

NSW Remote Working Insights 2

Why **hybrid** is here to stay and how to seize the opportunities

NSW Innovation and Productivity
Council NSW Productivity Commission
November 2021



NSW Innovation and Productivity Council

The NSW Innovation and Productivity Council (**‘the Council’**) was established by the *Innovation and Productivity Council Act 1996*. It advises the NSW Government on priorities for innovation-led economic development and productivity. Council members are leaders from industry, education, and research sectors. NSW Innovation and Productivity Council publications are independent reports and do not constitute NSW Government policy. This is consistent with the role of the Council and its object under the *Innovation and Productivity Council Act 1996* (NSW).

NSW Productivity Commission

The NSW Productivity Commission (**‘the Commission’**) was established by the NSW Government in 2018 under the leadership of the State’s inaugural Commissioner for Productivity, Peter Achterstraat AM. The Commission is tasked with identifying regulatory roadblocks and opportunities to boost productivity across the State. The Commission’s priorities include making it easier to do business, lowering the cost of living, making housing more affordable, and making NSW the easiest state to move to. Since its inception, the Commission has undertaken several reviews on productivity matters and published the landmark *Productivity Commission White Paper 2021, Rebooting the economy*.

Contacts

The NSW Innovation and Productivity Council and NSW Productivity Commission welcome feedback and inquiries regarding their publications, websites, and media.

To contact the NSW Innovation and Productivity Council:

Phone +61 2 4908 4800
Email ipc.secretariat@investment.nsw.gov.au

To contact the Office of the NSW Productivity Commissioner:

Phone +61 2 9228 4567
Email ProductivityFeedback@treasury.nsw.gov.au

Copyright

© State of New South Wales through Investment NSW and NSW Treasury 2021

Attributions

This work should be attributed as follows:

Source: NSW Innovation and Productivity Council and NSW Productivity Commission 2021, *NSW Remote Working Insights 2: Why hybrid is here to stay and how to seize the opportunities*, Sydney, 2021.

Disclaimer

This report is the work of the Council and the Commission and does not represent NSW Government policy. Further, the views expressed in this report have not been endorsed by the organisations interviewed and consulted.



Acknowledgement of Country

The NSW Innovation and Productivity Council and NSW Productivity Commission acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and thank them for their custodianship of Country—land, seas, and skies. We acknowledge the diversity of First Nations cultures, histories and peoples, recognise their enduring connection to our State, and we pay our deepest respects to Elders past, present, and emerging.

Artwork: Regeneration by Josie Rose, 2020.

NSW Innovation and Productivity Council Project Champion's Foreword



COVID-19 has massively changed how and where we work. There's no doubt that remote work has saved countless jobs and businesses by letting work continue during lockdowns. What's more surprising, though, is that most workers and employers who try remote working seem to *like it*.

And so remote and hybrid work seem to be here in a big way—and also here to stay.

We're still coming to grips with the change. But to thrive in this new world, we'll need to learn, adapt, and innovate. And that's what *NSW Remote Working Insights* is about.

In this second report, we use our *2021 Remote Working Survey* data to glimpse how working life could look after the pandemic. We dive into the research to explain why both employers and employees are embracing hybrid work. And we showcase how innovative organisations are meeting the challenges and seizing the opportunities—so that you can too.

Our 2021 survey and case studies tell us employers are using remote and hybrid working to access better skills

from wider labour pools, increase employee engagement, and reduce staff turnover. The shift to remote working is turbocharging innovation. Organisations are fast-tracking tech investments, digitising processes, moving online, and upgrading cyber security. We're becoming more competitive and more resilient to future shocks.

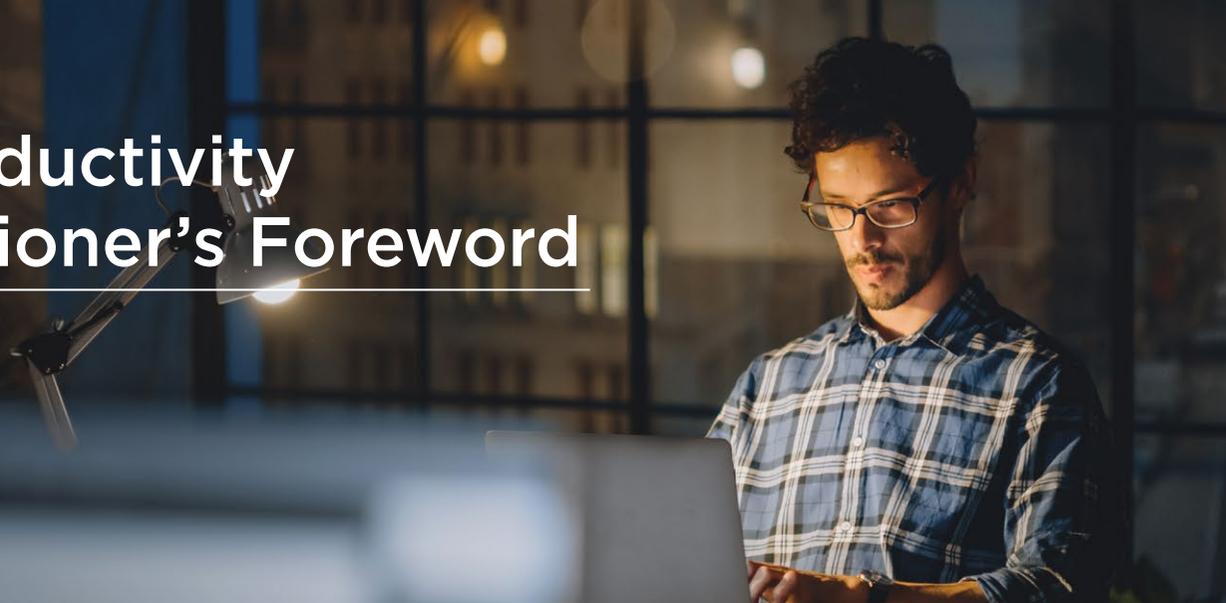
This 'new normal' has difficulties too. Remote work can be isolating, and collaborating can be difficult at a distance. Hybrid working tries to solve this by combining the best of remote and on-site work. But as Chair of the Commonwealth Productivity Commission Michael Brennan says, this hybrid model could be 'the easiest one to choose and the hardest one to execute' (Irvine, 2021).

Across NSW, we're working hard to adapt our homes, our offices, and ourselves to new ways of working. Workers, managers, teams, and whole organisations are experimenting. Innovation is hard work but solutions are already emerging. And I'm proud to share them with you in our latest report.

Steve Sammartino
NSW Innovation and
Productivity Council Member
NSW Remote Working Insights
Project Champion



NSW Productivity Commissioner's Foreword



The NSW Productivity Commission was founded to find ways of lifting our State's productivity growth, and with it our living standards. Its first White Paper, *Rebooting the economy*, sets out 60 ways to do that. We are always looking for more. I read the NSW Innovation and Productivity Council's first *NSW Remote Working Insights* report last year with that in mind, and saw the suggestion that remote working might permanently boost NSW productivity.

So I was delighted when the Council invited the Commission to partner with it on this second *NSW Remote Working Insights* report. Working together, we have been able to dive deeper into the productivity potential of remote and hybrid working. That is in part because we now have a second *Remote Working Survey*.

Together the two surveys suggest that once the pandemic recedes, NSW could produce almost a third of its gross state product remotely—up from around a fifth before the pandemic. Putting it in concrete terms, this means around \$165 billion a year of economic activity done remotely.

And the data suggests remote working has actually made people *more productive*. If the improvements of recent times can be sustained, remote working could be among the biggest boosts to NSW productivity in the past 50 years.

It is fast-tracking innovation, unearthing efficiencies, and creating opportunities to use office space more effectively. It is taking people off roads and public transport at the busiest times of the day. These are just the sorts of productivity improvements the Productivity Commission is seeking.

The benefits of remote working have surprised us in both their range and size. The better we understand remote working, the more we can use it to make the people of NSW better off.

Peter Achterstraat AM
NSW Productivity Commissioner

Contents

TABLE OF CONTENTS	3
TABLE OF FIGURES AND BOXES	5
KEY TERMS	6
EXECUTIVE SUMMARY	7
Innovation and productivity rise	8
Employers and employees see hybrid working as a win-win	10
Organisations are quickly adapting to remote and hybrid work	11

01. A PREVIEW OF WORKING LIFE BEYOND THE PANDEMIC 12

1.1 Hybrid working flourished when restrictions eased in early 2021	17
1.2 Hybrid is an adaptation to our more uncertain world	19
1.3 Employers continued to support remote work when restrictions eased	20
1.4 We are breaking down the barriers to remote and hybrid work	22
1.5 The ups and downs of collaborating and innovating remotely	24
1.6 Workers have tasted the benefits and want to keep them	25
1.7 Employers have embraced the benefits of hybrid and remote work	28
1.7.1 Remote working helps attract and retain talent	28
1.7.2 Remote-ready employers are more resilient	31

02. THE HYBRID OPPORTUNITY CAN BOOST PRODUCTIVITY 32

2.1 Innovation has been fast-tracked	35
2.2 Digital platforms are making businesses more efficient	36
2.3 Workers and managers affirm remote productivity	37
2.4 We can get more from our housing and infrastructure	39
2.5 Getting more bang for the office-space buck	41



03.

ORGANISATIONS ARE MAKING REMOTE AND HYBRID EFFECTIVE

3.1 Taking the bespoke approach	44
3.1.1 Tailoring work arrangements to roles and functions	44
3.1.2 Meeting employee preferences	46
3.1.3 Meeting team, organisation, and customer needs	47
3.1.4 Iterating, experimenting, and seeking feedback	48
3.1.5 Capitalising on opportunities in the regions	49

3.2 Creating fit-for-purpose workplaces and work practices	51
3.2.1 Investing in the right hardware and platforms	51
3.2.2 Using offices' face-to-face advantages	53
3.2.3 Designing hybrid-ready offices	55
3.2.4 Adopting location and time-agnostic work practices	56
3.2.5 Managing the peak of the week	57
3.2.6 Building new health and safety practices	58
3.2.7 Integrating remote work into working conditions	60
3.3 Managing for high-performance remote working	61
3.3.1 Measuring outputs, not just inputs	61
3.3.2 Reconfiguring management	63
3.3.3 Fostering proactive, authentic, communicative leadership	63
3.3.4 Creating a culture of trust	64
3.3.5 Equitable environments and positive incentives	66
3.3.6 New approaches to professional development	69
3.3.7 Redesigning onboarding	70

04.

