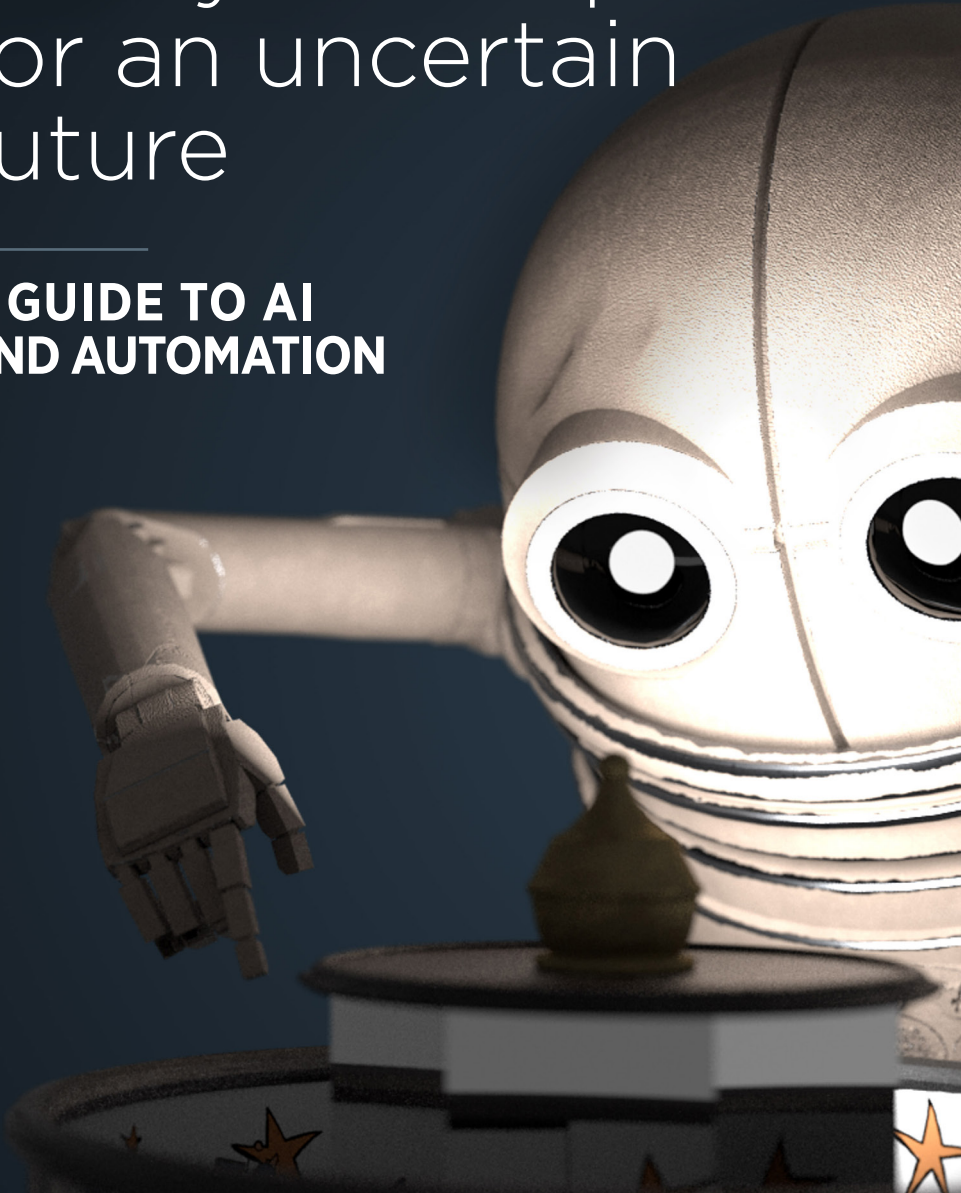





How you can plan for an uncertain future

**A GUIDE TO AI
AND AUTOMATION**



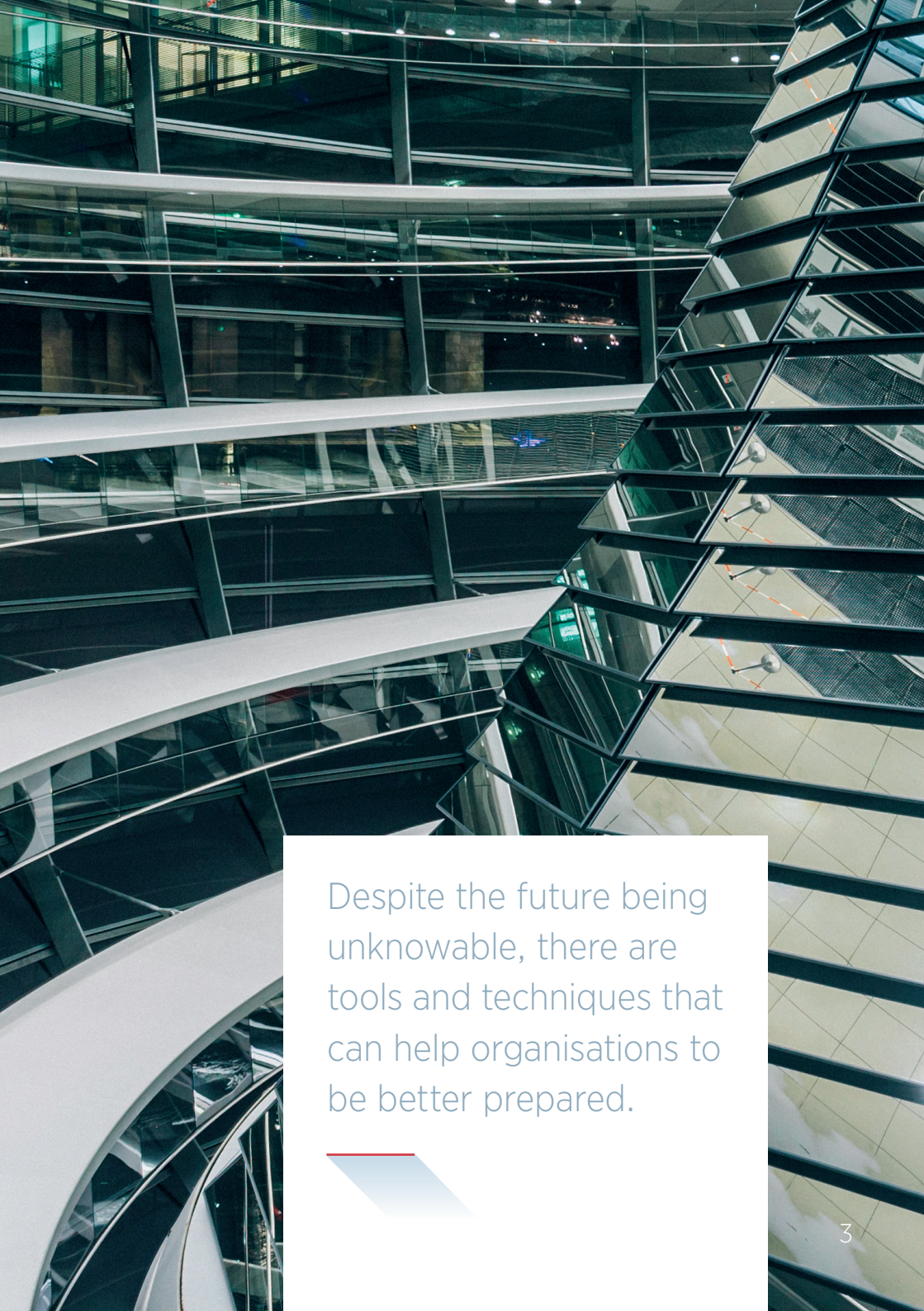
The situation today



There is currently unprecedented hype, commentary and speculation around the impact of Artificial intelligence and automation (AI). Whilst everyone agrees that these will be transformational technologies with broad impacts across society, economies and business, there is little consensus on how the future will unfold. High profile commentators point to AI and automation leading to future utopias or dystopias. Yet these interventions are not especially helpful for businesses and governments seeking to understand what to do about the technology today.

Arriving at a clear view of the future is hard because it is characterised by volatility, uncertainty, complexity and ambiguity. The future is often limited by the fact that it is shaped by personal experience (eg the past), and assumptions that favour continuity, rather than radical change. Often organisations have little time to devote to considering the future, due to the overwhelming practicalities of dealing with information overload and the pressures of maintaining a steady 'business-as-usual' performance.

