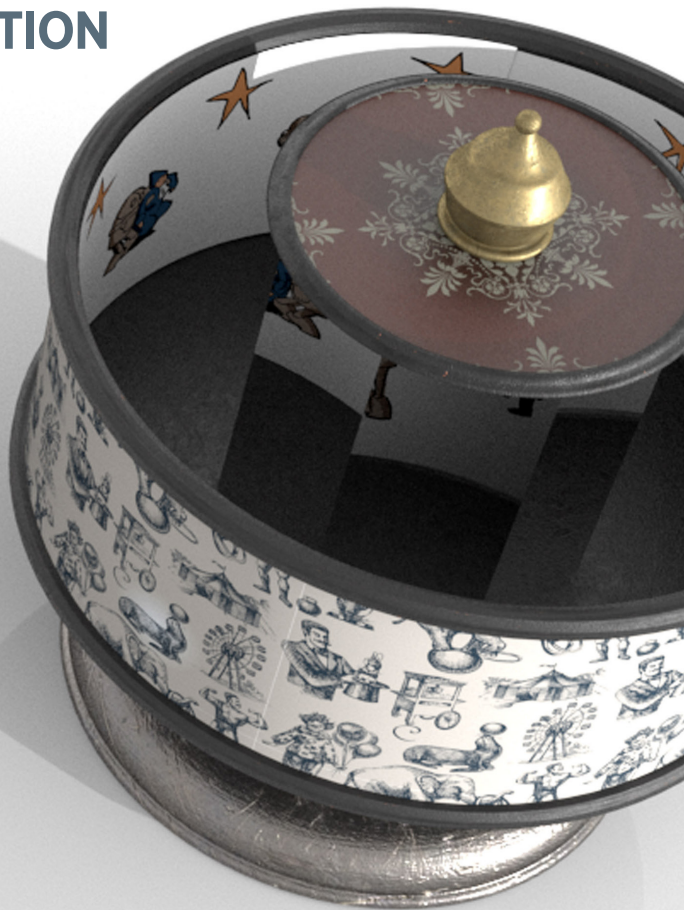# Is your board prepared for tomorrow?

A GUIDE TO AI AND AUTOMATION

The situation today

Artificial intelligence (AI) and automation are transformative technologies reshaping entire sectors and the day-to-day operations of organisations. AI and automation will usher in wholesale transformational change across businesses and society that will surpass previous Industrial Revolutions. The impact this will have on individuals' daily lives will be profound.

The chances are that your organisation is already using AI. It takes only a short time for the technologies – more recently seen as the stuff in science fiction movies – to be absorbed into business-as-usual capabilities, often to the extent that they are no longer described as AI.

A NEW CHALLENGE FOR THE BOARD

From the perspective of the CEO and the board, AI and automation provide both opportunities and threats. Because future success will demand that organisations have AI at their core, how they grapple with it is not just a question of making some AI tweaks to the current business models or putting an AI wrapper around existing processes. The board will need to plan, lead, communicate and drive the vision of the organisation transformed by AI. That starts with strong leadership to ensure the necessary reporting lines and governance structures are in place to give the board good visibility of how the technology is being used across the business. It will also be critical for all board members to have a deep understanding of the AI agenda, to ask the right questions, and to drive the strategy.

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Things to consider

AI and automation are collective terms for a set of technologies that will radically transform businesses. Different parts of the organisation, including IT, individual business units, and those responsible for people and talent, will all be impacted. Some key things for the board to consider include:

Availability of data. AI cannot work without high quality data. Before any significant decisions are made about AI technologies, a clear view on the organisation's data assets and their value will be required. A number of models can help inform this decision making, including non-financial methods that assess the intrinsic, business and performance values of information, and financial methods that consider cost, economic and market value.

The implications for future business design. A future automated business will look radically different from that of today, with fewer people working alongside more machines. Exactly how the future pans out will not only be determined by technology but also by the wider economic environment, legislation and regulation, and shifts in consumer values and behaviour. It will be the board's responsibility to shape the vision for the future.

Governance structures for AI and automation. Organisations need to create the necessary structures to ensure compliance with current and emerging regulation, as well as company values and ethics. Among the issues to consider are where the governance will sit and how it might be different. Indeed, a key consideration is the extent to which governance should be different for humans and AIs, and whether it should vary or be uniform across different customer channels. Key to establishing effective governance will be creating strong narratives for the positive changes the technology will bring. This entails motivating leaders and employees, who may have excelled and built their careers in the old world, to embrace the new. Try to avoid some of the mistakes of the past. For example, in the early days of e-commerce, new technology was sometimes seen as competing with the status quo, rather than a means to build new opportunities, customer relationships and business models.

