ Do you prefer a simple or a complex approach? One example of a simple approach is to consider “<i>What is, What if and What next?</i>” as three connected aspects over an agreed time frame. If you are to review complex scenarios, for example impacts across an extensive supply chain or a portfolio of projects, will you use systems analysis to review the impacts of scenarios across an interconnected system? ■ How do you want to apply time and velocity of change to stress-test strategies, plans or situations?
Undertake the scenario-analysis and scenario-planning review	<ul style="list-style-type: none"> ■ Depending on your scope, you may have someone in a facilitator role to support the process ■ The scenario-analysis and scenario-planning review will reflect whether it is integrated into an overall planning review, a business plan review, a business risk review or a project review ■ If it is part of an overall review, you may stitch the scenarios into it by using existing exercises/tools such as risk prioritisation maps or models ■ If it is being conducted in a hybrid or virtual manner, make sure you have the right interactive tools tested beforehand, and that people know how to use them.
Use the outcomes to help you achieve your objectives	<ul style="list-style-type: none"> ■ After conducting the scenario-analysis and scenario-planning review, confirm how the outcomes and actions from it will help the activity/situation that it was designed to support ■ Agree next steps and actions ■ Share learnings on how you conducted it for others in your organisation – and perhaps other stakeholders such as suppliers.

risk management and resilience techniques and practices to stress-test objectives, strategies and plans. Such linkages include horizon scanning, pre-mortems, counterfactual analysis, crisis management and business continuity management.

While scenarios often support strategic management, they can also add value to short-term tactical reviews and needs. The process of envisaging future

possibilities helps us think through the way that different external and internal factors may evolve, and our ability to anticipate and adapt to change. Such actions can improve

decision-making and help us be alert to signals – be they strong or weak – to be ready to act and react in purposeful ways to what we see ahead of us. As such, the practice can help with avoiding a myopic



Scenario analysis and scenario planning can be combined with strategy and business planning tools

“ The process of envisaging future possibilities helps us think through our ability to anticipate and adapt to change

focus, keeping biases in check and circumventing groupthink. Done properly, it can help organisations maintain a good state of resilience.

Approaches to scenario analysis and planning

The strategies and plans we work towards relate to specific aspects of what we do and our context, internally in our organisation and externally for our environment (see *Contexts and scenarios*).

Not surprisingly, a variety of ways to conduct scenario analysis and scenario planning exist. It can be done in a large-scale, detailed manner, or it can be done through a smaller, quicker approach. Your circumstances and context will inform what you do, but there are some important aspects to consider that apply to most situations (see *Points to consider*).

Getting the right balance of predictable outcomes and scenario outliers is not easy. Having a diverse team to think about scenarios helps to achieve a good balance and range. In a


2015 paper, [Overcoming obstacles to effective scenario planning](#), the consultant McKinsey pointed out some aspects to scenario planning and managing biases. Considerations include, for example, the availability bias where groups tend to make decisions on what they already know or have seen recently. Open and free debate can help overcome social biases – but there are many other biases to combat.

Links and guidance

A wide variety of tools, from simple to complex, exist to conduct scenario analysis and scenario planning (see *Linking tools*). Depending on your context and scope, you may benefit from external support and guidance. For example, support exists for climate change scenarios – a critical matter facing us all. The [TCFD](#) and the [Network of Central Banks and Supervisors for Greening the Financial System](#) both offer useful guidance.

In our fast-changing, volatile

and uncertain world, scenario analysis and scenario planning can help us to think about the future. It can help us consider in a de-biased way how different situations could affect our ability to achieve our objectives.

It can also be a valuable tool for tactical, urgent needs when we have to quickly assess and manage situations. Stitching scenario analysis and scenario planning into our way of working can help us to anticipate how situations may evolve, be aware of and adapt to changing circumstances, and think through and act on the risks to achieving our objectives. 

