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Eight most influential technologies in business

PwC has identified the Internet of Things alongside virtual reality and 3D printing, as one of the eight essential technologies that C-suite executives should absolutely consider.



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The essential eight

In its report, *Tech breakthroughs megatrend*, PwC evaluated more than 150 technologies globally, and developed a methodology for identifying those which are most pertinent to individual companies and whole industries. The result is a guide to the 'essential eight' technologies PwC believes will be the most influential on businesses worldwide in the near future:

- Artificial intelligence
- Internet of Things
- Augmented reality
- Robots
- Blockchain
- Virtual reality
- Drones
- 3D printing

The specific technologies that will have the biggest impact on each industry will vary, but PwC believes the list of eight comprises technologies with the most cross-industry and global impact over the coming years.

Johan Potgieter, technology leader for PwC South Africa, says: "The technological breakthroughs megatrend directly impacts every other megatrend. Every industry feels its influence now, and so does every company, of every size – everywhere. Although there is a still a significant digital divide, the developed and developing worlds are using similar platforms, including the internet, social media and mobile technologies."

Adds Potgieter: "Farmers in India track crop prices on their mobile phones; while closer to home Kenyan and South African entrepreneurs crowdfund their new ventures. Worldwide, business leaders acknowledge these changes, and have a clear sense of their significance."

To arrive at the essential eight, PwC filtered technologies based on business impact and commercial viability over the next five to seven years (as little as three to five years in developed economies). The specific criteria included a technology's relevance to companies and industries, global reach, technical viability – including the potential to become mainstream – market size and growth potential, and the pace of public and private investment.

What makes technological breakthroughs a megatrend?

Companies continually wait for the 'next big thing', believing that a particular technology trend either won't amount to much or that it won't affect their industries for years to come. But disruptions are happening today at a faster rate and higher volume than ever before. Innovations throughout history have tipped the balance in favour of the innovators. In that sense, technological breakthroughs are the original megatrend. The ubiquity of technology, with increased accessibility, reach, depth, and impact are what will expedite adoption of the essential eight.

Key questions and actions for the C-suite

The report suggests that the essential eight technologies will shake up companies' business models in both beneficial and challenging ways. Across industries and regions, the emerging technology megatrend will influence strategy, customer engagement, operations and compliance.

As a result, leadership teams should find effective answers to three fundamental questions:

- Do we have a sustainable innovation strategy and process?
- Have we quantified the impact of new technologies? If not, how can we do that and how soon?
- Do we have an emerging technologies road map? If so, are we keeping it up to date?

According to PwC's report, executives should not treat the essential eight technologies as a sort of checklist to delegate to the CIO. Instead, CEOs must take very seriously their own obligations to turn these technologies to strategic advantage – and to protect their own organisations against others using the technologies for advantage.

Before developing an innovation strategy and exploring and quantifying emerging technologies, executives should educate (or re-familiarise) themselves with these technologies and what they can do.