Existing capabilities. Thinking creatively about how and where capabilities are sourced – whether to build, buy, borrow or share – is essential. AI and automation will not only demand the acquisition of new and higher value skills, and the ability to work collaboratively and symbiotically with machines. It also demands the board consider whether the organisation needs to seek out new kinds of talent for the automated future. Successful partnerships and acquisitions may allow you to leapfrog your competitors.

The impact of AI and automation on brand. AI and automation have the potential to greatly influence the corporate brand in a variety of ways, from customer perceptions of interacting with AIs, to how any redundancies or unemployment resulting from automation are managed.

How change is communicated. Some of the media commentary on how AI will impact future work is oversimplified, often presenting a binary choice between entire roles being completely automated or not. The reality is far more nuanced, with automation impacting at the level of specific tasks rather than entire roles. For many employees, the future will involve some of the tasks that comprise their role becoming automated. The board must lead the internal dialogue and clearly communicate the benefits of automation to staff who may be concerned or fearful.

Maturity of regulation. Despite growing concern, specific regulation for AI is largely non-existent. Governments are establishing new regulatory and advisory bodies and discussing new regulations at the national and supranational level. For example, in February 2017, the EU Parliament adopted a resolution with recommendations to the EU Commission on Civil Law Rules on Robotics and AI. At present however, the question of how best to regulate AI and automation remains an open one, with organisations largely left to regulate themselves. Without AI-specific regulation there is a risk that use of the technology may lead to infringement of other laws. For example, an AI-powered recruitment system that filters for age or race could be infringing upon employment law, without anyone to spot and stop this behaviour.

THINGS
TO CONSIDER

Availability of data

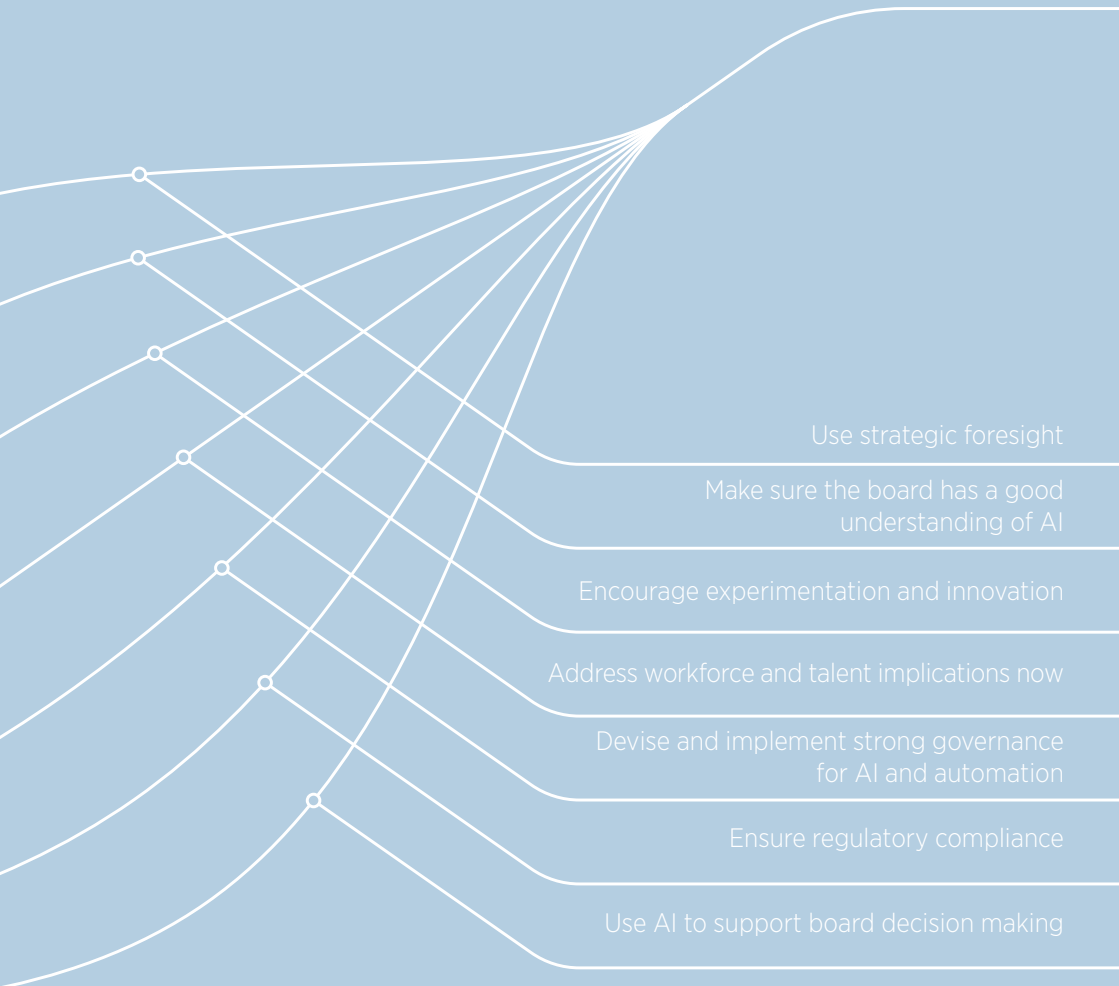The implications for future business design

