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real world **futures**

Mid- Year Report

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JULY 2018:

Digital economy disciples are correct to say the pace of change may never be this slow again. The sceptics are also correct to say the scale of backlash against the business models created from digital technology may also never be this low again.

The first half of 2019 has seen further gains in digital capability. Google has refined its voice-activated Artificial Intelligence to the level where it can.....[make a hairdressing appointment!](#)

Facebook continues to add new features that will keep users inside its advertising environment but has been [forced to apologise](#) to users and regulators for breaching their privacy and trust.

And Amazon has finally opened its Australian store for business (by advertising on every bus shelter and newspaper it can find) but has [shut its international store to Australians](#) because of the complexity of dealing with our requirement to levy a Goods and Services Tax on every transaction over \$1000.

Businesses are stepping up their investment in technology to meet consumer needs for more digitally enabled transactions but the consumers are also waking up to this realisation: they aren't just the customer but (through the provision of their data) they are also the product.

While this is not slowing digital take-up in the consumer market, it is increasing the vigilance both customers and regulators apply to the digital, and increasingly mobile, economy.

The role of the [QUT Real World Futures program](#) in this world is to continue to shine a light on the opportunities for both businesses and individuals willing to take them.

Those opportunities often involve managing risk and, most importantly, being aware of the forces at work.

In Australia, governments have finally become incredibly active in developing their own digital activity as well as monitoring the activity of the major corporations in the Australian economy.

The federal government has no less than three major ongoing inquiries into the digital world.

They are:

- A Senate inquiry into [the future of work and workers](#) which has heard from more than 100 individuals and organisations about what automation may do to employment. The predictions range from catastrophic to mildly optimistic. [QUT falls on the optimistic side](#) but you can get a full range of views from our [summary of submissions](#);

- An [Industry Department inquiry](#) into the digital economy which will publish its findings in the next few months. Its outlook is positive and focusses on the skills and productivity aspects of what Australia can achieve;
- An ACCC inquiry into the [activity of the major advertising platforms](#) (Google and Facebook) and their impact on the declining news media industry. Its outlook is concerned, fuelled by the flight of revenue from businesses that have traditionally sold advertising and supported the publication of news. This has spread into a free speech argument and been fed by concerns about a decline in political discourse blamed on social media.

Missing in the discussion (in Australia at least) is a dedicated focus on the possibilities – the means of using technology to reshape less efficient parts of the economy and to make us more competitive in the world.

The federal body, Innovation and Science Australia, published its Australia [2030 outlook early this year](#) which included the modest ambition to return Australian school students to the learning levels of Singapore and Hong Kong 15-year-olds over the next decade (assuming they remain static).

In the meantime, the public side of the Australian debate on education has got lost in an argument over the political values that underpin schools and universities.

In its quest for opportunity, Real World Futures will put some focus on adaptation in its program for the remainder of the year.

This will be the major theme of our annual ***Disruptive Influences – And What To Do With Them*** conference on **Tuesday, 16 October 2018**. But it will also define our other public events – a look at how new transport and technology will reshape Brisbane on **Thursday, 2 August 2018**, a chance to meet some robots and a catch-up on how entertainment is changing.

Outside the university, the Real World Futures team has been active in public forums which try to lift knowledge of what's happening in the digital world. They include talking to QUT alumni in Sydney, Melbourne and Adelaide about the future of work, leading discussions at Queensland Small Business Week about digital readiness, working on the [Robotic Roadmap for Australia](#) and participating in round tables on policy development by the federal government and challenging sports administrators to think more digitally.

The markers of what's happening in our key focus areas – **future working, future thinking** and **future living** - are worth noting.

Future Working

The debate has subtly shifted from being about the scale of job losses through technology to the intricacies of how jobs will be reshaped.

The tone was set late last year when Real World Futures pioneer Prof Michael Osborne co-wrote a UK document which [revised earlier estimates of the scale of job losses](#) from the much-quoted figure of 47% to closer to 20%. This work looked more closely at other factors in the economy and identified the parts of current jobs that could not be replaced by technology.

A related piece of work by [Boston Consulting Group](#) for the World Economic Forum began to model how workers with redundant skills could reshape their knowledge base. There will be a lot more focus on this as businesses and governments see the benefits of technology and work to avoid the downsides.