Despite the future being unknowable, there are tools and techniques that can help organisations to be better prepared. We can use them to think about how AI and automation might transform your organisation or sector. Doing so allows you to explore the implications of these technologies for your business, employees and stakeholders. The tools can also help you plan your AI adoption strategy, encourage dialogue, build consensus within your organisation about future change, and manage your innovation portfolio.



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Things to consider

PROVOCATION AND EXPLORATION, NOT PREDICTION



Scenario planning offers a set of tools and techniques that help organisations to actively explore, influence, plan for, and manage the future. The goal is not accurate prediction – scenario planning works from the starting assumption that any single future is inherently unknowable. Instead, it explores multiple plausible futures that are informed by current trends and emerging weak signals of change. For AI and automation, this would involve not only the potential of technology to transform organisations but also the impact across entire sectors, geographies and wider society, and how values and social structures will shift and change.

Scenario planning is at its most effective when it is highly personalised, exploring your future rather than a generic one. It can:

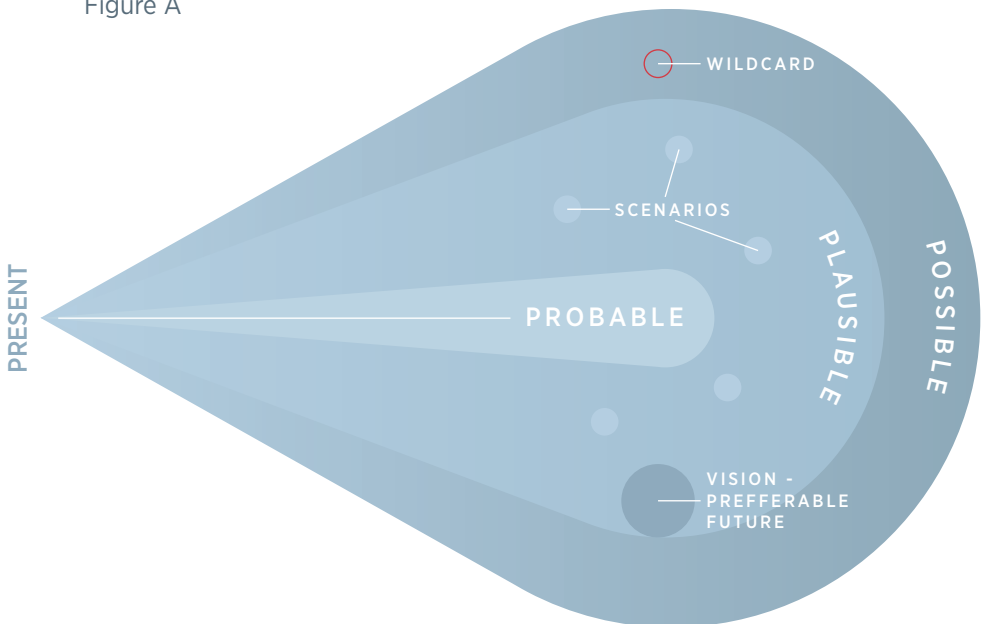
- **Help you explore the future impacts of AI and automation** on your organisation specifically or, at a higher level, on the wider business environment, and understand the implications for your business, partners, customers and other stakeholders
- **Provide a valuable opportunity for different parts of the organisation to come together** to share their hopes and aspirations about AI as well as any assumptions and fears. Doing so helps to build consensus and allows the organisation to articulate and move towards a shared vision for the future.

