



Veryone is underestimating the pace of change when it comes to artificial intelligence," says Rob Gear, Futurist at PA Consulting Group.

Intelligent machines are already a part of everyday life. We see it in the automation of routine work as well as more advanced developments.

Take the music service provider, Spotify, which has used deep learning to build personalise playlists, or Google's self-driving cars, which have already racked up 1.5 million miles.

"Acceptance of AI is increasing; it's becoming more capable and accessible," Rob explains. "It's extremely well-funded, there's a great deal of interest, the start-up activity is red hot and there are a number of different approaches taking place simultaneously."

While industries, such as the technology and gas and oil sectors, are bounding ahead there are developments across sectors.

For example, IBM's Watson – a technology platform that uses language processing and machine learning to uncover insights from large volumes of unstructured data – is helping doctors to make diagnoses. According to IBM, Watson can read over 40 million documents in just 15 seconds.

"IBM's Watson is being used in oncology specifically," Rob says.

"There's a tremendous amount of research out there on cancer, more than any single physician has the chance of disseminating. This has all been fed into Watson, which is now supporting doctors with extra intelligence."

Challenges and Opportunities

Whether it's using algorithms to better <u>understand customer data</u> or automating unpleasant or dangerous jobs – such as inspecting pipes on oil rigs – Al presents a number of opportunities to businesses.

But, as the technology becomes more sophisticated and pervasive, boards should consider its wider impact. "If you get more into AI, to some extent you are playing with fire," Rob warns. "The average CEO is not a deep AI expert, they won't have the acumen to ask what decisions are hard coded in an algorithm, for example. So how does the board ensure it has oversight?"

The first step is for the board to take stock of how AI is already being put to use. "They need to get an understanding of what they're already doing with it, some of this might not be immediately apparent," Rob advises

"They should also look at what others in their industry are doing, as well as those outside of it. There could be a lot to learn from industries that, for one reason or another, adopt the technology earlier than yours." When it comes to introducing new technology, poor implementation could lead to a plethora of risks.

"For example, at an insurance company the team builds an AI system that anticipates how to insure individuals while reducing the company's risk profile. But what happens if there are some discriminatory elements?" Rob asks.

Boards should take responsibility and implement some self-policing processes. "Put some governance structures around this. If you are taking Al seriously it should be a part of your risk strategy," he notes.

Rob also recommends creating new roles to look at the ethical implications. "Organisations should consider hiring a chief ethics officer or launching an ethics committee. Ethics and regulatory frameworks are really lagging a long way behind," he adds.

Want to know more about artificial intelligence? Why not read PA
Consulting Group's report <u>The</u>
Robots are Coming or <u>EQ</u> in the
Robotic Age



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Rob is PA's Futurist and conducts ongoing horizon scanning of social, technological, economic, environmental and political trends looking for signals of change. He uses strategic foresight tools and techniques to explore uncertainty, challenge assumptions, and to develop alternative future scenarios to support strategic planning and innovation.

Rob also leads PA's Innovation Lab, a small team developing prototypes with existing and emerging technologies to highlight new opportunities and business value.

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