Governance structures for AI and automation

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How change is communicated

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Use strategic foresight

Make sure the board has a good
understanding of AI

Encourage experimentation and innovation

Address workforce and talent implications now

Devise and implement strong governance
for AI and automation

Ensure regulatory compliance

Use AI to support board decision making

WHERE DO YOU
GO FROM HERE?

Where do you go from here?

In order to address the issues raised above, the board should:

Use strategic foresight to shape the future vision, challenge assumptions and explore uncertainty. Exactly how AI and automation will transform organisations and sectors in the future is uncertain. The future will be determined by decisions taken by individual organisations. Therefore, the board should encourage thinking big and use scenario planning to explore how AI and automation technologies – and their interplay with wider regulatory, economic and societal factors – will create opportunities and threats for the organisation. This same scenario planning can elucidate a vision for what an automated organisation will look like in the future.

Make sure the board has a good understanding of AI. We are not suggesting that the board should be comprised of AI experts and data scientists, but it will be important for every board member to have a good working knowledge of the technology and an understanding of the different ways it will impact the organisation. Board members should take responsibility for keeping their own knowledge up to date and, where necessary, draw upon internal expertise to provide additional insight.

Encourage experimentation and innovation. Once the foundations are in place, start with small-scale pilots that have the capacity to scale fast when clear business benefits are proven. Running competitions is one strategy that has proven effective to galvanise interest and encourage experimentation.

The board should ensure that the HR and talent organisation is proactively planning for AI – in particular, the impact it will have on leadership.

Address workforce and talent implications now. AI and automation have the potential to radically change the requirements and composition of the workforce. For instance, the technology will eliminate some tasks and roles that have previously formed an important part of the career progression ladder. Loss of some of the lower rungs of the ladder may lead to difficulties in providing a clear career development path for the leaders of the future. The board should ensure that the HR and talent organisation is proactively planning for AI – in particular, the impact it will have on leadership.

Devise and implement strong governance for AI and automation. It will not be acceptable for boards to see AI capabilities as algorithmic 'black boxes'. For example, the board will need to be able to answer questions around what decisions are being taken by machine learning algorithms, and ensure they are not biased or discriminatory.

This will include establishing a dedicated role or roles and new reporting structures, for example:

• Creating clear reporting lines and responsibilities in relation to these technologies from all functions and business units (eg IT, HR and marketing)

• Appointing a *chief ethics officer* or *ethics committee* to ensure that doing the best for customers and employees remains at the heart of the business and that any use of AI and automation technologies supports and reinforces corporate values, principles and good behaviours

• Creating governance and oversight for individual AI algorithms or applications (especially where these are highly business critical) to mitigate the risk of these going rogue or leading to unethical or discriminatory outcomes or behaviours.

Establishing strong governance around AI and automation will also ensure that reputational risk to brand in adopting these technologies is minimised.

Ensure regulatory compliance. Where AI and automation are concerned, demonstrating compliance will require knowledge of exactly what different algorithms and technologies are actually doing. This may not always be straightforward depending on the precise technologies used. For example, AI that learns through close supervision and highly structured training data will be easier to audit than that which draws its own conclusions through unsupervised analysis of large and unstructured data sets.

In the future, it may become a prerequisite for algorithms purchased 'off-the-shelf' to demonstrate compliance, but any algorithms developed in-house will require strong oversight and testing to ensure that they do not breach regulations.

Use AI to support board decision making. Some forward looking organisations are exploring how the board can harness the power of AI in its own decision making. Some have even gone so far as to co-opt an actual AI to the board team. The Japanese VC firm Deep Knowledge has announced an AI board member who will advise on investment decisions based on analysis of trends in the databases of life sciences companies. IT services company Tieto has become the first company in the Nordics to make an AI expert part of the leadership team. Some may view such announcements as generating more publicity than tangible business benefit, but the technology is evolving rapidly and it will not be long before many boards will be able to benefit from AI to support their decision making. Working directly with AI will also provide the board with an opportunity to gain first-hand experience of how the transition to being a business increasingly managed by technology will play out.

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