

As the voice of the profession, Engineers Australia consults with industry leaders to inform our advocacy and, ultimately, to bring greater benefits to the community. Between June and August 2020, we held a series of eight online CEO Roundtables on COVID-19, discussing its immediate impacts, business responses and the longer-term effects and implications. This work built on our advocacy initiative COVID-19 Recovery: A 9-Point Plan.

Attendees:

Sixty CEOs and senior leaders attended from sectors including:

- Government
- Aviation & aerospace
- Health & medical devices
- Transport
- Materials
- Tertiary education
- Defence
- Professional services
- Utilities
- Construction
- Information Communication Technology



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About Engineers Australia

With approximately 100,000 individual members, Engineers Australia is the peak body and voice of the engineering profession. Our purpose is to advance the science and practice of engineering for the benefit of the community.

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The "coronacoaster"

"All the economic analysts talk about the W-shaped recovery, the V-shaped recovery, U-shaped recovery, different letters of the alphabet – but we don't really know."

Held over three months, Engineers Australia's CEO Roundtables on "COVID-19: Business as unusual" reflected our profession's changing experience and the accompanying "coronacoaster".

For most, the dawning crisis involved rapidly transitioning employees en masse to work from home. CEOs agreed flexible work had succeeded in "the biggest, fastest experiment", with outcomes delivered, teams adapting to change, trust enhanced and preconceptions challenged.

Over time, businesses started to acclimatise. CEOs found some remote work "efficiencies" had hidden costs. Taxi rides had provided mental breaks. The commute had ended the working day. Water cooler conversations had yielded insights. Social contact had enhanced personal relationships.

One CEO described how working from home had prompted an initial sense of "almost a celebration". That had given way – particularly in Victoria – to deep concern, depression and even helplessness.

There was a growing realisation that the pandemic was more than a hiccup and that additional waves of disease could reverse progress at any time. The importance of mental health, always a concern, was magnified. Fatigue and despondency loomed increasingly large. The attention of CEOs turned towards the longer-term impacts and implications, as well as non-COVID priorities such as client engagement, other safety risks, catching up on staff training, strategy and staff retention.

CEO concerns included fears that organisations were emptying a limited "bucket" of social capital with staff over time, as well as disquiet about the effects of missing "boots on the ground" leadership, the risk of complacency and the reduction of unstructured learning opportunities for junior staff.

Relatively fortunate - for now

"Having managed a business through the GFC... the hurt came six to 12 months later."

Engineering CEOs reflected on their fortunate positions compared to counterparts in tourism and many other areas. Much work could be done from home and many businesses fell under "essential" industry categories.

Construction continued largely undisturbed, supply chains withstood the initial challenge and it became easier and quicker to collaborate externally – and less formally – with government, industry counterparts, unions and associations.

Where possible, organisations took advantage of factors like reduced traffic, school closures and reduced public transport patronage to accelerate construction and maintenance projects when disruption would be minimised.

CEOs were concerned about the future pipeline of work and expected financial challenges ahead. Some private sector construction projects had been suspended, and plans for some future projects reassessed, with feasibility studies postponed. Sectors affected included in oil and gas, higher education, hotels, hospitality, tourism, aviation and CBD property development.

Government spending on defence, and on transport infrastructure, had continued, however CEOs lamented the lack of support for buildings (other than housing).

"There's more workers per dollar in a building than workers per dollar in a road. So, if your government desire is purely employment, then you could get better bang for buck."



In particular, players in the commercial building industry could battle to survive without government stimulus amid collapsing demand for "vertical" building projects like apartments and offices.

"Jobkeeper is supporting a lot of jobs that don't exist at the moment... Where's that going to end?"

Any fall in migration stemming from COVID-19 would impact future work and revenue, and could shift the balance between spending on infrastructure and on what one leader described as Australia's "maintenance backlog", a source of "screwdriver ready" jobs.

CEOs described defensive measures including seeking classification as an "essential service", site and rostering changes, and use of international networks. Despite additional costs, one international business had permanently shortened supply chains – including by financially facilitating smaller suppliers.