 **Gareth Byatt is a risk and resilience consultant operating across different industries and domains. He owns Risk Insight Consulting and is also an associate with Satarla. He is the IRM global ambassador for the APAC region.**

LINKING TOOLS

TOOL	EXAMPLE USAGE
A simple 2x2 box	■ Useful to consider four scenarios plotted against appropriate X and Y axes.
Risk prioritisation maps	■ If you have your risks mapped, you can run scenarios with them to review how these risks may change depending on different things happening, which you could link to a 2x2 scenarios box.
Three segments	■ A “What is, What if and What next?” as three connected segments to think through different situations in varying degrees of detail.
Decision trees	■ Review potential options for decision-making along different paths and branches to arrive at agreed approaches based on outcomes along the way.
Risk quantification	■ Quantitative risk analysis (QRA) can be linked to scenario analysis and scenario planning, when you have appropriate data.

Money revolutions

BY ALEXANDER LARSEN

As a wide range of digital assets become mainstream, organisations need to carefully assess the opportunities and risks of adoption

The last few years have seen a lot of hype around the converging technologies of blockchain,

cryptocurrencies, non-fungible tokens (NFTs) and the metaverse. In a previous article (Welcome to the metaverse, *Enterprise risk*, Spring 2022), we concluded that the metaverse would take a while to become a reality, and blockchain technology has now risen to prominence, gaining widespread adoption.

According to the [researcher Blockdata](#), 81 of the top 100 companies use blockchain technology. It found that the technology is being used in areas such as payments, traditional finance, banking, supply chain and logistics. Blockchain is no longer a technology of the future, but one that is established and being developed.

The tumultuous rise and fall in the wider cryptocurrency market, led by Bitcoin, over the last two years has no doubt triggered renewed concerns regarding the

that may exist in Web3, where cryptocurrencies, central bank digital currencies, NFTs, the metaverse, decentralised finance, community tokens



Blockchain is no longer a technology of the future, but one that is established and being developed

legitimacy of the asset class, with many pointing this out as proof that this is just a passing fad being fuelled by speculators. While on the surface it may look this way, there are many indicators that suggest that it is here to stay. We will therefore take a closer look at the opportunities and risks of Bitcoin corporate adoption and review the possibilities

and decentralised autonomous organisations all converge.

Definitions

Reflecting on the events of the past two years, you may be forgiven if you missed hearing about how Bitcoin has won over some of world's best-known billionaires, from technology entrepreneurs such as Jack Dorsey,



Image credit: Traxer / Unsplash.com

Peter Thiel and Elon Musk to Wall Street legends such as Stanley Druckenmiller and Paul Tudor Jones. All have embraced Bitcoin – but why? What qualities does this relatively new, highly volatile and digitally intangible asset have that would garner such interest? To attempt to answer that question, one must first understand what Bitcoin is and what it does.

“ There may be several reasons why a company may wish to add Bitcoin to its balance sheet

Bitcoin is a new digital form of money that is censorship resistant, seizure resistant, borderless, permissionless, pseudonymous, programmable and fully peer-to-peer. It is therefore available to everyone around the world, and all that is required to interact with the network is a mobile phone and an internet connection. With Bitcoin, transactions are not managed by banks or financial intermediaries, but instead value travels directly from one person to another. Payment processing is not done by a regulated company like Visa or PayPal, but instead it is all facilitated by a decentralised global software network, with custodianship not handled by a bank but the users of the network. Other cryptocurrencies aim to emulate these attributes.

While the wider cryptocurrency market is awash with different digital assets and tokens (over 19,000 of them), Bitcoin has, since inception, remained the largest cryptocurrency by market capitalisation. To many investors, it is Bitcoin's longevity and simplicity that sets it apart from the rest of the digital asset market.

Mainstream acceptance

A telling metric that reflects Bitcoin's mainstream acceptance is the increasing trend of corporate adoption. One of the

most prominent examples of this was NASDAQ-listed MicroStrategy Incorporated's announcement in December 2020 that it had made more than US\$1 billion in total Bitcoin purchases in 2020. It claimed that this would “provide the opportunity for better returns and preserve the value of our capital over time compared to holding cash.”

Following this, other companies, such as Tesla, followed suit.