APPENDICES

4.1 APPENDIX A: 2021 Remote Working Survey	72
4.1.1 Our survey covered key groups in the NSW workforce	73
4.1.2 We asked workers about their productivity and managers about the productivity of their employees	74
4.1.3 We asked workers to complete 'Likert tasks'	74
4.1.4 We also asked workers to complete 'best-worst' tasks	75
4.2 APPENDIX B: How we estimate changes across the NSW workforce	76
4.3 APPENDIX C: How we estimate NSW's remote work potential	77
4.4 APPENDIX D: How we estimate remote jobs and output during lockdowns	78
4.5 APPENDIX E: How we translated productivity improvements into higher Gross State Product	79
4.6 APPENDIX F: Our case studies and qualitative research	80
4.6.1 We interviewed a diverse range of employers	80
4.6.2 We asked employers about their innovative policies, procedures, and initiatives in relation to remote and hybrid working	84
4.6.3 We consulted peak bodies	84

REFERENCES

86



Figures

FIGURE 1: The proportion of work done remotely remained higher than pre-pandemic levels when restrictions eased	17
FIGURE 2: When restrictions eased, workers and employers embraced remote and hybrid models	18
FIGURE 3: Even without health restrictions, employers support remote working	20
FIGURE 4: Employers have embraced a range of hybrid policies	21
FIGURE 5: Most barriers to remote work have improved	22
FIGURE 6: Most report health and wellbeing benefits from remote work	25
FIGURE 7: Workers with longer commutes prefer remote work more	27
FIGURE 8: Managers use remote work to help retain and recruit employees	28
FIGURE 9: Remote work could permanently boost NSW productivity	33
FIGURE 10: Remote work protects NSW jobs and output during lockdowns	34
FIGURE 11: Workers and managers agree remote work is more productive	37
FIGURE 12: Managers see the benefits of remote work	38
FIGURE 13: Policies should accommodate a range of worker preferences	46
FIGURE 14: The new work challenges in hybrid offices	55

Boxes

BOX 1: Fostering social connection for remote workers	23
BOX 2: Telstra—Using flexible working to attract and retain talent	29
BOX 3: Sustainable East—A resilient remote-ready small business	31
BOX 4: Remote working could ease housing and transport costs	40
BOX 5: Rethinking agglomeration in light of remote working	42
BOX 6: Chamberlain Group—Actively managing remote role expectations	45
BOX 7: KPMG’s hub model—ensuring employee decisions meet team and organisational needs	47
BOX 8: CommBank—listening and responding to staff	48
BOX 9: WorkLife—enabling people to work from NSW’s South Coast	50
BOX 10: Hunter New England Local Health District—using online tools and processes for healthcare	52
BOX 11: Atlassian—Reimagining the central office	54
BOX 12: Atlassian’s ‘Team Anywhere’ supports work from all over	56
BOX 13: Supporting remote workers’ mental health and wellbeing	59
BOX 14: Remote and hybrid working—protecting worker’s rights and protections	60
BOX 15: Staff engagement and productivity	62
BOX 16: GitLab’s all-remote approach—built on trusting employees	65
BOX 17: How remote work impacts women at work and home	68

Key Terms



Innovation is our ability to find and apply new ideas and techniques that make us more productive.



Productivity is our ability to produce more goods and services from a given amount of capital and labour.



Remote working is an arrangement where an employee works from somewhere other than their employer's workplace. Remote work is often called 'telework' or 'telecommuting'. Employees often work remotely from their homes, but remote working can be done from almost anywhere—a café, a local work hub, even on a train (NSW Innovation and Productivity Council, 2020).



Remoteable tasks are tasks that can be done remotely.



Remoteable workers are workers who can do some remote work in their current role. All workers in our *2020* and *2021 Remote Working Surveys* were remoteable. They may be:

- **Full-time remote workers**—working more than 4 days a week remotely on average.
- **Hybrid workers**—working more than 1 day and up to 4 days a week remotely on average.
- **Full-time on-site workers**—working no more than 1 day a week remotely on average.



Hybrid working involves a combination of on-site and remote work. There are two aspects to hybrid working—'hybrid working patterns' and 'hybrid working environments':

- **Hybrid working patterns** involve a worker working on-site and remotely at different times. A variety of hybrid work patterns are used across different industries and roles. A common pattern is to work from an office a few days each week and the rest from home.
- **Hybrid working environments** are where some employees are working on-site at the same time as others work remotely. These environments can involve collaborating using digital meeting platforms, cloud-based digital tools, file sharing accounts, and document management software.



Flexible working can include remote and hybrid working but is a broader term that covers all flexible ways of working. It includes flexibility in:

- **work hours**, such as starting and finishing work early or late
- **work patterns**, like job-sharing or part-time work
- **work locations**, for example, being able to work remotely.

Executive Summary

Throughout the COVID-19 pandemic, remote working has become a trusted ally to many NSW workers and employers. The ability to keep working remotely has saved hundreds of thousands of NSW jobs, kept businesses running, and preserved billions in NSW economic output. These jobs and incomes have knock-on effects that benefit all of the people of NSW—even those who *cannot* work remotely.

FIGURE: REMOTE WORK PROTECTS NSW JOBS AND OUTPUT DURING LOCKDOWNS



* These are non-essential NSW workers (both full- and part-time) who would be laid off or stood down if they could not work remotely.

** This represents output from non-essential workers who would be stood down or laid off if they could not work remotely.

Source: ABS Census Table Builder, ABS National state and territory population, ABS State Accounts, FaethmAI 'Remoteability Index', NSW PC modelling. For further explanation see Appendix D.

Executive Summary

Innovation and productivity rise

Remote working has become more than just a Plan B. In early 2021, when COVID-19 transmission and health restrictions eased, we saw widespread adoption of hybrid working—employers and employees combining remote working with on-site work.

We estimate that when health restrictions eased in early 2021, 30 per cent of all work tasks in the NSW economy—with an economic value of around **\$165 billion a year** (in 2021 dollars)—continued to be done remotely.

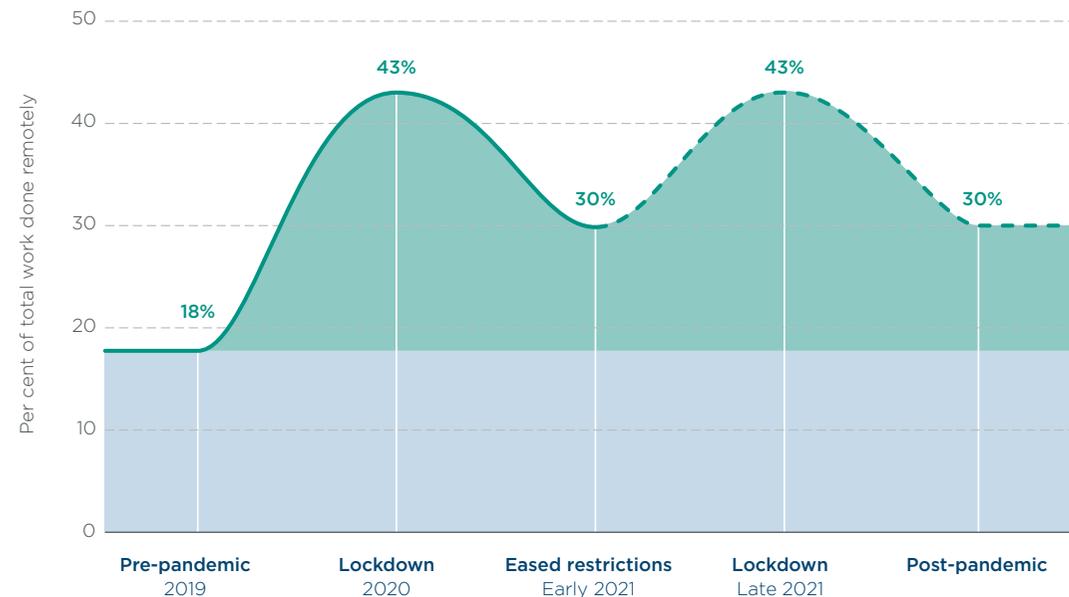
If that level is sustained, we estimate that the COVID-induced rise in remote work could raise NSW's productivity permanently by **1.9 per cent**, or **\$6 billion** a year in 2021 dollars.

Ultimately this productivity flows on to NSW households as higher incomes and standards of living. The increase in productivity from remote working could improve the wellbeing of the average NSW household by around \$1,800 a year in 2021 dollars.

That would make remote working one of the biggest boosts to NSW productivity in recent years.

FIGURE: THE PROPORTION OF WORK DONE REMOTELY REMAINED HIGHER THAN PRE-PANDEMIC LEVELS WHEN RESTRICTIONS EASED

Total work done remotely in NSW



Source: IPC Remote Working Survey 2020 & 2021 and IPC / NSW PC estimates.

Executive Summary

FIGURE: REMOTE WORK COULD PERMANENTLY BOOST NSW PRODUCTIVITY

Modelling of remote working's impacts beyond the pandemic



Source: NSW PC modelling, see Appendix E

How it is that remote and hybrid working arrangements could contribute so much to the State's productivity growth? The explanation is that remote working lets the economy produce more goods and services with the same resources. We see qualitative evidence that remote working is:

- fast-tracking innovation
- unearthing efficiencies
- creating opportunities to use office space more effectively.

Remote and hybrid working are easing congestion on roads and crowding on public transport both by reducing car and public transport travel and by moving trips outside morning and evening peak times.

Remote and hybrid working may also help us get more from our Central Business Districts (CBDs). Larger firms can use it to reduce their office space requirements, while smaller companies take up the slack, seizing opportunity to establish boutique CBD footprints.

Executive Summary

Employers and employees see hybrid working as a win-win

We are not seeing the ‘death of the office’. Most remoteable workers (76 per cent) do not want to work remotely full-time. Most of us enjoy coming into the office for collaboration, team building, and social contact. Employers also want to retain a central office for these reasons. Many workers and employers now believe hybrid working combines the benefits of remote work and on-site work.

This report uses new survey data and case studies to explain *why* hybrid working is here to stay and *how* organisations can successfully adopt this new way of working.



Employees report that remote working:

- reduces their commuting time
- improves their sense of wellbeing
- allows them to work flexibly around their other commitments and activities.

Employees are also evaluating their career moves carefully—and hybrid working gives them a greater choice of employers.



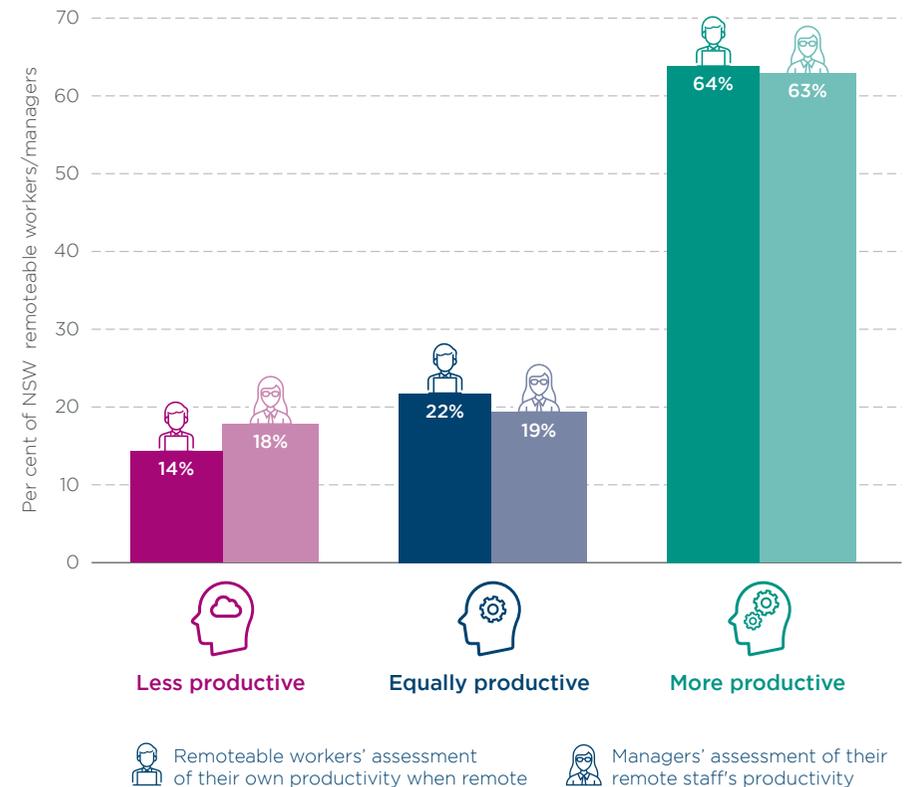
Employers are increasingly viewing remote, hybrid, and flexible working as key weapons in the global war for talent. ‘Remote-ready’ employers report that remote work can:

- make a company’s remuneration package more attractive to prospective employees
- give them access to larger labour pools, making it easier to recruit staff and fill skills gaps
- aid retention because employees prize the option to work remotely and reward it with loyalty
- make them more resilient to the shocks and stresses of a more uncertain world, aiding business continuity when access to physical workplaces is disrupted.

While there is still much to learn, there are strong indications the hybrid opportunity is boosting productivity. Remote working has fast-tracked technological innovation, for example in telehealth, and many employers are reporting efficiencies. Both remoteable workers and their managers report substantial productivity gains when they work remotely.

