KPMG Al: Why we should not fear the rise of the robot

If you're not exposed to technological innovation on a regular basis, it can come as quite a shock to learn about what's possible today, let alone what might be possible tomorrow, says Jeremy White, Executive Editor of WIRED magazine.

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At a recent event in Newcastle, attended by Jeremy White, Executive Editor of WIRED magazine, and other business leaders with technology interests, we were taken on a whistle-stop tour of current technological innovations. Speaking at the event, Jeremy is soon in full flow on his favourite topic of Artificial Intelligence (AI).

The rapid developments in Al are – for some – a cause for concern. Unsurprisingly, Jeremy is perfectly at ease with Al. He dismisses as scaremongering all the talk of the rise of the robots and of our gradual slide to mass unemployment.

Al is simply a tool, he says. As humans, we have a decent track record in making use of tools; everything from fire through to super-computers. Whether the tool ends up being used for good or for bad is completely down to us.

In that regard, Jeremy has faith in the developers and the strong moral code he believes that most, if not all, of them exhibit. That's what gives him hope that Al will only ever be a force for good. For sure, he admits the technology could be abused – but suggests that the same would have been said when computers first came along.

Nevertheless, we are in a time when AI is still very much in its experimental phase. And when Jeremy provides his tub-thumping prediction of "I absolutely believe that AI will save more lives than it costs", the sub-text of the danger still apparent in some of AI's uses is clear. We're guinea pigs, he reminds us. We're being experimented on all the time – but the possibilities being created by those experiments are mind-boggling.

Mystic Meg need not apply

"I'm no futurist", states Jeremy. He's very clear on that. His views are all predicated on what he sees happening now, not a vague promise of what might be to come.

He's equally clear on his disdain for the Internet of Things and how the term has become synonymous with low-grade consumables that have had internet connectivity thrust upon them, whether there's any real need or not. He proceeds to eviscerate the thinking behind remotely operated kettles, fridge food sensors and online toilets. But these are just a means to an end – a way of steering the conversation to where the AI magic really happens; in business and in healthcare.

Taking just a few of his examples, there's the Al behind Google DeepMind, which sees a virtual biped teaching itself to walk like a human. Then there are the hospital applications, where eye defects and heart attack possibilities are being identified and predicted with increasing levels of accuracy.

There's AIDYIA, the hedge fund operated entirely by AI. Trained to look for long-term trends and given eleven years' worth of back data, it showed that it would have outperformed the market by 25% in that time. Switched on immediately, it began to make money from day one.

There are the personal assistants, like Google Duplex, recreating human speech complete with minor pauses and affectations. And the even more impressive sounding Viv, which writes its own programming as it goes, enabling it to answer increasingly difficult questions. The only reason we haven't yet heard more about Viv is that it (he? she?) currently only converses in US English. Then there's Darktrace which monitors your cyber security by treating it like a biological organism, understanding what its normal rhythms are. The comparison is apt as when it spots an anomaly, it goes to work like the human immune system, shutting down problems or affecting a fix.

There's even the prospect of self-healing concrete in the construction industry. The concrete is laced with a bacteria which lies dormant until exposed to moisture. At that point, it starts creating limescale which plugs the gaps or cracks which have allowed the moisture in.

What happens to me?

One inevitable question remains. In an Al-dominated future, where do we fit in? Put on the spot about his own industry's job prospects in an Al world, Jeremy points out that the Press Association is already experimenting by using Al to write sports reports. "Dull as dishwater," he claims, albeit factually correct and written in impeccable English.

"There's no spark, you see. No creativity, no human spirit. We can rely on Al in its various forms to remove drudgery, danger and repetition from our jobs. But it's a long way from being able to infer, to read between the lines, to understand and demonstrate emotion."

The prospect of all our jobs being made redundant is readily dismissed. "Only one job truly disappeared completely after the Industrial Revolution," he claims. "Lift operators." With mechanical support, fewer people were needed to do the jobs they did before – but those jobs didn't disappear completely. Meanwhile, many of the displaced workers moved onto other, more creative and/or value-adding jobs – some of which did not exist previously.

It's a shift Jeremy imagines will happen again. One of the AI uses he highlights is a technology called Luminance, currently being used to analyse and summarise dense, complex legal documents. With the drudge work outsourced to Luminance, Jeremy claims that lawyers will be able to spend more time on the more creative side of their job, providing clients with better value for money. This doesn't necessarily mean fewer lawyers; just the same number applying their skills in different, more innovative ways.

You can't get in the way of progress

In 1995, voice recognition was simply impossible. By 2013, its fail rate was down to 23%. In 2017, it was deemed to have reached human parity, meaning that it had a 5% error rate; equivalent to how often two human beings typically misunderstand each other.

As with every other facet of Al development, the fact this is even possible is due to the incredible strides made in computer processing power. Jeremy highlights that our current computers are one million times more powerful than their 1993 predecessors. That's an awful lot of progress in a quarter of a century.

Right at the distant forefront of this digital charge is where the debates are raging about ethics and morality within AI. Bringing us back to the line about the AI that will save us, not kill us, these are the arguments that need addressing.

How, for example, to solve the conundrum facing your autonomous car when a multiple vehicle crash is unavoidable and it needs to choose the lesser of two evils in terms of who it hits?

Setting Al's moral compass would appear to be a considerable undertaking. Setting the more straightforward rules by which it operates (rather than 'thinks' or decides) is however an area where Jeremy thinks we can step up our game more rapidly.

There are stories of AI seemingly 'gone wrong' – of chatbots going rogue, for example, insulting their customer or talking in gobbledegook. Yet Jeremy asserts this isn't the start of something more sinister, merely an indication of our failure to give our AI proper instructions from the outset.

We'll get better at it, he asserts. We'll have to. "The genie's out of the bottle now. It's not going back. Overall, I've got far more cause to be optimistic than pessimistic about the future. Look; my dad's in his seventies and only now getting excited by Facebook. My young nieces are growing up in an environment full of possibilities – where they think everything should be a touch screen. I'm glad to have a foot in both camps; to straddle that divide. But I know which world I'd rather live in."

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