There may be several reasons why a company may wish to add Bitcoin to its balance sheet. It may be to leverage a potential opportunity for asymmetric risk returns observed over previous years (given its early stage of global adoption), or as a hedge against currency devaluation brought about by unprecedented state intervention in the money supply. It could be part of a corporate strategy to embrace modern, open-source technologies or to support an operational strategy that includes accepting Bitcoin as payments.

A major developing area of Bitcoin is that of energy optimisation and reduction of carbon emissions. Despite the commonly held view that Bitcoin is bad for the environment, there are several initiatives that are focused on using Bitcoin mining to both reduce carbon emissions and increase the use and viability of renewable energy. For example, Bitcoin mining is integrated with wind and solar farms to help balance grid loads and optimise energy generation. By signing agreements with Bitcoin mining companies who get exclusive rights for times of low demand and to turn down mining in periods of high demand,

energy companies can more efficiently run their operations.

In fact, this supports energy companies' ability to raise capital to build more infrastructure which will speed up renewable adoption and support making grids more resilient. Some hydroelectric dams in North America are already seeing the advantage of Bitcoin mining with an increase of revenue allowing them to make repairs and upgrades and keeping them in operation.

Evolving landscape

As Bitcoin is a digital financial investment, it is essential that the chief executive officer, financial officer, chief risk officer, chief technology officer and the board of directors all have a clear assessment of the asset's risk profile and where this aligns and diverges from the company's tolerance for risk. As such, risk managers are key to helping make their organisations aware of these risks so that appropriate mitigating strategies can be developed and implemented to help ensure success in this venture (see *Key risk areas*).

The past two years have been transformative when looking at the wider [altcoin](#) landscape. In the early days of Bitcoin, altcoins were largely cryptocurrencies that sought to challenge Bitcoin. This is no longer the case. The concept of Web3 has risen to prominence where its staunchest supporters claim that we will have an “internet owned by the builders and users, orchestrated with tokens.” If Web1 was the internet of reading, Web2 the internet of reading and writing, then Web3 could be characterised as the read-write-own internet – as some of the following developments towards Web3 may suggest.

Decentralisation

Most people can relate to the friction, inaccessibility and regulatory burden associated with interacting with the current banking system. In recent years, these challenges only seem to be

KEY RISK AREAS

- **Regulatory compliance risk:** Arguably the most important risk to consider given the relative immaturity of the asset class and the lack of firm regulatory treatment of Bitcoin and other digital assets across different jurisdictions. It is important to consider not only the company's regulatory obligations but also those of its counter parties – for example, exchanges and custodians. Items to consider include knowing your customer and anti-money laundering rules, accounting rules, tax rules, commodity laws and securities laws. These should tie in with existing company code of conduct rules.
- **Liquidity risk:** This risk seeks to characterise the company's ability to meet its day-to-day working capital requirements through deployment of cash reserves. A working capital threshold should typically be established, and only cash more than this amount should be made available for digital asset investment.
- **Technology risk:** While Bitcoin has a provable decades-long track record of performance, it is vital that the technology be understood and monitored as it evolves. Material changes affecting the validity of the protocol are deemed to be highly unlikely (not necessarily the case with other blockchains). Nonetheless, the protocol continues to evolve, albeit at a measured pace. Incorporation of Bitcoin improvement proposals (BIPs) typically take years to agree before being incorporated into the protocol. Adoption of the proposals does come with new features that allow for more functionality, which could be leveraged by the company, but may also introduce unforeseen risks.
- **Custody and information security risk:** Thorough appreciation of the various risks associated with custody of Bitcoin needs to be undertaken. This is particularly important in the face of historical high-profile hacks. There are different strategies a company may decide to follow with respect to custody of its Bitcoin. Self-custody, fully outsourced custody to a trusted third party or using some combination of the two via multi-signatory custody may be considered. Self-custody is considered harder to do securely for most organisations, but outsourced and multi-signatory custody are not without risk either. Should the latter two options be explored, secure private key storage, assurance of account statement accuracy, custodial service liquidation risk management, market volatility management (especially if the Bitcoin is being rehypothecated) and information security protocols all need to be thoroughly understood and vetted.
- **Transaction control and authorisation risk:** Executing inbound and outbound transactions and cross-account transfers creates several risks. Transaction workflows need to be fully understood with key controls put in place. These include documented segregation of duties outlining who has access to the accounts and clear levels of authority detailing what types and thresholds of transaction each person can or cannot undertake.
- **Stakeholder risk:** Bitcoin's energy consumption has been a major point of concern raised by environmental groups and competing less energy-intensive blockchains in mainstream media. While recent studies have largely refuted many of these claims, understanding and addressing stakeholder concerns with respect to adopting Bitcoin must be an imperative. This will require well-thought-out proactive stakeholder engagement planning.