FIGURE: WORKERS AND MANAGERS AGREE REMOTE WORK IS MORE PRODUCTIVE

NSW remoteable workers, self-assessed and manager-assessed productivity ratings when working remotely compared to at their employer’s workplace, early 2021



Source: IPC Remote Working Survey 2021

Executive Summary

Organisations are quickly adapting to remote and hybrid work

Our case studies present many lessons for policymakers, workers, and businesses, from organisations leading the transition to remote and hybrid working. Here are five of the biggest lessons:



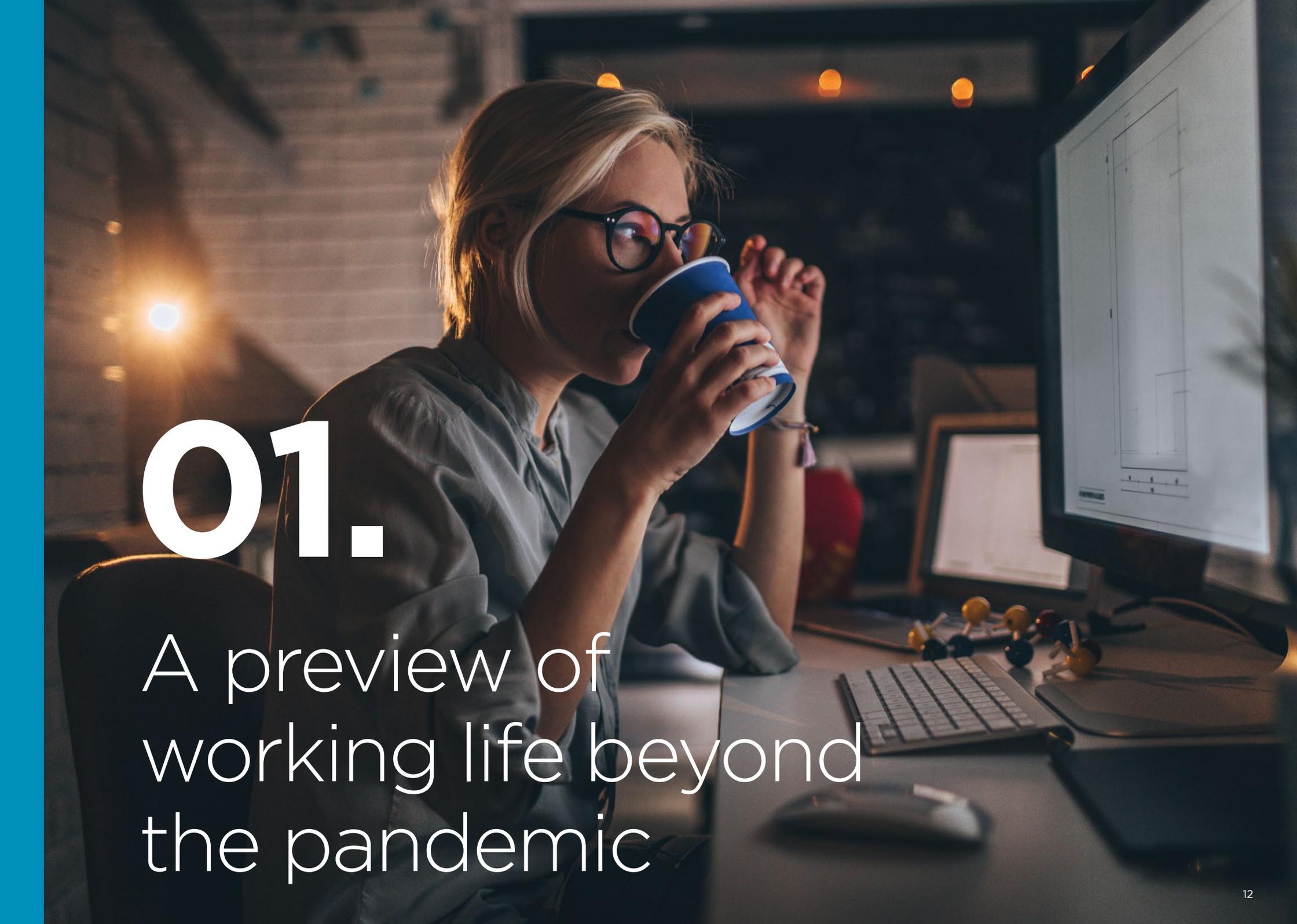
1. Tailor flexible working arrangements to workers' roles and functions, to employee preferences, and to the needs of the team, organisation, and customers.

2. Experiment with work arrangements and set up systems to get employee feedback on the experiments.

3. Reshape office use and work practices to support both hybrid and remote workers. Use offices for what they are best at and shape work practices around new patterns of use.

4. Find new ways to measure work. Measure outputs not just inputs.

5. Invest in hybrid culture. Build an organisational culture that emphasises trust, treats people in different roles equally, continues to encourage professional development, and successfully onboards new starters.



01.

A preview of
working life beyond
the pandemic

The COVID-19 pandemic has activated the biggest global remote working experiment in history. It is a cultural shift with significant economic and policy implications.

In response to this changing landscape, the NSW Innovation and Productivity Council launched the *NSW Remote Working Insights* series in 2020. The series examines changes in working patterns and arrangements because of COVID-19 and provides evidence and insights on the longer term implications, supporting NSW public policy development and workforce planning into the future.

In our first report in the series, *Our experience during COVID-19 and what it means for the future of work*, released in November 2020, we described ‘a huge remote working experiment’ which was taking place in our State (NSW Innovation and Productivity Council, 2020, p. 1). It included insights from:

- a survey of 1,500 NSW remoteable workers in August and September 2020, capturing experiences of remote working at the height of the 2020 COVID-19 lockdowns
- modelling of the NSW workforce’s capacity to work remotely, powered by Faethm AI
- a review of the literature on remote working, including its productivity effects.

That first report recorded the experiences of NSW remoteable workers when COVID-19 was new, vaccines had not yet arrived, and the State was amid its first lockdown.

Amid the gloom, the 2020 report had good news. NSW workers and business had saved time and increased productivity by working remotely. Done right, data suggested, remote working could strengthen our economy and improve our lives. Other reports from across the world have supported that finding.

Now this report takes up the next questions, for both policymakers and businesses. The two biggest are:

How likely is this rise in remote working to persist beyond the pandemic?

To the extent remote working is here to stay, how should organisations adjust to it?

To answer these questions, the NSW Innovation and Productivity Council partnered with the NSW Productivity Commission to:

- conduct a follow-up survey of 1,500 NSW remoteable workers in March and April 2021, capturing remote working patterns when community transmission of COVID-19 was minimal and related health restrictions had eased
- speak to 12 organisations and consult several NSW employer and industry peak bodies.

This report presents some of the first data on where remote working patterns may settle when the pandemic ends.

When restrictions eased in early-2021, were employers and employees keen to simply return to pre-COVID working patterns?

As **Chapter 1** sets out, our survey shows the opposite. When health restrictions temporarily eased in early 2021, 30 per cent of all work in the NSW economy continued to be done remotely—up from 18 per cent before the pandemic.

A preview of working life beyond the pandemic

Hybrid working gained prominence in NSW as the pandemic temporarily receded in late 2020 (Dempsey, 2020). It is likely to thrive once the pandemic ends because it offers durable benefits to workers, organisations, and the economy. And it will probably become a common feature of working arrangements through this decade and beyond.

A primary lesson of our report is this: **NSW should get used to the idea of hybrid work and find ways to seize the opportunities.** It will almost certainly stay with us and may well be permanent. Working some hours at the employer's workplace but others at home is likely to become the norm for many occupations.

We cannot be certain of any new workspace developments. Some prove to be fads and fade away. But the evidence from 2020 and 2021 so far suggests that from now on, NSW should treat hybrid working as a standard feature of many jobs.

As the Chair of the Commonwealth Productivity Commission, Michael Brennan, has said the current period is *'characterised by two experiments: the first one being the forced experiment of firms and workers having to embrace remote work; and the second experiment being the array of different models tried by different firms: fully remote, fully centralised, and the endless possible versions of a hybrid model'* (Brennan, 2021).

Academics, businesspeople, and media outlets have pointed to individual companies contemplating making their pandemic-time workplace changes permanent. This does not mean hybrid work will be adopted by every employer. Some organisations will return to a norm of on-site work; a smaller group will institute full-time remote working throughout their organisations.

This report quantifies the breadth of the changes, and showcases how a select group of companies are successfully grasping the opportunities and mitigating the challenges of remote and hybrid working.

As the report points out, organisations remain uncertain. This report cannot eliminate that uncertainty; research cannot provide a crystal ball.

But it is widely accepted that organisations cannot avoid decisions just because their environments are somewhat uncertain. Businesses and individuals need to manage their affairs in an environment of uncertainty.

As **Chapter 2** shows, remote and hybrid working have become widespread because they are powerful tools for managing uncertainty and disruption. Throughout the pandemic they have helped workers and employers across NSW be flexible, resilient, and productive. They have saved jobs and businesses and helped us manage health risks. If uncertainty persists, remote and hybrid working will remain as trusted allies.

Yet adapting to remote and hybrid working is proving to be a significant task. In **Chapter 3**, this report sets out a range of innovative policies, processes, and initiatives leading organisations are adopting.

By documenting this, we aim to help NSW organisations make better decisions about the workplaces of our State, and adapt quickly to the changing conditions. In an atmosphere of uncertainty and change, there are still opportunities to seize.





Who we surveyed

For this *2021 Remote Working Survey*, we surveyed 1,500 NSW remoteable workers in March and April 2021, to understand their experiences of and attitudes to remote working when community transmission of COVID-19 was minimal and related health restrictions eased.

Our respondents had been at their current job for at least six months and had some experience of remote working. We interviewed managers and non-managers based in both metropolitan and regional NSW. Our large survey sample allowed us to break down results by different demographics, like sex, age, and income level.

In our *2020 Remote Working Survey*, we surveyed 1,500 NSW remoteable workers in August and September 2020, to understand their experiences of and attitudes to remote working at the height of the 2020 COVID-19 lockdowns.

Details on the survey sample and questions are in **Appendix A**.

Who we interviewed

We interviewed a diverse group of companies that employ NSW workers, spanning a range of industries, metropolitan and regional locations, and both the private and public sectors.

Details on these organisations, the interview process, and the roundtable are in **Appendix F**.

- **Atlassian** is a technology company that specialises in the development of software to facilitate collaboration and ‘open work’.
- **Chamberlain Group** is an advanced manufacturer specialising in smart access solutions and ecosystems.
- **Commonwealth Bank of Australia** (CommBank) is one of Australia’s ‘big four’ banks and provides a range of integrated financial services.
- **GitLab** is a software development operations company.
- **Hunter New England Local Health District** is responsible for the provision of public health services across the Hunter, New England, and Lower Mid North Coast regions in NSW.
- **KPMG** is a global network of firms that provide audit, tax, and advisory services.
- **Legal Aid NSW** is a statewide organisation that provides legal services to socially and economically disadvantaged people.
- **Rio Tinto** is a large mining and metals company.
- **Sustainable East** is a consulting company specialising in land use planning, spatial data, and economics.
- **Telstra** is Australia’s leading telecommunications and technology company.
- **University of New England** is a university based in Armidale with options to study online or on campus.
- **WorkLife** is a network of co-working spaces on the South Coast.

We also consulted with the following peak bodies:

- **Business Illawarra** is the Illawarra region’s peak business organisation.
- **Business NSW** is the State’s peak business organisation.
- **Business Sydney** is the ‘voice for business in Sydney’.
- **NSW Indigenous Chamber of Commerce** supports Aboriginal people to establish and operate their own businesses.
- **Property Council of Australia** is the leading advocate for Australia’s property industry.
- **Recruitment, Consulting and Staffing Association** is the peak body for the recruitment and staffing industry in Australia and New Zealand.
- **Small Business Association of Australia** is a business organisation that supports and advocates for the small and medium-sized enterprise (SME) sector.
- **Unions NSW** is the peak body for the State’s trade unions.