It wasn't just business facing uncertainty but also Government, which was in the process of identifying and investing in a pipeline of stimulus projects and trying to maximise benefit given delivery constraints and an uncertain longer-term outlook. Identifying genuinely "shovel ready" projects was a challenge.

"It feels a bit as if we (Government agency) are building a bridge into the dark... hopefully there's solid ground on the other side."

Positives included:

- Continued business operation and delivery the success of the "real time experiment"
- Internal and external stakeholder willingness and ability to embrace change
- Normalisation and embedding of flexibility working from home and shared childcare, with potential future diversity pay-offs in a heavily male-dominated profession (13.6% of qualified engineers are women in Australia)

"Having really robust, difficult conversations... seems to be a little bit easier when you're looking at someone in their lounge room."

- Advantages flowing from remote meetings e.g. connections between CEOs and a wider range of staff; enabling quieter/less dominant staff to contribute more; less travel;
- Potential to offer smaller Australian suppliers opportunities as a result of reassessing supply chain vulnerabilities, and to take on specialist staff laid off by other companies
- More frequent, "frictionless" and effective collaboration e.g. between design houses, with unions, with government – with traditional divisions set aside, particularly early on

Challenges included:

- Financial uncertainty, particularly the future pipeline of work, and impacts of reduced migration/population growth
- Accommodating changing rules and restrictions e.g. interstate border movement; inability to recruit internationally where needed
- Inadequate internet capacity e.g. for engineering designs
- Remote work mental fatigue among those who did not like it; risk of burn-out; difficulty promoting creativity and effects on camaraderie; some staff lacking sufficient work space at home
- Cyber security one CEO reported an increase in attacks
- Health and safety responsibilities including for work spaces in homes; for non-COVID site-related risks; mental health including greater need for assistance on anxiety, financial pressures and domestic violence
- Potential for skills shortages in future if client organisations did not take the opportunity of government stimulus to contractually require the use of apprentices, graduates, trainees and Aboriginal suppliers

"It's becoming harder and harder for people just to stay energised. Part of the issue is not having a clear destination."



Ideas and approaches

Health, safety and connection

- Extra resources (e.g. apps; employee assistance program; mindfulness programs; domestic violence help; online exercise sessions; training)
- Social activities (e.g. peer check-ins; more frequent meetings; interest-based clubs – books, cars, dogs; allocating new starters with a mentor and a "buddy")
- Tailored approaches for staff with particular needs (e.g. those in share houses; living alone; or supporting home-based learning)
- Distancing (e.g. additional/dedicated lifts, toilets and control rooms; no shared tools; split teams; use of videos in the permitting process)

Leadership and communication

- "Walking meetings" for online one-on-one meetings
- Staff communications (e.g. deliberately "overcommunicating"; town halls; videos; anonymous question facility with 48-hour responses; personal phone calls to staff infected)

 Research (e.g. consulting an independent world expert epidemiologist; surveys on staff wellbeing and preferred future work habits; examining productivity experiences overseas; determining "normal" additional demand for workplace mental health services with COVID-19)

Flexibility and work

- Boundaries (e.g. regular "all in days" when the entire team gathers in person; "core hours" of 10am-3pm when all staff must be available and all large meetings must be scheduled)
- More flexibility, including for site workers (e.g. a "flexperiment" where all teams assess feasibility of a "menu" of flexibility options such as leave, roles, schedules; job sharing; full-time hours spread over four-day weeks)
- Remote client service and relationship building (e.g. the "virtual expert" made available, regardless of location; virtual drinks with customers, with food and drink home delivered)





Australian onshore capability

"If we're going to control our destiny around some of our critical federal projects or critical national interest projects, how much of that acumen sits here?"

CEOs reflected on the need for greater clarity about what Australia was trying to achieve, and how the nation could use the COVID-19 era to change our strategic trajectory permanently for the better.

Focus on Australia's onshore capability in strategic areas has potential to grow and support local manufacturing, and lead to a competitive edge for Australia. This included the opportunity to further grow and support local manufacturing, including for defence.

"It's [been] sort of hidden in the shadows of 'everything we do is secret and classified'... but we've got some brilliant [defence] technologies and capabilities that have been developed in our country."