worsening, and a trip the dentist seems preferable to a trip to the bank. In many parts of the developing world, even having a bank account is a privilege.

Decentralised Finance (DeFi) attempts to address these challenges by allowing users to utilise financial services such as borrowing, lending and trading without the need for a bank or financial institution. These services are provided via Decentralised Applications (Dapps), which are deployed

on smart contract blockchain platforms such as Ethereum, Solana or Cardano. Many have benefited from the boom in DeFi, but there has also been a fair amount of controversy, including, for example, the abuse of smart contract bugs, miner-extracted value front-running, flash loan manipulation and rug pulling. Any venture into decentralised finance should only be undertaken with a full understanding of all the risk categories mentioned.

Decentralised Autonomous

Organisations (DAOs) are digitally native communities that centre around a shared mission and whose assets are managed by the community's contributors. A DAO is code committed to a public ledger and the blockchain guarantees user accessibility, transparency and rights. The DAO's token determines its voting power and allocation of funds to achieve the group's goals, incentivises participation and punishes anti-social behaviour.

DAOs can be set up for a



“ Alignment with the organisation’s vision, mission and values is a good starting point, followed by development of a digital asset strategy

variety of purposes where groups of individuals need to raise funds to achieve a goal. For example, *UkraineDAO* is a fundraising DAO set up to collect and distribute donations to assist those affected by the war in Ukraine.

A significant advantage of DAOs over traditional organisations is the lack of trust needed between two parties with no leader or board making decisions. DAOs are, however, not without risk. A now famous [Ethereum DAO hack](#) highlighted the importance of ensuring technology risk is properly managed. A bug in the DAO’s code led to the theft of US\$60 million worth of Ethereum tokens. Regulatory compliance risk also requires detailed understanding as regulators seek to define how these entities should be treated.

Cryptocurrencies, NFTs and community tokens

If the metaverse becomes a reality and widespread, the use of cryptocurrencies and NFTs will boom. Cryptocurrencies are the main way in which people will conduct financial transactions in the metaverse while NFTs


will be the items you buy.

While the metaverse will ensure widespread adoption, NFTs do not require the metaverse to have a use case. They are being adopted right now for university degrees, house ownership, artwork purchases and any other real-world item that is unique and requires ownership proof that can be stored and found securely on the blockchain.

Some organisations are developing their own cryptocurrencies or NFTs to reward customers or staff and tie them into their own ecosystem. JPMorgan developed one to make global transfers cheaper and faster, while Amazon has developed one to work as a store card. Binance, a cryptocurrency exchange that allows users to trade various tokens, have their own cryptocurrency to reward users for using their services and helps – they claim – provide a competitive advantage against the competition. Football clubs have developed NFTs as community tokens for fans, allowing them access to players and to vote on things such as what song to be played when a player scores a goal

– an idea which has much wider potential applications. Google and Facebook are expected to launch similar products soon.

Despite the concerns and scepticism associated with Bitcoin, NFTs and altcoins, adoption is happening that will become more widespread. How should businesses be looking to become involved? From investment to developing their own cryptocurrencies, or investing in their ecosystems, there is plenty to explore. As with all initiatives that have high rewards, they come with plenty of risk.

Alignment with the organisation’s vision, mission and values is a good starting point, followed by development of a digital asset strategy. Once this is in place, a thorough assessment of the opportunities and risks needs to be undertaken with particular emphasis on where these converge and diverge with the company’s risk tolerance. 



