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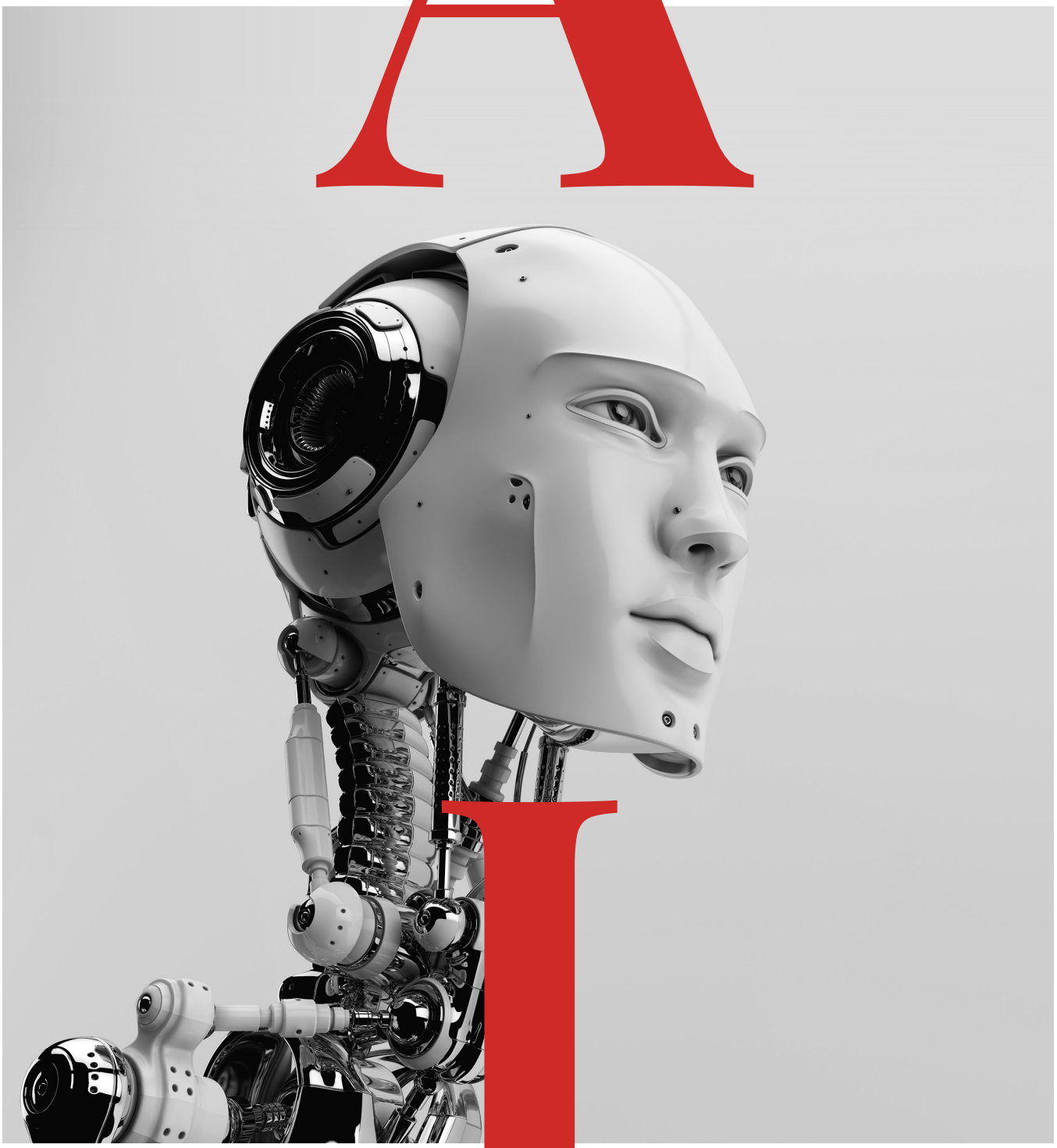
2019

AI



Digital Immortality

During the last five years, the rise of AI has been truly astounding. From highly sophisticated robots and driverless cars, to a wide range of "under the bonnet" techniques that use AI, the market in AI is predicted to explode. According to a new report from market research firm Tractica, it is likely to grow from $643.7 million at the present time, to $36 billion by 2025. This represents a 57-fold increase over that time period. Yet, this is only the beginning. Many people associate AI with robotics, but the applications and usage of AI is becoming vast.

SO WHAT WILL THE AI BRING US IN THE FUTURE?

In the short term – the next 5-15 years –AI and robotics is likely to transform the workplace, making huge numbers of human jobs redundant. Robots don't get paid, don't get tired, and don't demand better working conditions. This means that there are millions of robots likely to take the place of factory workers in the future. For example, Foxconn, a company that assembles Apple iPhone parts, is replacing 60,000 workers with robots. These are very different to the dumb robots that have been used in car plants to perform repetitive single task activities. They are more mobile, flexible, and capable of more general multiple tasking.

In the longer term, super intelligent AI is probably, according to some experts, at least 30 years away. However, when it comes, we will have capabilities to solve problems beyond our own intelligence limits and could well provide answers to problems beyond us – such as discovering technically efficient ways of providing energy and solving other resource problems.

There are many other possible benefits likely to unfold in an age of machine super intelligence. AI systems that can rapidly acquire large amounts of specialized knowledge will be well-suited to medical and educational applications. Kurzweil, lists several of these in his future predictions. For example, we have already entered a cyborg (human augmentation) age where silicon enhances our own biological limits. Prosthetic limbs, hands and legs, are now in widespread use that provide strength and dexterity similar to that what could be attained to having actual limbs. Some recipients say that they even feel the sensation of these limbs. But this is only the start. Many people will want to enhance the limits of their biological bodies with silicon-based intelligence that can improve them physically and/or mentally.

"ROBOTS DON'T GET PAID, DON'T GET TIRED, AND DON'T DEMAND BETTER WORKING CONDITIONS."

Another one of the likely consequences of the age of AI is "mind or brain uploading" – that is mind copying to a computer. This could take the form of scanning the brain and creating a copy of that persons mind. This is known as "digital immortality" and many of the billionaire Technology gurus, such as Elon Musk, are investigating ways of doing this now. The cost of "mind uploading" will be high because the human brain contains over 100 billion neurons interconnected in thousands of ways.

Of course, it's unlikely that human consciousness could ever be fully replicated by uploading from biological to electronic format because we constantly change through our lives as a result of daily experiences. But some of the essential human characteristics, such as the sound of a person's voice, their beliefs, even sense of humour, could not be captured when more progress is made in this field and the computing power is available.

– Keith Darlington