

The changing nature of work

Convened by Dr Sam Wilson, this panel explored the consequences of digitisation, automation and AI for work, careers and organisations.

Recent developments in robotics, artificial intelligence, and machine learning have put us [on the cusp of a new age of automation](#).

According to the [McKinsey Global Institute](#), at least 30% of the activities associated with most occupations in the United States could be automated. Similarly, [McKinsey Australia](#) estimate that up to half of our current work activities could be automated by 2030.

Automation and AI technologies are already making their way into workplaces in Australia and around the world.

As explained by the [World Economic Forum](#), the uptake of AI and automation, as well as a raft of other technologies, will only accelerate in the years ahead.

Moreover, although [robotization](#) is not as advanced as these other technologies—humanoid robots are still a way off—stationary robots, non-humanoid land robots, and fully autonomous aerial drones are at, or near, commercialisation and increasingly in use.

Implications of AI and automation on the workforce

As technological breakthroughs rapidly [shift the frontier](#) between work tasks performed by humans and those performed by machines and algorithms, global labour markets are undergoing major transformations. Australia is not immune to these developments.

Many of us will have seen the headlines exclaiming the predicted loss of jobs due to AI and automation. On the face of it, there are probably some grounds for concern.

Robots and computers can not only perform a range of routine physical work activities better and more cheaply than humans, but they are also increasingly capable of performing fundamentally human activities once considered too difficult to automate successfully, such as making [tacit judgements and sensing emotion](#).

These concerns about the spectre of uselessness are reflected in employee sentiment.

To illustrate, a recent study by the [Centre for the New Workforce](#) showed that fear of job loss arising from AI and automation is rated by Australian employees as a more serious threat than other factors, such as 'a change in the economy'.

Although technological changes are the focus of today's panel discussion on the changing nature of work, it is important to note, as the [Centre for Future Work](#) pointed out in a recent report, that the world of work is being transformed by many complex forces.

Technology is absolutely one of these forces, but so too are changes in the structure and organisation of workplaces, employment relationships and demographic challenges.

Regardless of the root causes and socio-technical drivers of these changes, it is clear that the way we live and work is changing. In many respects, the future of work is already here.

As we are only on the cusp of a new age, we can only speculate about what lies in store for us on the other side of the interregnum.

And, of course, we should bear in mind that fears about technology and the disappearance of employment have been experienced before.

From the onset of the first industrial revolution, workers have worried about how new machines would affect their livelihoods. In this respect, the fourth industrial revolution—so-called Industry 4.0—is no different.

So, how is work likely change?

As has been well documented, in the modern economy, the shelf life of many skills is short, especially in technology and the sciences, and in advanced forms of manufacturing.

Technology will continue to evolve the role humans play in the workforce, so everyone will be required to adapt their skills throughout their working lives through [lifelong learning](#).

Jobs will replace roles. [Employees will need to shape their own career path](#). Careers, as we have historically understood them, will cease to exist. The 'gig' economy will continue to expand.

Within organisations, [positions will be more fluid](#). There will be more project-based teams. Thanks to high-speed mobile internet, the [workforce will become more decentralised](#).

Ultimately, [AI and intelligent machines will become our co-workers](#). Humans will need to develop a level of comfort and acceptance for how humans and machines can collaborate.

Rather than succumb to doomsday predictions about the future of work, an optimistic view would highlight opportunities to do meaningful, socially connected work that draws on our uniquely human capacities for ethics, [imagination, emotional intelligence, empathy, leadership and entrepreneurial skills](#).

A social psychological perspective on the changing nature of work

At this point, I would like to offer a social psychological perspective on the changing nature of work. In doing so, I will also draw on the work of the sociologist, Richard Sennett.

It is worth reminding ourselves, as Sennett pointed out some years ago now in his Castle lectures on the culture of the new capitalism, that the dismantling of institutions does not invariably lead to hoped-for outcomes.

According to Sennett, when young radicals took aim at big corporations and big government in the 1960s, and sought to dismantle these institutions, they hoped that, in doing so, they could produce communities—"face-to-face relations of trust and solidarity... a communal realm in which people became sensitive to one another's needs. This has not happened."

Without wanting to draw too strong a parallel, we should be at least be mindful of the possibility that dismantling another institution—this time, institution of jobs and careers—will have unhappy consequences for many of the people who inhabit these institutions.

Among these who focus on how AI and automation can be harnessed to liberate people from routine work, freeing them to focus on meaningful work, it is easy to detect the same hoped-for futures as those young radicals in the 1960s who sought to liberate people from the bureaucracies that supposedly held them in an unwelcome iron grip.

I don't wish to seem overly pessimistic, but I do think it important to proceed with caution, and with a sense of how people actually *are* rather than how we would *like them to be*.

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As Sennett argued—appropriately, I think—only a certain type of human being can prosper in unstable, fragmentary social conditions. In this context, which Zygmunt Bauman famously called liquid modernity, this ideal person has to address a number of challenges.

In the interests of time, I will address only one of these challenges—one which has special resonance with a social psychological construal of the changing nature of work.

In particular, this challenge concerns time: how to manage short-term relationships, and oneself, while migrating from task to task, job to job, place to place.

As observed by Sennett in the context of the dismantling of institutional bureaucracies, if institutions no longer provide a long-term time frame, the individual may have to improvise his or her life-narrative, or even do without any sustained sense of self.

In the context of dissolving careers, fluid positions, and fragmenting jobs, these threats to a person's sense of self-continuity are amplified.

Humans, typically, do not and cannot live like this. We need a sense of self-continuity, the sense that we, as individuals and as members of groups or collectives, have identities that reach back in time and extend forward into the future.

The experience of future self-discontinuity—and the corresponding impaired ability to imagine oneself persevering through time—has been shown to have a range of unhappy consequences, from heightened impulsivity and ethical misconduct through to suicide.

None of this is to say that humans cannot adapt or even flourish in the coming age of AI and automation—we know that people can be very resilient and adaptive indeed, as Lawrie Zion and his colleagues discovered in their recent major study of Australian print journalists.

However, we need to acknowledge that humans will experience and make sense of this brave new world with some very ancient apparatus indeed.

To help us make sense of the changing nature of work, we are privileged today to be joined by a panel of experts with a range of fascinating perspectives on AI, automation and work.

This discussion will be chaired by Professor Lawrie Zion. Lawrie is Professor of Journalism and Director of the Transforming Human Society Research Focus Area at La Trobe University.

Our panellists are Ms Mira Stammers, Lecturer in Law at the La Trobe Law School, Dr Sean Gallagher, Director of the Centre for the New Workforce at Swinburne University, Mr David Yip, Strategic Engagements Executive at DXC Technology, and Dr Julian Koplin, who is a Research Fellow with the Biomedical Ethics Research Group at the University of Melbourne.

Please join me in welcoming our panel.

Society 4.0

The Society 4.0 program examines the human, social and cultural implications of emerging technologies like artificial intelligence, biotechnology and autonomous systems.

Society 4.0 symposium: Trust in an age of thinking machines

In the midst of the growing power of emerging and converging technologies, such as genetic manipulation, robotics, and artificial intelligence, our notions of self, society and what it means to be human are changing. In this symposium, we explore the development, maintenance, loss and restoration of trust in an age of thinking machines.

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