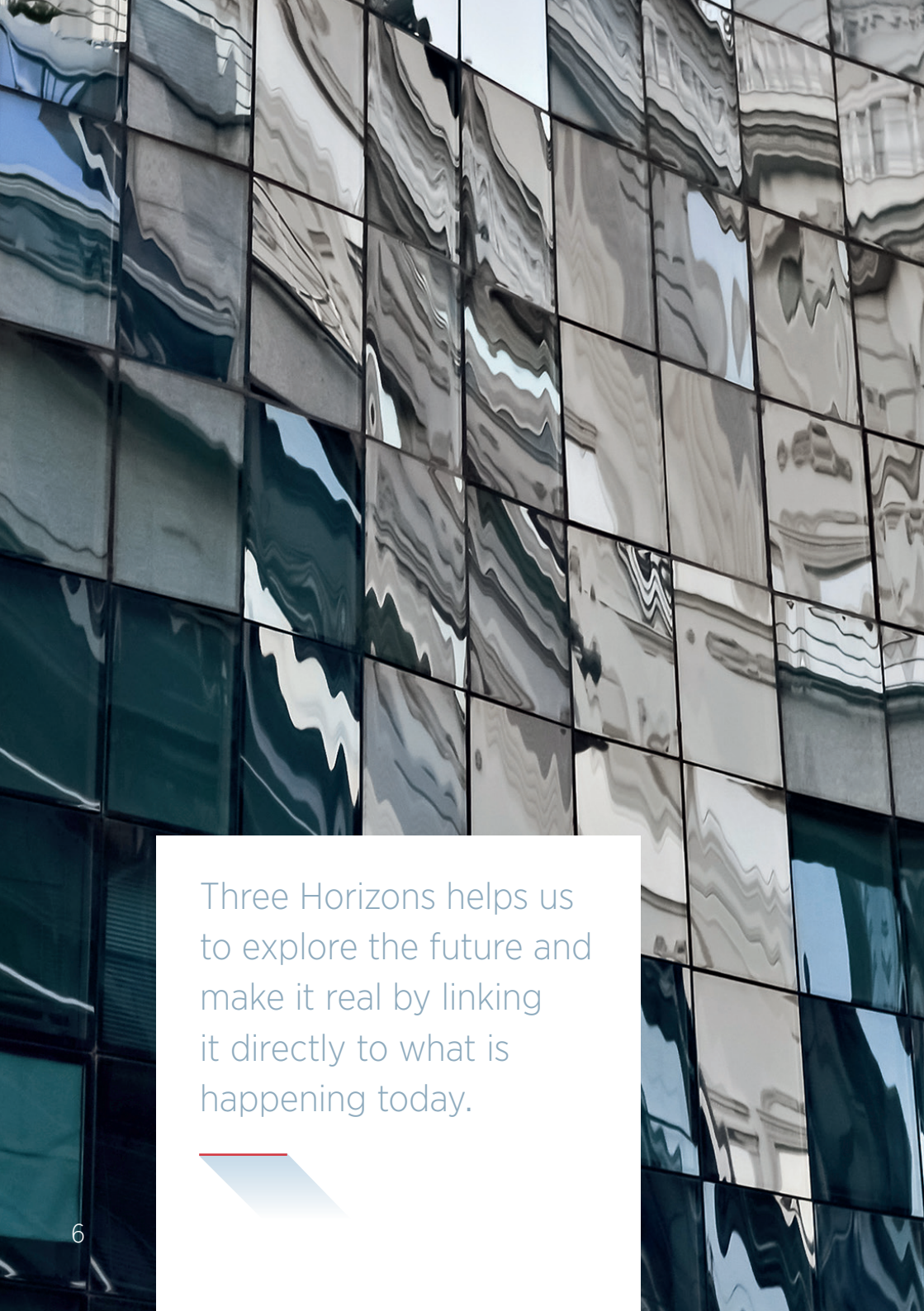
To understand how scenarios can help us to forecast more accurately, it can help to imagine the future as a ‘cone of possibility’ extending from the present, as depicted in Figure A (on page 5). The further we move away from the present, the greater the uncertainty as to what the future holds. Where the cone is most narrow is what we consider to be the most likely or

probable future. As the cone expands, we have a space where plausible scenarios – alternative futures that we can easily imagine happening – exist. Widen the cone further still and you enter the realm of all the possible futures which could come to pass, including ‘wildcard’ scenarios with a low probability of occurring, but with a very high impact if they do.

Scenario planning provides us with a tool to explore the cone of possibility and create narratives – after all, scenarios are essentially stories about the future – for a range of probable, plausible, possible and preferred futures. The preferred future represents a bold vision for what the organisation would like to become. Through the use of scenario planning, the organisation can work through all the uncertainties about the future and expose and challenge its own assumptions and current business models. The scenarios and their implications can then be used to plan for the transformation AI and automation will bring.

Figure A





Three Horizons helps us
to explore the future and
make it real by linking
it directly to what is
happening today.