1.1 Hybrid working flourished when restrictions eased in early 2021

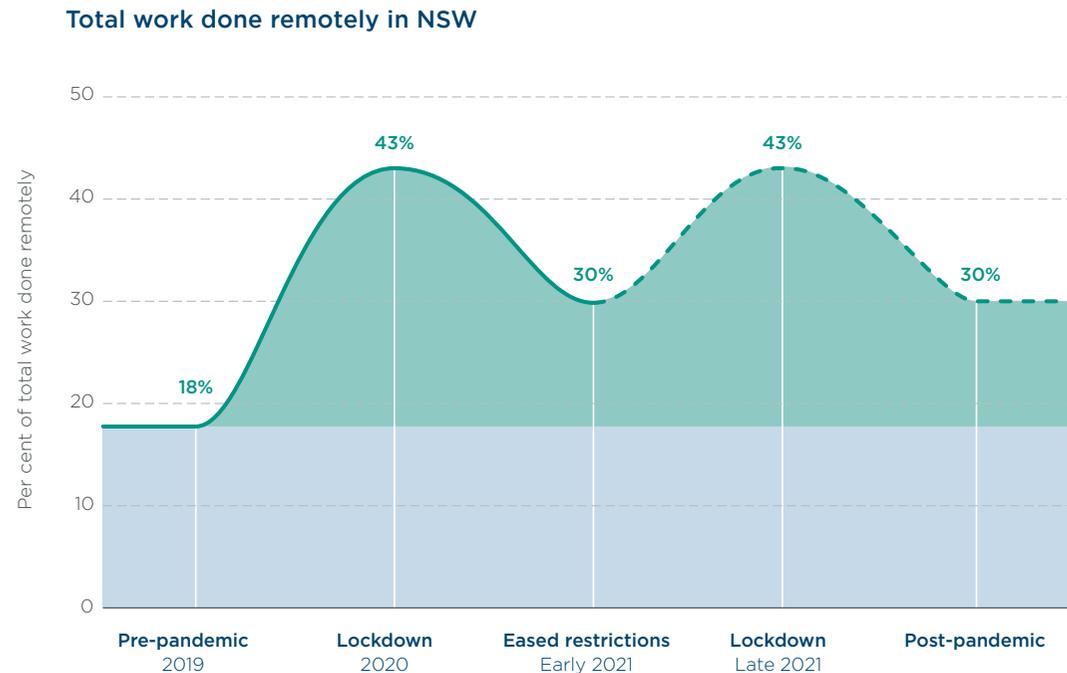
Our 2021 Remote Working Survey begins the job of testing how durable the change in our work patterns may be.

We spoke to 1,500 NSW remoteable workers in March and April 2021, about their experiences of remote and hybrid working when COVID-19 transmission and health restrictions were minimal in NSW. This survey provides an indication of how remote and hybrid working practices evolved during a hiatus in the pandemic. It gives us a glimpse of where patterns may settle when the pandemic ends.

The proportion of work that can be done remotely differs from job to job, but in our previous report we analysed all work tasks done in NSW and estimated that, overall, a maximum of 44 per cent of work can be done remotely. NSW came very close to this rate of remote working at the height of the 2020 lockdown: our 2020 Remote Working Survey showed 43 per cent of all work in this State being done remotely (see **Figure 1**). We expect remote working has returned to similar levels in the second half of 2021, due to the Delta strain outbreak and associated NSW lockdown.

That is up from just 18 per cent before the pandemic.

FIGURE 1: THE PROPORTION OF WORK DONE REMOTELY REMAINED HIGHER THAN PRE-PANDEMIC LEVELS WHEN RESTRICTIONS EASED



Source: IPC Remote Working Survey 2020 & 2021 and IPC / NSW PC estimates.

1.1 Hybrid working flourished when restrictions eased in early 2021

Based on workers' preferences for a hybrid model, we projected that after the pandemic, around 30 per cent of all work in NSW would continue to be done remotely.

Our 2021 Remote Working Survey findings are consistent with these projections. We estimate that when health restrictions eased in early 2021, 30 per cent of all work in the NSW economy continued to be done remotely. In other words, remote and hybrid working are now a major part of working life in NSW.

Our latest findings show that workers are increasingly embracing hybrid working patterns (see **Figure 2**).

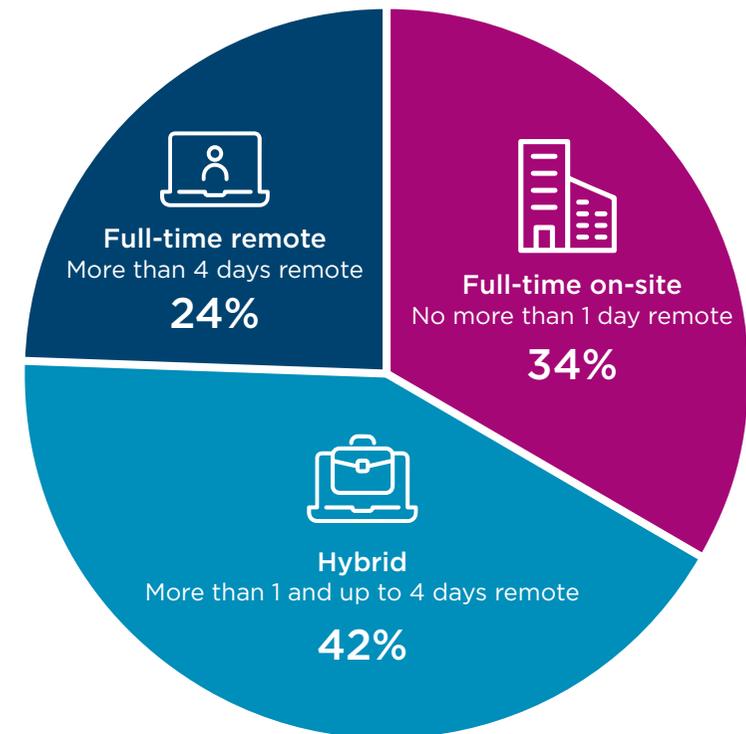
At the height of the 2020 lockdown, 46 per cent of NSW remoteable workers did so full-time, more than four days a week. But then, as COVID-19 transmission and health restrictions eased in early-2021, only 24 per cent continued working remotely full-time.

In this period of lifted restrictions, hybrid working became the most popular choice for remoteable workers (and their employers). 42 per cent of these workers embraced hybrid working patterns, working more than one and up to four days remote a week.

Nevertheless, some did come back to the office full-time. The proportion working remotely no more than one day a week jumped from 19 per cent at the height of the 2020 lockdown to 34 per cent in early 2021. In some cases, these workers stopped working remotely because they did not enjoy it. In other cases, employers directed workers to return to the office because they did not want to offer remote working, and government health orders no longer required them to.

FIGURE 2: WHEN RESTRICTIONS EASED, WORKERS AND EMPLOYERS EMBRACED REMOTE AND HYBRID MODELS

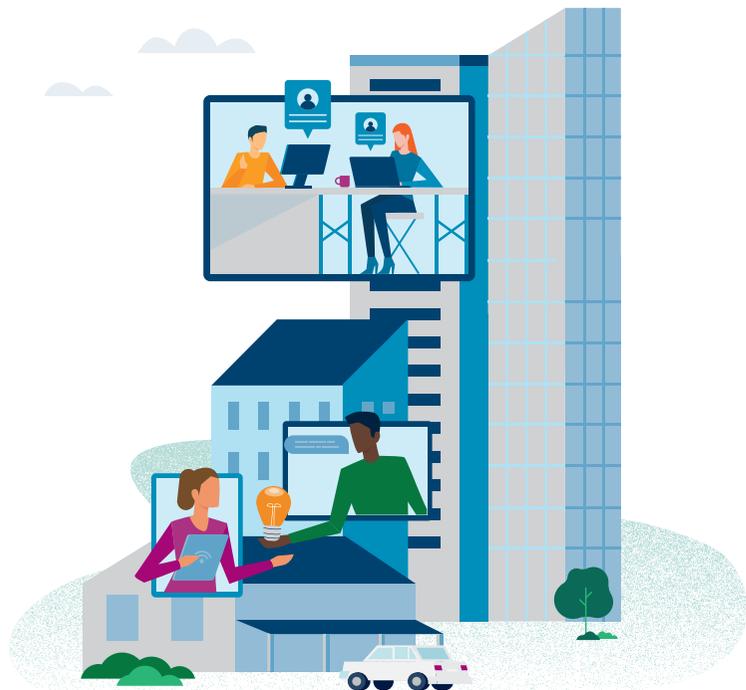
NSW remoteable workers, days a week remote, early 2021



Source: IPC Remote Working Survey 2021

1.2 Hybrid is an adaptation to our more uncertain world

Organisations are uncertain about where work will be done in the future. Employers and business groups report that while the pandemic prompted a rapid move to working from home, returning to the office was slow and often only partial.



When health restrictions eased in early 2021, data showed some people returning to offices. The **Property Council of Australia's** office occupancy survey found Sydney's CBD was at 59 per cent occupancy in April 2021, up from 50 per cent in March 2021 (Property Council of Australia, 2021a). Property Council of Australia members, however, have noted that there is no consistent pattern for the return to the office by industry. Clients of Property Council of Australia members reported they are likely to have 50 to 60 per cent of staff in on any one day, and that spaces are being used differently.

While workers and employers are shaping their new work environment, they have also been managing ongoing uncertainties. They have had to respond to intermittent COVID-19 outbreaks, state and national border closures, requirements to self-isolate or social distancing in response to symptoms or outbreaks, and, of course, further lockdowns.

As the pandemic goes on, it is clear businesses need to adapt to ongoing uncertainty. Many employers are taking an experimental approach. They are exploring, testing, and adjusting their return-to-work policies and practices.

Some companies spoke about their hesitancy to mandate arrangements while everyone is testing and figuring out what the future of work will look like. **Business NSW** noted the difficulty for employers '*making decisions under uncertainty*'. This uncertainty is trickling down to employees, especially when there are no policies or frameworks in place: '*Because people are still uncertain, it is preventing employees from adjusting. For example, it is preventing people from developing optimal setups for what they want to do, or moving to a different location, for example to a regional location*'.

For many, though, hybrid working has emerged as the most efficient adaption to uncertainty. As our *2021 Remote Working Survey* results reveal, for most jobs that can be done remotely in NSW, employers have adopted hybrid working policies (see **Section 1.3**). For a significant number of jobs, employers allow full-time remote working. A survey conducted by *The Age* and *The Sydney Morning Herald* in July 2021 found that most of Australia's largest employers have adopted a hybrid work policy and expect this will endure even after the threat of COVID-19 has passed (Koehn & Irvine, 2021).

1.3 Employers continued to support remote work when restrictions eased

According to our 2021 Remote Working Survey, NSW employers continued to support remote working when restrictions eased in early 2021.

On average, NSW remoteable workers reported that their organisations continued to encourage people to work remotely, were well prepared for it, and that was both common and easy to get permission to work remotely (see **Figure 3**).

Employer support for remote work did, however, drop slightly from its heights during the 2020 health restrictions. At that time, some employers offered remote work on a temporary basis to protect workers' health. NSW Government health orders also required employers to let employees to work from home wherever it was reasonably practicable, regardless of the employer's preferences. When the threat of COVID-19 reduced and health restrictions eased in early 2021, employers' support for remote work eased slightly, to a level that likely reflects their underlying preferences more closely.

FIGURE 3: EVEN WITHOUT HEALTH RESTRICTIONS, EMPLOYERS SUPPORT REMOTE WORKING

My organisation encouraged people to work remotely



My organisation was well prepared for me to work remotely



It was common for people in my organisation to work remotely



It was easy to get permission to work remotely



Working remotely reduces my chances of promotion



Source: IPC Remote Working Survey 2020 & 2021

Note: 2020 responses were collected in August and September 2020. 2021 responses were collected in March and April 2021.