The antidote to an opportunity-based approach is the [decision of the National Australia Bank](#) to make 6000 workers redundant and announce it will replace them with 2000 workers skilled in Artificial Intelligence. This is the bank's approach to meeting customer needs but the sceptics are concerned that it did not include retraining any of the 6000 redundant workers for roles it will have trouble filling.

These are immediate tensions of the future of work debate – it is difficult to define the skills needed to succeed, even more difficult to develop them quickly and impossible for big corporations and their employees to make workforce transitions that can keep pace with consumer demand.

Part of the Real World Futures work this year has been to assist create the Robotics Roadmap for Australia. It aims to ease those tensions by spelling out the state of play of robotics technology in every industry as well as describing what's possible and what's foreseeable.

It is underpinned by five key principles – jobs matter, time matters, safety is imperative, remote communities need to be served and certainty counts

Future Thinking

The manipulation of American voters through their social media feeds has dominated discussion of how technology is changing the way we think.

The expressions “fake news” and “post-truth world” have become as much a part of the political discourse as “tax cuts” and “new jobs”.

This goes to the core of modern life and the big question that has hung over digital media’s impact on our thinking – are we dumbing down debate by reducing complex ideas to sentence-length? And does this reduce our capacity to think in complexities?

This is not a new debate but one that continues to be fought both through the forums that encourage complexity (e.g. newspaper columns) and those that encourage simplicity (e.g. Twitter).

(The view favoured by this writer is that the fact we’re having this debate is a positive. We’re now talking about how we think and make decisions instead of blindly behaving the way we always have. And not every big idea is verbose. The Gettysburg Address was 260 words and the Christian world aspires to live by 10 commandments.)

Two other factors colour the discussion about future thinking.

The first are the valid questions about where is the economic productivity from digital technology. A Bank of England economist has gained traction with a blog post that compares two lines of economic activity – smartphone sales and productivity growth.

They show that the decline in growth reflects the rise in sales. His post poses the question of whether the continuous checking of social media feeds, stock prices, the news and weather on our smart phones is affecting the ability of office workers to **concentrate on what they are paid to do**, creating a loss of productivity. Expect to hear more of this.

The second is the addictive character of gaming. Right now, this is most vivid through the popularity of the game, Fortnite, the bane of parents of teenagers (boys in particular) around the planet.

The concern is that the players **are obsessed with the game** and competing with faceless players that they are neglecting their “real world” responsibilities. The reverse argument is that they are engaging and the virtual world is now the real world for teenagers.

If this is increasingly the case, it changes our attitude to everything we do. Real World Futures has taken interest in the rise of eSports (**featured in the Disruptive Influences conference last year**) and has opened the eyes of Queensland sports administrators to what it might mean for their codes. Again, expect to hear more of this.

Future Living

The rise of digital technologies is now putting consumers in a perpetual trade between convenience and trust. The one-touch transaction through a smartphone is convenient but it requires a leap of faith that it will produce the desired result and an acceptance that the technology will work.

Australians have had some recent small tastes of the technology not working. [Supermarket chains have had to shut stores](#) this year when their payments systems stopped working for hours at a time (were you stuck with a trolley of groceries you couldn't buy?).

And there is the continued question about who accesses and uses the data we all create by simply moving around with a high-powered portable computer in our pockets.

This is giving rise to increased demands for privacy protection.

But the accumulation of data and the ease of accessing it also offer some big pluses, particularly in the areas of health care where sample sizes are telling us more about the health of the population and monitoring devices are motivating us to live more healthily.

The next step (and this is highlighted by Mary Meeker, the best analyst of digital commerce in her [giant annual report to](#) the annual Reload Conference in the US) is to put the pressure on healthcare providers to share the benefits with consumers.

Our notion of entertainment continues to shift. Netflix, the video streaming service, is now ubiquitous in Australian life. And we no longer feel bound to the schedules TV stations determine to watch what we want. (How long before cinemas move to on-demand streaming?)

The idea of sharing that sits behind business models such as Uber and AirBnB is now common and being applied across every business that can latch onto it. The impact on living is more choice and the opening up of capacity not previously available.

The downside is that everything we own or everything we do becomes a tradeable commodity – for the right price. Where does this end?

And what do we make of all this?

There's no doubt Prime Minister Malcolm Turnbull is right in trumpeting this as an exciting time to be alive. It's also an exciting time to be informed and to be equipped to act on the challenges and opportunities (both personally and corporately).

Real World Futures will keep you posted through its upcoming events, regular newsletters or through our social media feeds which pick the best of current trends.

And welcome to 2018-2019