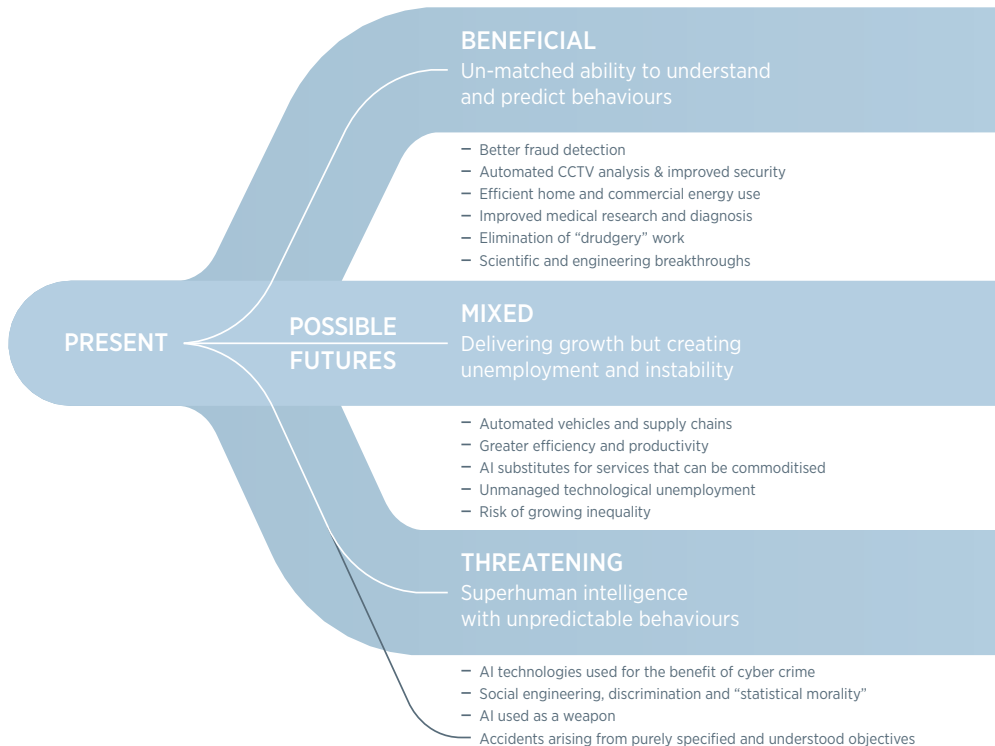


THE VALUE OF SCENARIOS: SIMPLE SKETCHES, ALTERNATIVE FUTURES AND PERSONALISED NARRATIVES


To give a basic taster of how scenario planning could work for AI and automation, consider three generic scenarios that list just a few of the possibilities of the technology. Figure B (below) illustrates this for 'beneficial', 'mixed' and 'threatening' scenarios. The few ideas beneath each scenario show how AI and automation could bring widespread change.

Now imagine you are conducting a full-scale, personalised scenario planning exercise where you consider the impact on your organisation, sector and wider society in the context of other important drivers of change. With such specific context, it is easy to see how scenario planning will help inspire you, generate new insights, uncover new opportunities, and point the way to minimising risk.

Figure B



Where do you go from here?



To prepare for, and respond to, an automated future, you should:

- **Establish a horizon scanning programme**

Horizon scanning (sometimes referred to as environmental scanning) describes the systematic identification of trends, drivers and weak signals of change that relate to a specific area of focus. The scan should be broad, looking at trends both inside and outside your industry sector. Scans are often structured around the STEEP categorisation, covering Social, Technological, Economic, Environmental, and Political trends, as well as legislative changes and shifts in values. Keeping track of emerging developments in AI and automation will involve looking beyond vendor roadmaps and developments in academia and corporate labs. It will also demand consideration of the emerging legislative and regulatory environment, shifts in consumer behaviour and sentiment, and the evolving future of AI in the political and business agenda.

Horizon scanning can also play an important role in stimulating and catalysing innovation, particularly when looking to other sectors for transferable applications of AI. It is also an important precursor to any scenario planning exercise. The goal of horizon scanning is to be as broad as possible while prioritising based on the question or issue under analysis, eg how will my organisation be transformed by AI and automation in a decade's time?

- **Consider using AI to automate aspects of the programme**

There is a small but growing number of companies offering horizon-scanning-as-a-service. Aspects of drawing out insights from across a wide range of scanning sources and collating these into reports are being automated through the use of AI. Examples include Shaping Tomorrow, FutureScaper, and Meta+. Horizon scanning demonstrates how AI and automation can complement and enhance an organisation's ability to gather forward looking intelligence

that can be used to stimulate innovation and feed into scenario planning activities.