1.3 Employers continued to support remote work when restrictions eased

More and more organisations have developed and adopted policies to support remote and flexible working arrangements. A Swinburne University of Technology survey of Australian organisations suggests COVID-19 spurred a significant increase in the number of organisations with a formal working-from-home policy. Prior to COVID-19, around 60 per cent of Australian organisations surveyed reported having a formal working-from-home policy. By May 2020, 78 per cent had one in place (Hopkins & Bardoel, 2020).

A survey of 1,000 Australian employees and 300 small- to mid-size employers found those businesses recognised that COVID-19 has changed flexible working arrangements (Bastion Insights et al., 2021). New or expanded flexible working arrangements were introduced by 57 per cent of employers surveyed. One employer noted: *'The pandemic has seen our team working smarter and harder than ever. If they can do that remotely during a pandemic, then a hybrid model and smarter communication and systems will see a positive future for the business performance'* (Bastion Insights et al., 2021, p. 8).

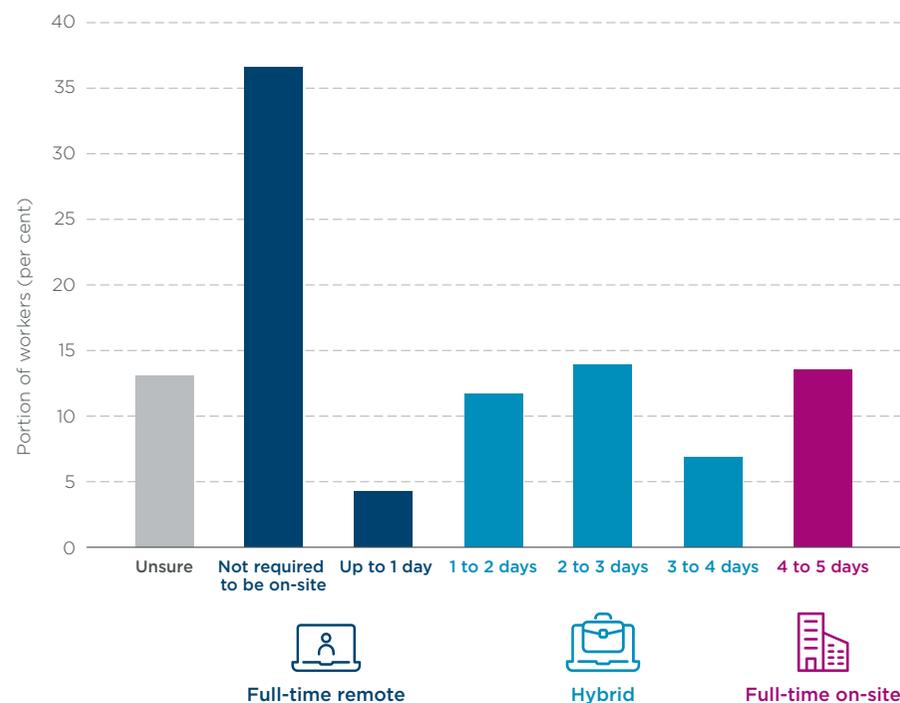
Employers in NSW have embraced a variety of remote working policies (see **Figure 4**). According to our *2021 Remote Working Survey*, 50 per cent of remoteable workers must work from their employer's workplace for some amount of time each week, while 37 per cent are not required to be on-site at all. The remaining 13 per cent reported being unsure whether a policy exists, likely reflecting ongoing experimentation and uncertainty for some employers.

Property Council of Australia members report that small- to mid-sized companies have been more likely to return staff to the office, while larger organisations have tended to keep fewer people on-site. This is partly driven by large organisations' greater health and social distancing challenges.

The **Small Business Association of Australia** and **Business NSW** also argue that accommodating remote and hybrid work arrangements can be more challenging for teams in a small business. For example, the equipment costs for accommodating staff can be proportionately more significant. Allowing flexible working hours can also drive up overtime claims.

FIGURE 4: EMPLOYERS HAVE EMBRACED A RANGE OF HYBRID POLICIES

NSW remoteable workers, time required at employer's workplace, early 2021



Source: IPC Remote Working Survey 2021

1.4 We are breaking down the barriers to remote and hybrid work

NSW remoteable workers and employers have now had a chance to adapt to and reduce many of the barriers to remote work.

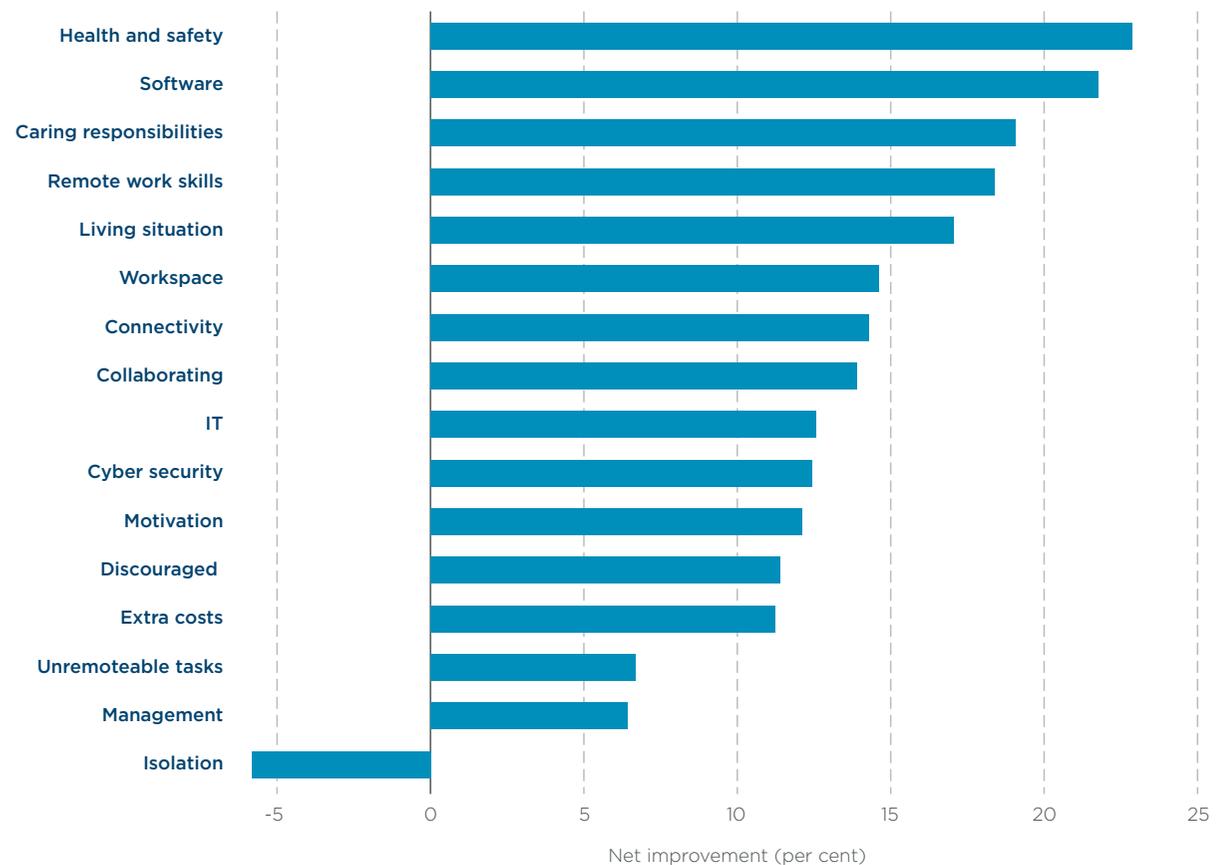
In our 2021 Remote Working Survey, we asked NSW remoteable workers how the barriers to remote work have changed in the previous six months. Most of the barriers showed net improvements—meaning more workers reported the barriers improved than worsened (see Figure 5).

Most barriers showed a net improvement of 10 percentage points or more. **Health and safety** and **software** showed net improvements of 20 percentage points or more.

The only barrier that worsened since our last survey was **social isolation**, by a modest 6 percentage points. As one respondent remarked, remote working can take away work's *'social side, the collaboration, the incidental chats, the team building'*. Other studies have also found isolation, or loneliness, to be one of the biggest challenges of remote working. Fortunately, there is much employers can do to address it (see Box 1).

FIGURE 5: MOST BARRIERS TO REMOTE WORK HAVE IMPROVED

Barriers to remote working, net improvement in the previous six months



Source: IPC Remote Working Survey 2021



Box 1

Fostering social connection for remote workers

In a global study of 3,500 remote workers between October 2020 and January 2021, 16 per cent cited loneliness as the biggest struggle of remote working, ranking it the third biggest struggle overall (Buffer, 2021). Interestingly, workers who had worked remotely prior to the pandemic struggled more with loneliness than those who had not—17 per cent compared to 14.5 per cent.

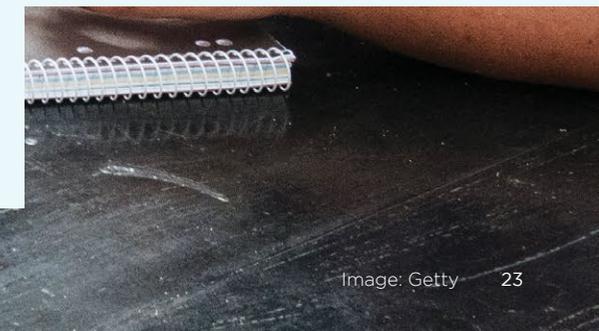
The problem of isolation cannot be blamed solely on the pandemic. A research project involving 62 British journalists, undertaken in 2003, well before the COVID-19 pandemic, found that fully remote journalists were 67 per cent lonelier than those who were office-based (Mann & Holdsworth, 2003).

Our *2021 Remote Working Survey* revealed varying experiences of isolation among those working remotely. 21 per cent reported isolation was not a barrier, and 18 per cent reported it had improved over the previous six months. But 36 per cent reported no improvement, and 24 per cent reported worsening isolation.

Those who reported worsening isolation had a similar appetite for remote working as their peers. But they were more likely to be women, or in single or couple households without dependent children. These workers likely require extra support when working remotely.

As our case studies show, there is much that employers can do to ensure all remote workers have a strong sense of social connection. Key actions include:

- Allowing as much or little remote work as workers prefer (see **Section 3.1.2**).
- Ensuring time in the office is socially rewarding (see **Section 3.2.2**).
- Proactive, authentic, and communicative leadership (see **Section 3.3.3**).
- Ensuring remote workers are treated equitably (see **Section 3.3.5**).
- Proactive, remote-friendly onboarding processes (see **Section 3.3.7**).



1.5 The ups and downs of collaborating and innovating remotely

Many of the companies we interviewed said it was too soon to tell whether remote working will make innovation and collaboration better or worse.

In many people's minds, collaboration and innovation are connected. Less of one means less of the other. One survey respondent remarked that remote working *'reduces interaction between the workers and this affects the creativity of a team as a whole'*. **Business NSW** commented that the *'quality [of work] may be different if we don't have people bouncing off each other as much'*.

But the link between creativity and collaboration is complex. Many creative people—like artists, researchers, and inventors—are famous for spending time alone.

Even before the pandemic, an experimental study found remote workers are actually more productive than office workers when doing creative tasks, by 11 to 20 per cent (Dutcher, 2012). We are not sure why this is. More time alone and less interruptions may aid remote workers' creativity. The flexibility they enjoy may motivate them to be more innovative (Choudhury et al., 2021).

The impacts of remote working on collaboration are also mixed. Remote workers rank difficulty collaborating as the second biggest barrier they face (NSW Innovation and Productivity Council, 2020). But remote collaboration also has some advantages. With new online platforms, distance and travel time are no longer obstacles to getting the right people 'in the room'.

The shift to remote working may also improve inclusiveness, an important aspect of collaboration. A survey of remote workers conducted by Microsoft showed that 52 per cent of respondents felt more included in remote meetings 'because everybody was in the same virtual room' (Spataro, 2020). The **Recruitment, Consulting and Staffing Association** noted that holding remote meetings helped increase the 'cultural engagement' of interstate and overseas team members and made them feel more a part of the team.