Alexander Larsen (BHRM, CFIRM), president of Baldwin Global Risk Services Ltd.

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Continual improvement

BY KATE BOOTHROYD, JOHN CRAWLEY AND SARAH GORDON

In September 2022, IRM released a thoroughly revamped International Certificate in Enterprise Risk Management. Packed with up-to-date theory and practice for modern-day enterprise risk management, the new, improved Certificate is a major step forward in IRM's professional qualifications

The International Certificate in Enterprise Risk Management has been a valuable resource to students, helping them understand and apply risk management in their working lives. However, the world is a fast-changing environment, where risks change constantly, but also so does the practice of risk management. As such, it was time for a thorough update, not just as part of IRM's regime of continual improvement, but also to reflect changes in risk management practice and focus.

In fact, Heraclitus, a Greek

philosopher, is quoted as saying "change is the only constant in life", and this is also true in enterprise risk management (ERM). The modern-day chief risk officer sits at the c-suite table and is expected to not just spotlight deviations from the achievement of organisational objectives but to influence the management of those deviations for the betterment of the organisation. That is why the International Certificate needs to be relevant to today's world.

In addition, having had the opportunity to work with hundreds of students as well

as practically work in risk management with many different organisations, it was becoming increasingly clear to us that there were some components missing from the original syllabus that had recently become fundamental to any risk manager's skillset. The opportunity to review and make updates to the Certificate gave us the chance to include these aspects into the new content.

Deciding what to include

We consciously took a big step back and asked ourselves, "what are the foundations of being a really good risk manager in today's climate?" While the old syllabus had lots of useful content, there were some gaps – such as issues around sustainability and resilience – which we quickly identified.

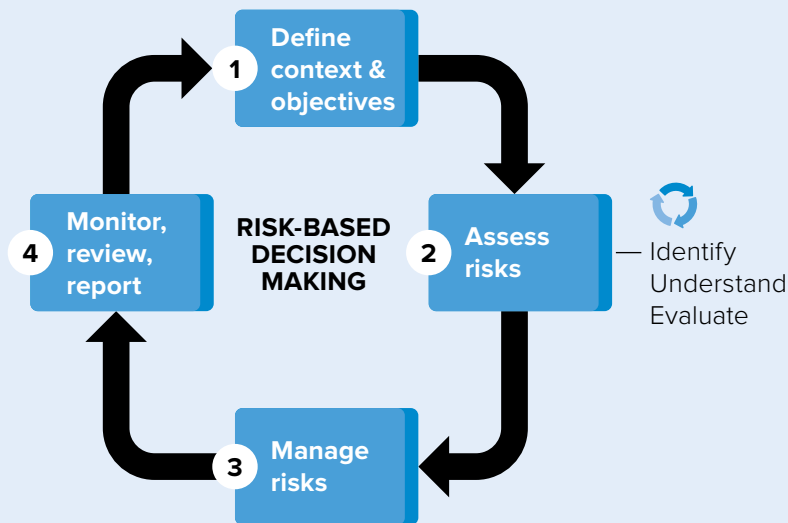
On the other hand, we were also keen to ensure that the great material in the existing Certificate was maintained and then augmented with updated best practice in risk management. We also made sure to retain the



Image credit: Hert-Nils / Unsplash.com

“ It was becoming increasingly clear to us that there were some components missing from the original syllabus that had recently become fundamental to any risk manager’s skillset

FOUR-STEP RISK MANAGEMENT PROCESS



Source: Gordon, S (2022) Sataria Ltd.

project management and supply chains. Unit 11 helps students understand the importance of risk maturity. Finally, Unit 12 is devoted to gaining a much deeper understanding of the technical and behavioural competencies required to be a modern-day risk professional.

New sections and features

In the real world, ERM is changing in its format and its role. Sustainability and Environment, Social and Governance (ESG) have become massively more important to businesses, organisations, investors and stakeholders over the past few years. Risk management is the mechanism through which good sustainability performance can be achieved. Understanding this link is vital for any risk management practitioner, which is why we included it as a separate unit in the updated Certificate.

