

Rise of the MACHINES

Will new technology and the disintegration of traditional power structures mark the end of nations?



By Nigel Lake

For the past two years, nearly every discussion of emerging technologies and new trends has been peppered with references to the Internet of Things, Big Data, and Hadoop. The endless wave of innovation means that yesterday's cutting-edge thinking becomes everyday capability that even relatively small businesses take for granted.

The good news is that most boards and management teams don't need to devote all their energy to worrying about how they will navigate the inevitable uncertainties created by this technological turmoil. They do, however, need to focus carefully on some much more powerful forces that will wreak unparalleled change on the world in which we all live and work.

At the most fundamental level, traditional power structures are breaking down. Where iconic media companies once controlled the nature and shape of the news around the world, there are now billions of reporters writing their own stories and filing them online, second by second, on platforms such as Facebook and Twitter. The boundary between News and news has been thoroughly blurred. Social media has reshaped the entire consumer and business

landscape, and even in digital backwaters such as Australia, companies are now furiously espousing an online mindset.

Yet, while many leaders talk digital, far fewer think digital. Only a dozen ASX 100 CEOs even have Twitter accounts, and most of those are passive (Telstra's recently departed CEO David Thodey and Perpetual's Geoff Lloyd being notable exceptions). The figures are similar in the UK. In the USA—a true frontier territory in the digital economy—business leaders such as Warren Buffett, Bill Gates, and nearly all tech CEOs connect daily via social media with millions of individuals who care about their businesses and their thoughts.

This fracturing of the old norms extends a long way beyond the media. Old-world companies are being turned upside down and inside out by new competitors founded by college dropouts, powered by energy drinks and dreams. Five years is now more than long enough to create whole new industries (the iPad has just celebrated its fifth birthday) and to destroy market leaders (RIP Nokia mobile phones).

The boundaries between global behemoths and the garage start-up are now measured in just a handful of years, not decades. Early stage businesses can raise millions of

dollars, garner tens of millions of customers and reach \$100 million valuations in fewer than 12 months. Thus, Silicon Valley has reshaped the corporate and competitive landscape in industry after industry. Meanwhile, around the world, company after company is running hackathons, promoting intrapreneurship and creating future labs as they seek to harness the same forces of nature that created companies like Airbnb and Uber.

But exceedingly few companies have much to show for all their enthusiasm. They may talk innovation, but the pace of action is glacial. Unsurprisingly, they struggle to create real value at all, even in the face of clearly terminal competitive threats. Like a beautiful painting, inspirational song or perfect recipe, radical new businesses cannot be created by a mechanistic process arising from a board edict for original ideas and fresh thinking.

Make no mistake—there is plenty that can be done to ensure that the environment, structures, and incentives provide a fertile environment in which brilliant ideas can be nurtured so that they grow into significant, viable businesses. But there is no magic formula for original sparks of invention. And large organisations have to accept that for every successful new venture there will be dozens that fail. These failures are essential to a healthy ecosystem, allowing the strongest to grow more rapidly. Many other prospects will die, simply because there isn't the right balance between innovation, relevance, capital, customers, and timing.

To succeed in this brave new world, businesses (and especially big businesses) need to move beyond Steve Jobs' exhortation to "think different". In short, they must act differently, and act now. They must be prepared to invest most of their energy, effort, and capital developing new businesses and concepts that target opportunities beyond their day to day comfort zone. The survivors in this harshly competitive environment will be those that seize these opportunities. In contrast, many large organisations devote 95 per cent of their financial and creative effort to preserving and refining their traditional business, even if they are only growing at a few per cent a year. When products and businesses lasted decades or even centuries, this approach was fine. But in 2015, an enormously bolder approach is essential.

Even in academia, a true bastion of long-term thinking, revolutionary inventions, and political radicalism, the old world order is being broken down. Once the preserve of the most elite students, the world's best education is now becoming available for free from MOOCs. The entire sum of human knowledge is available to almost everyone, in seconds, on their mobile phone. And as the inspirational academic Professor Sugata Mitra has demonstrated, all kids really need to learn in this environment is the encouragement of a grandparent or convivial proxy. His TED presentation on the 'granny cloud' is essential viewing.

On all fronts, the knowledge economy is dying. Knowledge itself is becoming entirely commoditised. Even locating relevant knowledge can be left surprisingly reliably to Google. The interpretation and application of knowledge is currently a key capability, even for relatively mundane jobs. But improving access to data, more sophisticated statistics, machine learning, and automation mean that even these more complex roles are being taken over in the inexorable rise of the machines.

The two forces I've described above—the yin of automation and

machines and the yang of social media and entrepreneurship—have wound together to create truly shocking challenges for governments in general, and political leaders in particular. Politicians and media moguls no longer control the political agenda. Individual activists can light the fire of consumer interest and voters' aspirations and redefine the balance of power in hours. Even in the USA, where a run for the presidency costs a billion dollars, Obama has demonstrated that the cheque books of big business and old money can be outgunned by a viral campaign, raising record campaign funds a few dollars at a time and building exceptional influence through social media.

But why should it stop there? These overlapping revolutions hint at a true end of the world as we know it. Countries themselves are ceasing to have meaning to many people. Facebook and Google are now more populous communities than either China or India. Google's market value is the same as the GDP of South Africa, and Apple's market value puts it ahead of the GDP of Switzerland. These companies are more important to many people than their choice of political leadership in national elections. In the recent UK election, for example, 35 per cent of the population simply didn't vote at all, and the US election turnout hasn't been above 60 per cent since the 1960s. And, of course, remember that many giant tech companies have worked very hard to minimise the amount of tax they pay to any country, following a logical desire to preserve the maximum profit for their shareholders. Thus, even economic power is shifting from countries to corporations in a more fundamental manner than has ever been seen before.

This is not just idle speculation. Google has already intimated its interest in constructing cities. From the outset, the company has thought big and dreamt gargantuan. The most successful tech companies have sought out large industry sectors where the incumbents had retrospective mindsets, and have reinvented

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their industries. If they could turn a US\$1-trillion-dollar industry into a US\$100-billion-dollar industry, of which they owned 50 per cent, then both the innovators and consumers would win handsomely.

So consider this. Globally, very few people appear to be truly satisfied with the way that their countries are governed and run, let alone the longer term outlook for their children. Judged from a Silicon Valley perspective, this might just look like an incredibly attractive opportunity. Reinvent the lifestyle of an entire physical community, re-imagine how people are recognised and rewarded for their economic and social participation, and create a better world in which to live. In tech terms, this would be a new game, with new rules, a better user interface, and end to end gamification.

The final step would be to build such communities as tax-free zones, located on attractive islands with perfect weather, ubiquitous fibre broadband, and the opportunity to work globally from a comfortable home base, through shared work spaces and virtual businesses.

For individuals to succeed in this world, they need very open minds, expertise in systems thinking, and a true love of change. To Gen Y and Gen Z, who have accepted a new digital life where privacy is no longer a concern, this might just sound hugely more attractive than the old world order. They would be free to invent their own world order, free from the massive and growing national debts run up by previous generations. Would you be tempted to join them? •

About Nigel Lake

Nigel is CEO of global advisory firm Pottinger and an entrepreneur with a passion for diversity, innovation, environment, and action. He is author of *The Long Term Starts Tomorrow* and is a senior associate of the University of Cambridge Institute for Sustainability Leadership. Follow him on Twitter at @Nigel_Lake.

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