There are still concerns that innovation and collaboration may be harmed by remote workers missing out on the chance encounters that happen in physical workplaces (Kraut et al., 2002; Pesutto, 2021).

But these encounters are often limited to colleagues who happen to be nearby. There may be benefits in fostering connections between workers who would not otherwise meet in the office, and remote working could make this easier. Companies like Netflix and Okta now use collaborative applications—such as Donut—to connect colleagues through random virtual meetings during the workday (Donut, 2020).

In 2020, Walt Disney Animation Studios showed that, whatever the difficulties, remote collaboration and creativity can be successful on a grand scale. Due to the COVID-19 pandemic, Disney produced its multi-million dollar animated film *Raya and the Last Dragon* remotely from the homes of over 400 cast, crew, and production workers (Tuttle, 2021).



1.6 Workers have tasted the benefits and want to keep them

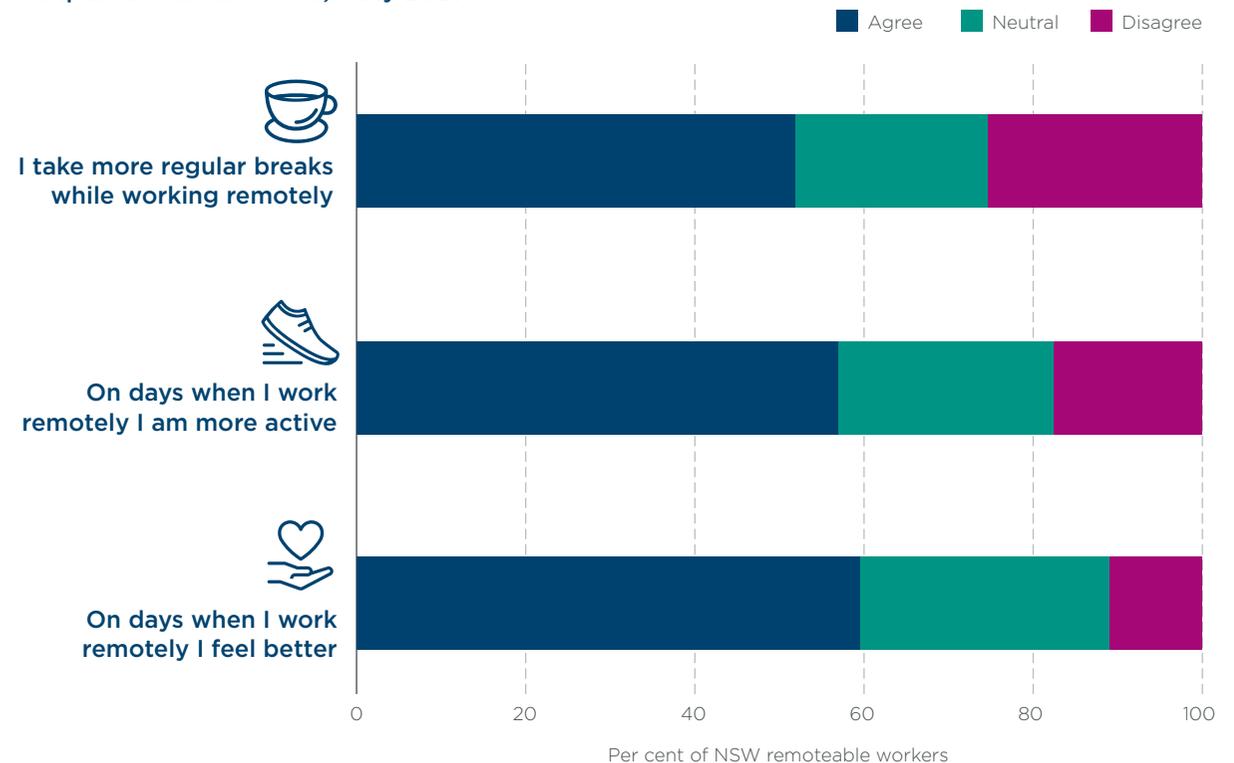
Remote working is popular among workers because, among other things, it improves their wellbeing and saves them time.

In our 2021 Remote Working Survey, most of NSW's remoteable workers also reported that they felt better, were more active, and take more regular breaks on days when they work remotely (see Figure 6).

Other NSW Government research backs these findings, showing physical activity increased during the 2020 lockdowns—a period when people were working remotely more. The Department of Planning, Industry and Environment's (DPIE) *Public spaces during COVID-19* survey, undertaken between May and August 2020, found that 59 per cent of respondents were walking more and 27 per cent were cycling more than before the pandemic (NSW Department of Planning, Industry and Environment, 2020). Transport for NSW (TfNSW) cycleway scanner data also showed a 106 per cent increase in cycling between April 2019 and April 2020 (Transport for NSW, 2020b).

FIGURE 6: MOST REPORT HEALTH AND WELLBEING BENEFITS FROM REMOTE WORK

NSW remoteable workers, views on health and wellbeing when working remotely, compared to in the office, early 2021



Source: IPC Remote Working Survey 2021

1.6 Workers have tasted the benefits and want to keep them

But the evidence on how remote working affects physical activity is mixed. A study from the Journal of Occupational and Environment Medicine, for example, reported that people working from home had less physical exercise (Xiao et al., 2021). A meta study from the British Medical Journal found that most studies reported decreases in physical activity and increases in sedentary behaviours during lockdowns (Stockwell et al., 2021). It is difficult to work out what the effect of lockdown due to decreased movement versus remote working. Time will tell.

NSW remoteable workers also save time when working remotely. On days when they work remotely, NSW remoteable workers save an average of 1 hour and 4 minutes preparing for work and commuting. On average they spend 17 minutes of this extra time by working. But they use most of it as personal or family time. One survey respondent said remote working *'creates less pressure on those who have other responsibilities as they don't need to spend additional time commuting'*.

“

It offers me flexibility enabling work and life balance. ”

Female, 40, North Sydney, ICT Professional



1.6 Workers have tasted the benefits and want to keep them



I enjoy working remotely, I have settled into the new routine and the time and effort saved on commuting daily and the opportunity to give my family (and job duties) more time has been a big advantage.

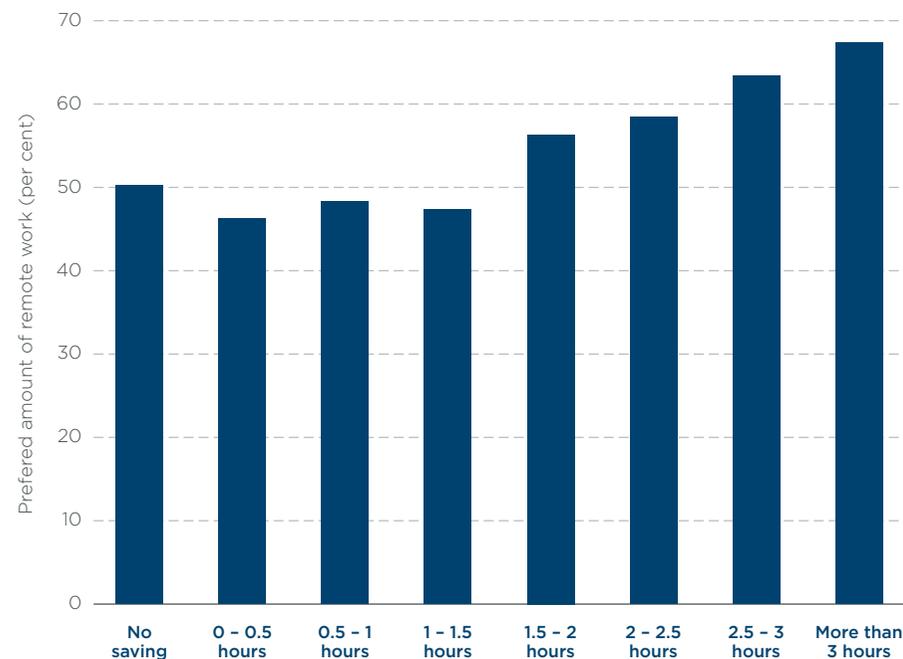
Male, 42, Western Sydney, ICT Professional

NSW remoteable workers who save more time preparing for work and commuting when they work remotely would like to work remotely more often (see **Figure 7**). Remoteable workers with a short commute—who save between no time to one and a half hours a day—would prefer to work remotely about half the time on average. Those who save between one and a half to two hours a day would prefer to work remotely 56 per cent of the time on average, and those who save more than three hours a day would prefer to work remotely 67 per cent of the time on average.

The value workers place on remote working can be measured in a variety of ways. According to our *2021 Remote Working Survey*, a substantial proportion of NSW remoteable workers—32 per cent—would be prepared to negotiate a pay cut for the right to work remotely. A Department of Infrastructure, Transport, Regional Development and Communications (DITRDC), University of South Australia (UniSA), and iMOVE Cooperative Research Centre research project—*Encouraging the continuation of work-from-home practices in a post-pandemic world*—found that remote work is worth \$6,200 on average in annual wages to employees (Vij et al., 2021).

FIGURE 7: WORKERS WITH LONGER COMMUTES PREFER MORE REMOTE WORK

NSW remoteable workers, preferred amount of remote work after COVID-19 by total daily commuting time, early 2021



Source: IPC Remote Working Survey 2021

Note: Only NSW remoteable workers who work in NSW were included

1.7 Employers have embraced the benefits of hybrid and remote work

1.7.1 Remote working helps attract and retain talent

According to our *2021 Remote Working Survey*, offering remote work helps managers retain and recruit employees (see **Figure 8**).

Many organisations increasingly view their flexible working policy as a key component of their remuneration package (see **Box 2**). A survey of workers in the United States (US) found that 35.8 per cent of workers would look for a job that allowed remote work if forced to return to the office full-time, and 55.9 per cent of employees were more likely to consider a new job at the same pay if it allowed them to work remotely two to three days a week (Barrero et al., 2021b). **GitLab** reported that its 'all-remote' approach helps it to attract talented staff. Recent applicants have been told by their current employer that they need to return to a central office and commented on the appeal of GitLab's all-remote approach.

The rise of flexible working arrangements has brought greater focus onto their role in boosting employee satisfaction. Companies are thinking deliberately about what future employees will want and are making sure they provide a competitive offering. **CommBank** highlighted the importance of getting hybrid working right to attract and retain talent into the future: *'We are aware that many organisations will do this hybrid really well and if we want to compete for great people, we will have to do same'*.

Microsoft's *2021 Work Trend Index* report also identified that employees are evaluating their next moves with greater intensity. The proportion of employees surveyed globally with 'job switching intent' nearly doubled over the last year: 41 per cent of those surveyed reported that they are likely to consider leaving their current employer within the next 12 months. This likelihood of leaving has increased because employees who can work remotely have more options and greater choice of employers (Microsoft, 2021).

FIGURE 8: MANAGERS USE REMOTE WORK TO HELP RETAIN AND RECRUIT EMPLOYEES

Offering remote work helps me retain employees



Offering remote work helps me to recruit employees





Box 2

Telstra—Using flexible working to attract and retain talent

Telstra has long supported flexible working models, introducing an ‘All Roles Flex’ policy in 2014. The initial driver was to increase diversity, but the leadership team at Telstra noticed that flexible working arrangements attracted broad uptake: *‘Pretty much everyone worked flexibly at Telstra before COVID’*. CEO Andrew Penn led from the top, remarking that *‘the new normal isn’t coming, it’s here now’* (Penn, 2020).

Telstra renewed its commitment to flexible working with a new flexible working policy in April 2021. This policy lets employees be location-agnostic if it suits their role, with no mandated number of days in an office. The policy is a commitment to all roles being flexible in some way. It *‘makes it clear it is your right to work flexibly—other companies treat [it] as a privilege’*.

Telstra’s flexible working policy is guided by three steps:

1. Decide how flexibility works best for you. Consider time, space, leave, and work.
2. Discuss with your leader.
3. Do it. Put a plan in place to make it work.