- **Use scenario planning to explore different possible futures and help you think big about the transformational potential of AI**

Remember that much of the value of scenario planning lies in the process itself and you must ensure that you allocate adequate time to do a thorough job. You also need to ensure that a broad and diverse range of people, experience and corporate functions participate to guarantee that the scenario planning delivers maximum benefit. Most important of all is ensuring that the implications of the scenarios translate directly into actions that drive the organisation towards its future vision.

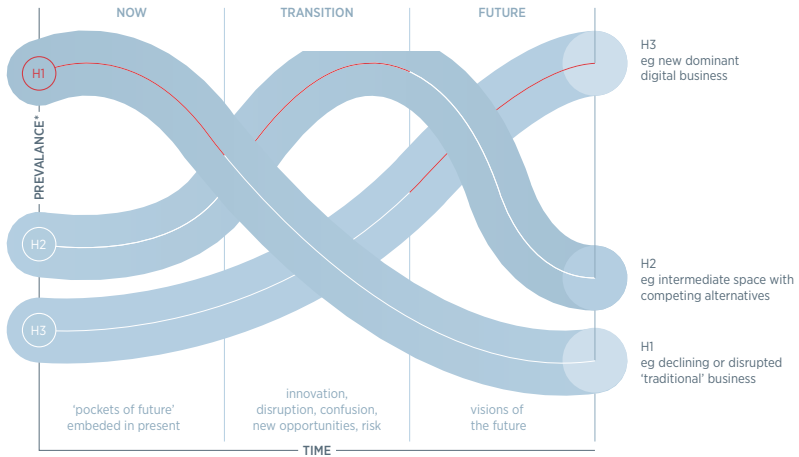
- **Communicate change and structure your innovation portfolio**

Three Horizons, depicted in Figure C (on page 10), is a simple but powerful foresight tool that provides an intuitive way of thinking about, and working with, change. People tend to think of the future as a 'perpetual tomorrow', but the seeds of the future are constantly being sown in the present day. Three Horizons helps us explore the future by making those seeds apparent.

We can visualise how the relevance, or strategic fitness, of today's business models and systems will decline over time (H1). We can also anticipate how mature AI and automation technologies (which we can see emerging today) will supersede the status quo by creating new business models and systems (H3). Finally, we can represent how rapid cycles of innovation that both sustain H1 and enable H3 enhance relevance in the medium term (H2).

In the context of your organisation, you can use the framework to identify how you might transition from the status quo (H1) to an automated future (H3), through innovations and experimentation (H2). By considering all three horizons, you'll smooth your implementation of AI and automation to maximise both current and future value, and reduce the chances of being disrupted.

Figure C



So why is this useful in helping to better anticipate and plan for an automated future? The Three Horizons model offers a number of benefits:

- **It makes the future more tangible by framing it as a reflection of three qualities of the present moment** – the current state, where business and society are just starting to feel the impact of automation; the transition period characterised by uncertainty, experimentation and rapid innovation; and a vision of the future transformed by these technologies. Although the framework is simple, it also allows us to think beyond the technology, to examine the processes of change and identify deeper patterns of behaviour beneath surface events, such as changing attitudes to work and new economic models

- **The model encourages organisational dialogue** and helps to build consensus by engaging the voices of continuity (H1) and change (H2/3) in a discussion
- **It can help restore a sense of control and empowerment** in the face of a future that is (and always has been) radically open and uncertain, and provide the means to communicate the 'big thinking' about the automated future and how to achieve it
- **It can be used to model and help balance an innovation portfolio** as AI and automation can sustain and enhance current business models and processes (H1), innovate and experiment with new opportunities (H2), and achieve large-scale transformation (H3). A balanced innovation portfolio should include projects that address each of the three horizons, as risks are much higher for H3 than H1.

The future impact of AI, automation and robotics will depend on the choices made by thousands of businesses, governments and scientists today and over the coming years and decades. In order to maximise the benefits and minimise the threats, we will need collaboration, strong and ethical governance, and a focus on the positive outcomes we wish to achieve. It is only through the use of foresight to think about possible futures, as well as the future we want, that this can be achieved.



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