Much is written today on resilience and agility often as if these concepts are something new. We bring together much of what has evolved in this area and spotlight best practice in a new section on resilience. In this unit we use a fable to tell the story.

One of the principles of the International Organization for Standardization (ISO) is that risk management should be integrated with all organisational activities. As such, students must be aware of how risk management is aligned with or links to other functions, departments and practices within their organisations. The previous version of the Certificate considered three of those specialisms in risk management: operations, projects and supply chains. We wanted to provide a broader perspective on where

approach that provides students with regular activities throughout the learning materials so that students can check that they have understood their learning and explore how risk management can be used in practical situations.

Finally, we were respectful of the other IRM qualifications and courses on offer. In particular, many of short courses have already been updated – such as FoRM, Practical Risk Appetite and Running Risk Workshops – so the updated Certificate needed to reflect developments in those areas too.

Structuring the syllabus

We spent some time considering the flow of the syllabus to ensure that the learning was structured and decided it made sense to tell the story of risk management – both the theory and the practice.

This meant that we decided to cover the key concepts and process steps in Module One, along with an introduction to risk culture and appetite, and an assessment of corporate governance. This gives students the right breadth of knowledge of risk management before they go into more depth in Module Two.

Module Two covers a deeper knowledge of ERM. In Units 7 to 9, the Certificate content now focuses on strategy, sustainability and resilience. These issues are fundamental to all organisations and emphasise the importance of management in the term risk management. Unit 10 recognises that ERM is influenced by many governance factors and goes into some detail on key sectors and topics, including banking, health and safety, information technology, insurance, legal,



We spent some time considering the flow of the syllabus to ensure that the learning was structured and decided it made sense to tell the story of risk management – both the theory and the practice



We wanted to provide a broader perspective on where and how ERM can integrate with different approaches to risk management

and how ERM can integrate with different approaches to risk management, which is the reason why we added in a broader range of functional areas such as health and safety, for example, and information technology among others. Of course, the different approaches we have considered are by no means exhaustive but cover some more of the common specialisms that students might encounter in their working lives.

Content preview

Those of you who have come on a number of the live training courses in recent years will recognise the simple four-step risk management process that we regularly refer to. In line with international standards, this provides us with a great roadmap through which to explore the key elements of any risk management process, which can then be tailored to suit your organisation.

This four-step process allows us to ask a fundamental question regarding the management of our risks: given the context in which we are working, the risks we are facing and our ability to manage those risks, can we achieve our objectives?

Practicalities

The Certificate takes a distance-learning approach to study. For that reason, we have taken the opportunity to widen students' learning experiences by adding many interesting articles, thought leadership pieces and links to useful sources. These will be updated constantly. Broadly speaking, in Module One we have designed short exercises that test a student's knowledge of the Unit's learning objectives.

In Module Two, we ask students to take the Unit's learnings into their own world to seek out practical applications.


The old Certificate used multiple-choice formats in exams. As Module One is an introduction that is designed to explore the breadth of ERM, we decided to retain a multiple-choice questions (MCQ) exam for this module. However, to enable students to demonstrate their learning and practical application of risk management, both Modules One and Two now also have assignment-based assessments. Module One has an MCQ exam and one assignment, whereas the assessment for Module Two comprises two assignments. These assignments require students to provide a critical evaluation of a set topic related to their work situation (or equivalent) – so putting the theory into practice.

Blended learning training

We added a blended learning option to the International Certificate four years ago to support those students who wanted a more interactive learning

experience through their distance-learning journey, and it has been a great success. That will continue.

Typically, blended learning is a four-day experience that takes place over five months. Day one introduces students to the full syllabus and helps navigate them through it, the learning materials and the virtual learning environment. Days two and three are deep-dive sessions where students delve into the syllabus in some detail and introduce them to our now well-known *wall of learning*. This tool allows students to capture key points from their learning to refer to in developing assignments, revising for exams, navigating through learning material and to use later in their practice of risk management. We also include exam questions and assignment tips to introduce students to the assessments. Day four is a revision session and includes mock exams and assignments to prepare students for the format and type of assessments they will need to complete. We also offer a tailored, in-house blended learning option for larger organisations.