Flexible working is organised through conversation and negotiation with the employee and manager, with managers able to make decisions that best fit their team, noting *‘we want to help our people live their best life’*.

The challenge for Telstra is making sure they remain an industry leader in providing flexible working models. *‘How do we keep differentiating ourselves in the market?’*. Telstra is currently working on a ‘future workplace experience’ offering that will maintain their competitive advantage as an employer of choice. This means supporting working from home, as well as considering how individual team leaders can ‘earn the commute’ of their staff when they do want them to come into the office through incentives like team lunches.

1.7 Employers have embraced the benefits of hybrid and remote work

Several organisations also said adopting remote working had increased access to talent. Remote working has downgraded the importance of physical proximity as an employment pre-requisite, and that has increased the talent pool of potential workers and made it easier to recruit staff with the desired profile. According to **Atlassian**: *'Companies are no longer fixated on where someone lives but more focused on what attributes they bring to the organisation... Atlassian had this before but it is now in much sharper focus'*.

The NSW Innovation and Productivity Council's forthcoming report on the fight for global talent supports these findings. This new research finds the global move towards remote working has opened the door to global talent for Australian employers. There are more opportunities for talent to work in Australia while living elsewhere, and vice versa.

This has been accelerated by COVID-19 with borders closed and remote work becoming normalised. Australian expats looking to return home for family and lifestyle reasons could also be accelerated if they can still perform their overseas roles.

Microsoft's *2021 Work Trends Report* states that remote opportunities are more attractive to a broader range of applicants—particularly women, members of Gen Z (those born in the late 1990s to 2000s), and people without a graduate degree (Microsoft, 2021). **GitLab** believes that an all-remote approach has increased the diversity of its applicants, observing, *'we hire a higher proportion of people from less represented groups because we can provide flexibility'*.



1.7 Employers have embraced the benefits of hybrid and remote work

1.7.2 Remote-ready employers are more resilient

The processes and practices that organisations are developing and experimenting with will make them more resilient to future shocks and stresses. For employers:

- accessing wider labour pools reduces the risk of skills gaps
- accommodating staff needs reduces turnover
- enabling remote work allows business continuity when access to physical workplaces is disrupted.

Establishing flexible working policies and practices and supporting staff to work remotely and flexibly has made businesses more resilient to COVID-19 by necessity. **Rio Tinto** introduced a formal flexible work policy during the pandemic, which was used to ensure continuity of operations in Rio Tinto's metro bases. Having a formal policy was advantageous during Perth's snap lockdown in February 2021 when Rio Tinto shut down its office areas for two weeks.

During COVID-19, some smaller, lean organisations have been able to pivot and be highly competitive, especially family businesses (KPMG Private Enterprise 2021). For small businesses, the flexibility of remote working can open new markets and enable access to new customers (see **Box 3**). The **NSW Indigenous Chamber of Commerce** noted that its member companies—many of them small businesses—have gained exposure to new contracts during COVID-19. Location previously restricted their access to contracts, but they can now deliver online, anywhere.



Box 3

Sustainable East—A resilient remote-ready small business

Sustainable East does not have a formal policy on remote working, both because the company is small and because it started out mostly remote. *'Remote work is made easier by the type of work we do—we were already remote'*, it explains.

Sustainable East is officially based in Bondi Junction, where it sub-lets an office with three desks. Staff were not face-to-face often before COVID-19 but would come together for meetings every fortnight or for fieldwork as needed. Most staff are now spread across NSW and work at co-working spaces, from home, or from government offices.

With four subcontractors on staff and casual staff hired on a project basis, Sustainable East has limited overheads, allowing it to have leaner operations and charge more competitive rates. This enables the company to provide its clients with better value for money.

Sustainable East reported that *'remote working benefits smaller companies'* as it can allow wider and faster growth and greater access to markets, including overseas opportunities.



02.

The hybrid opportunity
can boost productivity

As the NSW Productivity Commission (2020) has recently noted, increases in productivity are ultimately what raise living standards. This report presents important new productivity findings from the *2021 Remote Working Survey*.

Analysis of our 2020 survey results shows that workers allowed to do as much (or little) remote work as they prefer report the highest productivity gains. This suggests remote working is most productive in a hybrid model, where workers can choose how much they do.

The *2021 Remote Working Survey* confirms this finding. The survey was collected in early 2021, when many employers had embraced hybrid models, giving workers unprecedented freedom to choose how much (or little) remote working they did. In these circumstances, NSW remoteable workers reported that remote work was 17 per cent more productive than working at the employer's workplace. Managers broadly confirmed this, estimating their staff were 15 per cent more productive when working remotely. We use the average of these two figures, 16 per cent, as our best estimate of the productivity boost from working remotely.

Conversely, in our previous survey remoteable workers reported a slightly more modest productivity boost of 13 per cent. This lower figure is likely because the survey was collected during the 2020 lockdown, when many were doing more remote working than they preferred.

Based on our latest 2021 survey results, we project that after the pandemic, if remoteable workers can work remotely as much as they want, labour productivity could increase by 1.9 per cent in NSW, equivalent to an increase of \$6 billion a year in 2021 dollars (see **Figure 9**). This result is similar to a United Kingdom (UK) study that estimated more remote working could boost labour productivity by 2 per cent (Bloom et al., 2020).

FIGURE 9: REMOTE WORK COULD PERMANENTLY BOOST NSW PRODUCTIVITY

Modelling of remote working's impacts beyond the pandemic



Source: NSW PC modelling, see Appendix E

The hybrid opportunity can boost productivity

The experience of early-2021, when the pandemic briefly abated, suggests that remote and hybrid working will likely be a major part of the post-pandemic economy. Indeed, if remote work remains at the levels we saw in early 2021, up to 32 per cent of NSW Gross State Product (GSP) will be produced remotely after the pandemic, up from around 20 per cent in 2019. Remote work would contribute \$165 billion a year in economic output to the NSW economy (in 2021 dollars).

More immediately, though, remote working has made our economy more resilient during the pandemic. Our modelling suggests that when the need arises—such as during a lockdown—around 44 per cent of all work in NSW can be done remotely. At the peak of the 2020 lockdown, our levels of remote working came very close to this figure, with 43 per cent of work done remotely. The ability for many businesses and workers to keep operating remotely has provided a vital economic cushion during COVID-19 health restrictions.

We estimate that during a NSW-wide lockdown, our capacity to work remotely preserves 832,000 jobs and \$3 billion a week in GSP (see **Figure 10**).

Our latest findings shed light on other ways remote and hybrid working contribute to the State's productivity.

As the next sections discuss, remote working is fast-tracking innovation and unearthing business efficiencies. It also has the potential to reduce road congestion and public transport crowding, helping us get more from our existing infrastructure.

FIGURE 10: REMOTE WORK PROTECTS NSW JOBS AND OUTPUT DURING LOCKDOWNS



* These are non-essential NSW workers (both full- and part-time) who would be laid off or stood down if they could not work remotely.

** This represents output from non-essential workers who would be stood down or laid off if they could not work remotely.

Source: ABS Census Table Builder, ABS National state and territory population, ABS State Accounts, FaethmAI 'Remoteability Index', NSW PC modelling. For further explanation see Appendix D.

2.1 Innovation has been fast-tracked

For many organisations and companies, the shift to remote working prompted a rethink of customer and client relationships, service delivery, and supply chains.

While challenging, this has spurred new innovations and sped up processes that were already in train.

CommBank explained that COVID-19 working arrangements have sped up the company's move onto new, more contemporary and secure technology platforms. Before COVID-19, CommBank's platform could only accommodate a limited number of staff working remotely; now all staff can log on remotely in a safer and more secure way.

The COVID-19 disruption has also uncovered new possibilities for remote and digital service delivery. **Legal Aid NSW** shifted their in-person drop-in services to telephone services for phone advice, and 'web chat' options were enabled. This has streamlined services and scheduled appointments now replace drop-ins.

At the onset of COVID-19 restrictions, **Hunter New England Local Health District** focused on moving to greater use of virtual care—which includes telehealth, video conferencing, remote monitoring, and 'store and forward' telemedicine (NSW Government, 2020b)—explaining that *'any service that could be delivered by virtual care has been'*.

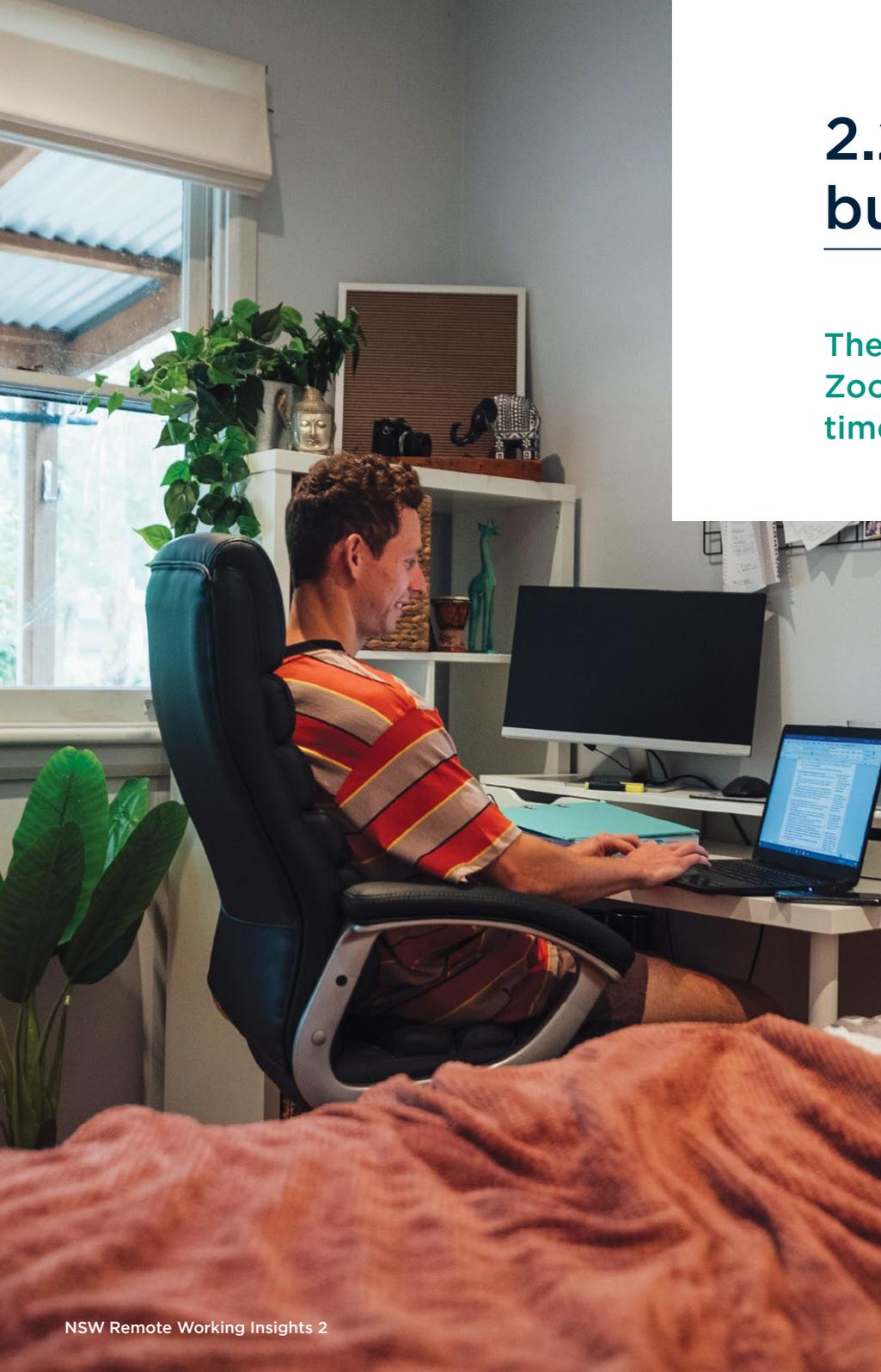
Dr Zoran Bolevich, Chief Executive of eHealth NSW and Chief Information Officer at NSW Health has commented that across the NSW health system, *'initiatives that might have taken months or years to achieve—such as the dramatic uptake of telehealth consultations—scaled up in a matter of days and weeks'* (NSW Government, 2020a).