CEOs predicted there would be more "conscious" allocation of capital linked with sustainability, capability and employment outcomes. Over time, Governments were also likely to shift towards greater fiscal restraint, moving away from direct stimulus such as infrastructure spending to policy settings and other levers such as technology.

While the opportunity to grow the local skills base was a positive, CEOs said Australia required overseas engineers both to fill specific skills gaps, and more generally to fulfil our community's needs. Currently, more than half (58.5%) of the engineers Australia benefits from were born overseas.

The next generation

"Broadly speaking, the industries involving engineers have been considered essential, and I think there's a good sense of purpose and a good sense of pride that can be taken... [for] a rallying cry to get more engineers in the pipeline."

Most CEOs planned to have a graduate intake in 2021, but with reduced numbers of places. While impressed by graduates' digital skills, they stressed the importance of:

- Diverse backgrounds, not just gender but also socio-economic
- Learning and practising interpersonal skills at university
- Post-graduation learning, including microcredentialing and online training
- Rounded career experiences (e.g. private industry and government)
- Cyber-security capability

CEOs were particularly concerned about how to replace the traditional learning by "osmosis" enjoyed by graduates in an office setting, with colleagues at hand to help.

Longer-term, CEOs believed the pandemic had provided an opportunity to showcase the importance of the engineering profession and to attract more young people to it.



Looking to the future

"We can make some pretty radical changes and make them stick."

CEOs missed the dynamism, drive, persistence and creativity associated with teams operating in person in full flight.

However, they reported COVID-19 had acted as a catalyst to highlight, and advance existing trends and organisational conversations. The pandemic had also produced fresh insights, and could potentially create permanent change for the better.

Previous assumptions and processes had been reviewed, including regarding supply chains, business continuity, safety, task design, mobility of people, and communications.

"Every job is a digital job. And I think one of the key things going forward is how we humanise the digital workplace...so you feel connected."

In future, maintaining organisational culture in a digital workplace would continue to be vital with, for example, people giving the same importance to a digital sign-off as a written signature on paper. CEOs reflected on the need to prepare leaders for significant cultural change – including digital upskilling, enhanced communication skills and an innovation mindset.

With that digital overlay, how do you drive and maintain an organisational culture? Because culture is actually the ultimate differentiator."

In particular, COVID-19 had normalised and destigmatised remote work, and seen previous investments in technology pay off.

Many CEOs discussed the prospect of professionals working from home three days per week as a potential future norm and, at one organisation, 89% of staff surveyed wanted to keep remote work options. However, approaches varied; one business had required staff to return ASAP, where another had already directed staff to work remotely until December.

"What will commercial offices look like? Will we all be reducing our footprint and what does that mean for our businesses, and particularly for business culture?"

CEOs also pointed to the potential for:

- Better outcomes by reforming governance, including commercial agreements between companies
- Differing outcomes between clients, with some treating engineering as a commodity and others responding more strategically and getting more out the engagement
- An increased need to be deliberate and intentional with remote working e.g. by planning onboarding rather than relying on the office environment, prioritising communications etc
- Client demands that go beyond the "given" of a technical solution to more human-centred experiences delivered by people whose skills were augmented by artificial intelligence and machine learning tools
- "Rewiring" business to make permanent any positive internal or external changes – including better relationships between and within governments

"The COVID experience has really shifted minds in terms of, 'This could have gone pear shaped had it not been for us (government) pulling together.' I think we just need to leverage that mindset and keep it going."



Insights and conclusions:

- The pandemic's full impact is not clear, and not over, with no quick rebound expected
- **2** CEOs are looking to the "long game", and want a better "new normal" not a return to the past
- While engineering has been relatively fortunate in the COVID-19 pandemic so far, challenges are on the horizon
- **4** CEOs expect capital to become more "conscious", and allocated to achieve sustainability, capability and employment outcomes
- (5) Both mental and physical health are on the agenda
- 6 COVID-19 has prompted greater cooperation, efficiency and innovation with stakeholders, including government
- 7 Flexible work is here to stay and not just for those with caring responsibilities
- 8 One size doesn't fit all for employees or organisations

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