Signing up to the updated Certificate is very easy. Just go to the IRM website and click on Qualifications, or go directly to the [Certificate page](#). All the information you need is there, including the full syllabus, the costs, the enrolment process and information on blended learning training. 



Kate Boothroyd, CFIRM, is the director of KB Risk Consulting Limited, a risk management consultancy. She joined IRM in 1992 and is an accredited IRM trainer, lead developer of the updated International Certificate in Enterprise Risk Management and co-developer and trainer on the blended learning offered to students of the Certificate.






John Crawley, IRMCert, is an energetic business leader with a proven track record in driving growth, business turnaround, risk management and sustainability with extensive international experience.

Dr Sarah Gordon is co-founder and CEO of Satarla sustainability and risk management. An accredited IRM trainer and co-chair of IRM Innovation Special Interest Group, Gordon lectures at Imperial College.

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Imperfect models

Whatever happened to analysis-paralysis?


A few years ago, analysis-paralysis was in vogue. This pithy phrase means broadly, in case you cannot remember, that instead of acting, people tend to prevaricate and do nothing.

The idea has a long history. Aesop's fables, for example, introduce us to a fox that has devised hundreds of ways of escaping hunting hounds – whereas the poor old cat has only one. Not surprisingly, the cat puts that plan in action by leaping up a tree when the dogs arrive, and the fox, unable to choose from a vast array of much cleverer options, is eaten.

Unfortunately, risk managers have suffered from a subtle sub-strand of analysis-paralysis. For them, it comes in the form of creating the perfect risk management model or framework. They hope that when it is ready they will have the ideal tool to hand. Sadly, like the 3-D printer hobbyist who only ever creates upgrades to the machine itself, the model is never perfect enough to use.

Out of fashion

Analysis-paralysis now looks like a quaint idea from a slower age. The pandemic, geopolitical tensions and alarming changes to the weather have accelerated the tempo of decision-making. When governments closed retail outlets back in 2020, for example,

 **What is the point in trying to create the perfect model when the underlying reality cannot be modelled perfectly?**

executives scrambled to find their dust-covered plans for digitalising their businesses and to put them into action. More recently, war in Ukraine and sanctions against Russia altered overnight the price of gas, the cost of borrowing and, for many, the possibility of doing business in Russia itself.

The imperative to make good decisions with imperfect information has never been stronger. But does that mean that “thinking too precisely on the event” (to quote Shakespeare’s inactive prince, Hamlet) is now a thing of the past?


Let’s analyse the matter further. The worldview to which such prevarication belongs, the driver to search for the perfect model, assumes that behind the messy reality of everyday life order prevails. Information when properly understood makes this order clear and directs

decision-making to an obvious conclusion. Once those decisions are followed by the right actions, the chain of causes and effects will produce the desired results. In other words, the perfectionist assumes that the world still works according to Newtonian physics.

Messy

Regular readers of *Enterprise Risk* are well aware of a new pragmatism that is beginning to replace this view. Complexity, systems and chaos theories accept the messiness of reality yet retain a belief in models – a theme reflected in our interview with Clive Martin, head of the government risk profession (pages 10-16).

These tools, however, are not like the old ones. While they can be mathematically complex, the ever-changing nature of reality means that they are always imperfect, tied as they are to unpredictable conditions. What is the point in trying to create the perfect model when the underlying reality cannot be modelled perfectly? It has changed each time you take a measurement.

Since analysis-paralysis has been around at least as long as people have written fables, it will no doubt return if the world ever becomes calm enough to create the free time for it. In fact, in that sense, it could be seen as something to look forward to. 

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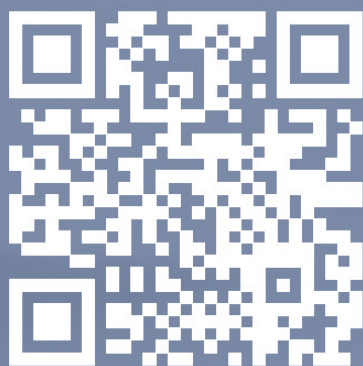
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