COVID-19 resulted in the State's new Telestroke service being used to 'even greater effect' (eHealth NSW, 2020). The service allows clinicians to virtually assess and treat stroke patients, connecting rural and regional health facilities with city-based specialists (NSW Government, 2020a). It was developed with the support of eHealth NSW and clinicians from Hunter New England, Mid North Coast, and Central Coast Local Health Districts. COVID-19 struck just before the service launched from its headquarters at Prince of Wales Hospital in Sydney's east. As Professor Ken Butcher, Medical Director of the service commented, *'COVID-19 got us thinking that this type of technology would be invaluable should NSW Health's medical workforce be severely affected by coronavirus. If, for example, stroke specialists had to self-isolate but were well enough to work, they could still deliver care to patients of stroke'*.

In **Section 3.2.1**, we discuss how organisations have invested in the necessary hardware and platforms to facilitate the transition to remote and hybrid working.

2.2 Digital platforms are making businesses more efficient

The widespread use of digital meeting platforms such as Zoom and Microsoft Teams has unearthed monetary and time efficiencies for some employers.



Remote working has had a positive impact on the bottom line for many organisations, particularly when it comes to travel expenditure. Amazon notably publicised that it had saved US\$1 billion in travel costs in 2020 as a result of the COVID-19 pandemic (Palmer, 2020). Google similarly reported a US\$371 million drop in travel and entertainment expenses between 2019 and 2020 (Bergen, 2021).

While corporate travel will resume once the pandemic ends, it may not return to pre-pandemic levels. A 2021 Deloitte survey of 150 executives with travel budget oversight found that 68 per cent plan to limit travel frequency as corporate travel resumes to control costs (Caputo et al., 2021).

Organisations also spoke about the time savings generated by remote working. According to **Sustainable East**, remote working means employees spend less time travelling to meetings. For the **University of New England**, efficiencies have been created around some practices and processes, particularly meetings and recruitment: *'The efficiencies have been dramatic—particular processes will be retained and become the norm'*. For example, by using Zoom for recruitment interviews, the University avoids the logistics of face-to-face meetings, such as booking rooms and greeting people when they arrive.

2.3 Workers and managers affirm remote productivity

Our 2021 Remote Working Survey asked workers to rate their productivity when working remotely, compared to working at their employer's workplace.

We also asked managers to assess the productivity of their staff. Managers are well placed to assess their staff's productivity and are another valuable source of information.

Overall, remoteable workers and their managers agree remote work is highly productive. 64 per cent of workers rate themselves as more productive when working remotely and 63 per cent of people managers rate their staff as more productive when remote (see **Figure 11**).



I prefer working from home and I'm actually more productive.

Female, 43, Western Sydney, Office Manager

18 per cent of managers say their staff are less productive when remote, whereas only 14 per cent of workers report that remote work is less productive.

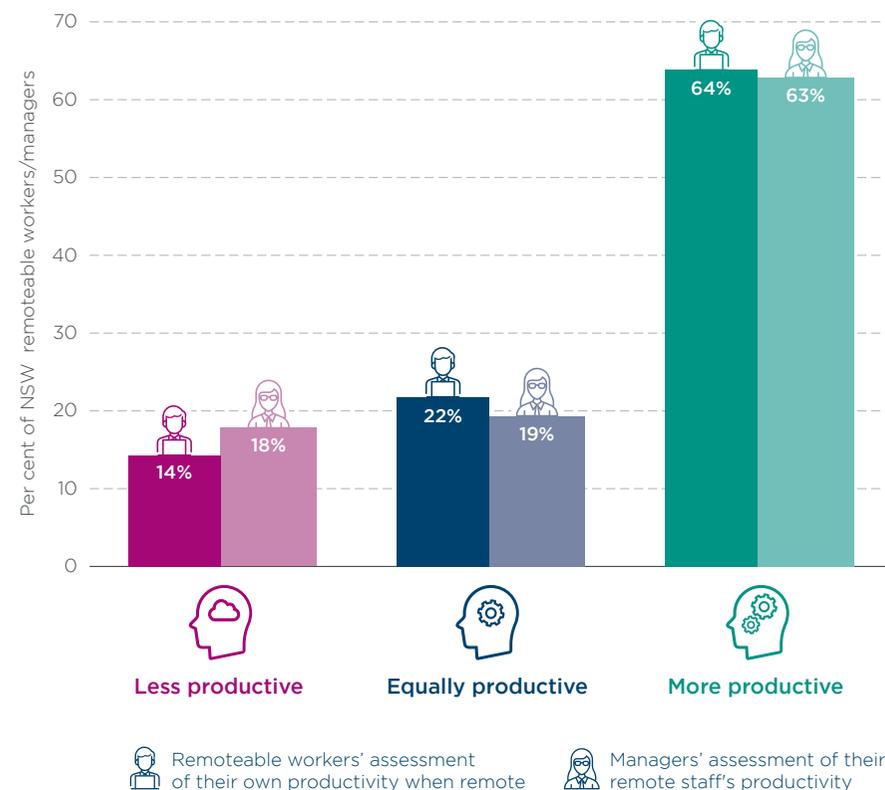
Workers reported they produced, on average, 17 per cent more each hour compared to working on-site, whereas managers assessed that remote staff were 15 per cent more productive. Managers are 'harder markers' on workers' productivity than workers, but only slightly. We use the average of these two figures, 16 per cent, as our best estimate of the productivity boost from working remotely.

In our *2020 Remote Working Survey*, we found that workers in producing and population-serving industries report the greatest productivity gains from remote work, despite having a lower potential to work remotely than those in knowledge-intensive industries (Innovation and Productivity Council, 2020). Our new analysis of managers' views is consistent with this finding.

A number of empirical studies also confirm that remote working can be more productive than on-site work (Bloom et al., 2015; Choudhury et al., 2021).

FIGURE 11: WORKERS AND MANAGERS AGREE REMOTE WORK IS MORE PRODUCTIVE

NSW remoteable workers, self-assessed and manager-assessed productivity ratings when working remotely compared to at their employer's workplace, early 2021



Source: IPC Remote Working Survey 2021

2.3 Workers and managers affirm remote productivity

Our 2021 results show managers believe their staff and teams work well remotely, that they are well prepared for managing remote workers and find it easy (see **Figure 12**). Managers appear to have adapted to the remote way of working. They report focusing more on results and outcomes. These are better indicators of productivity than old input measures like the number of workers in the office, or the hours they spend at their desks.

Managing poor performers is one of the most difficult aspects of management. The inability to monitor staff in person could make remote performance management even more difficult. New management strategies and further training could be required in this area. Still, managers do not report significant difficulties managing poor performers remotely.

FIGURE 12: MANAGERS SEE THE BENEFITS OF REMOTE WORK

My team works well together when they work remotely



I find it easy to manage employees remotely (e.g. tasking and monitoring progress)



I find it easy to manage poor performers remotely



I feel well-prepared to manage employees remotely



Managing people remotely makes me more focused on results



I find it easy to contact my employees when they work remotely



Source: IPC Remote Working Survey 2021

2.4 We can get more from our housing and infrastructure

Remote and hybrid working may also allow us to get more out of our infrastructure and housing, making NSW a more attractive place to live and work.



Remote and hybrid working present an opportunity to reduce road congestion and public transport crowding through resetting, reducing, retiming, and remodeling travel (Transport for NSW, 2020a).

A DITRDC, UniSA, and iMOVE Cooperative Research Centre research project found that remote work could **reduce** weekday commute car travel by between 10 and 17 per cent, and public transport travel by between 16 and 30 per cent (Vij et al., 2021).

Experience confirms this insight. In late May 2020, three months after COVID-19 restrictions were introduced, the costs associated with travel time in the Greater Sydney Metropolitan Area reduced by 54 per cent (Hensher et al., 2021). The economic value of this benefit is around \$5.6 billion a year. Much of it is likely due to reductions in congestion.

Retiming travel using part-day remote working also helps ease peak demand on roads and the public transport network. Remote working has the potential to move 5 per cent of car and public transport commute trips outside of peak times (Vij et al., 2021).

According to our *2021 Remote Working Survey*, 61 per cent of NSW remoteable workers sometimes work part of the day remotely and part on-site. There is demand for more part-day work, with 44 per cent of part-day workers expressing a preference to work in this way more than half the time, compared to 35 per cent who already do.

According to Sydney Coordinated Adaptive Traffic System data, private vehicle use rapidly rebounded following the initial lockdown period and tracked at similar levels to 2019 between December 2020 and April 2021 (Transport for NSW, 2021b). Car journeys over this period, however, were typically shorter and more localised. Public transport usage, on the other hand, was at around 60 per cent of 2019 levels in April 2021 (Transport for NSW, 2021a). This presents a clear opportunity to encourage commuters to **remode** from car travel to public and active transport.

Remote and hybrid working also have the potential to ease housing and transport costs (see **Box 4**) and may change how we think about and invest in places and localities (see **Box 5**).



Box 4

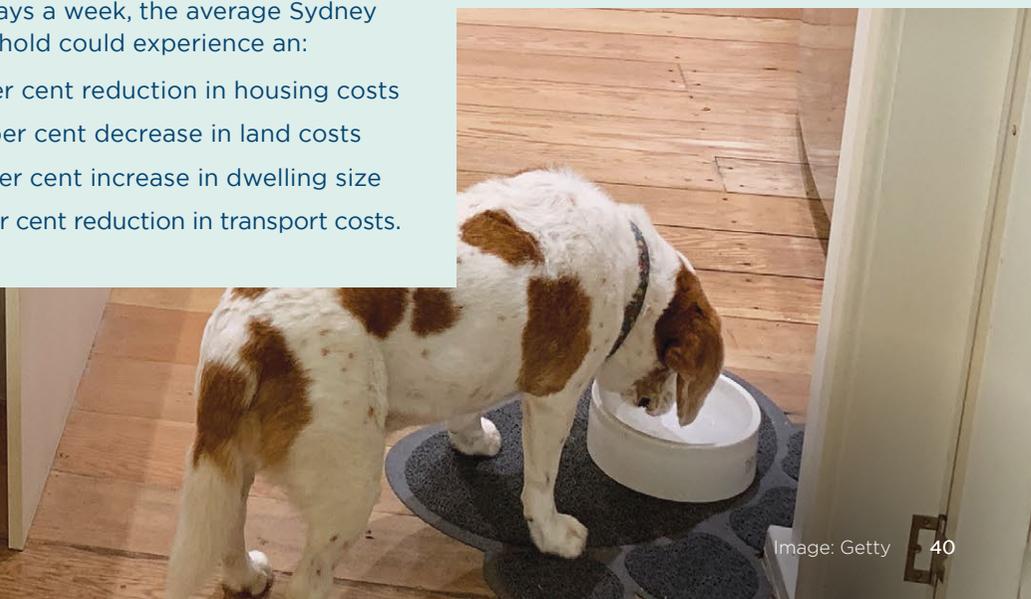
Remote working could ease housing and transport costs

Modelling for the *2021-22 NSW Intergenerational Report* (Ge et al., 2021) suggests that if workers continue working remotely after the pandemic, they will save on travel costs—measured as both time and monetary costs—because they would not need to commute to work as often, making living further away from the CBD in larger dwellings more desirable. As some households move out of the urban centre into outer suburbs and regions, those who remain will experience reduced housing costs.

Compared to a scenario where nobody works at home, if half the Sydney workforce shifts to working remotely two days a week, the average Sydney household could experience an:

- 11 per cent reduction in housing costs
- 29 per cent decrease in land costs
- 10 per cent increase in dwelling size
- 5 per cent reduction in transport costs.

Note that these results are based on a heavily simplified static model which does not account for Sydney's complex urban structure or other factors impacting house prices, land costs, or transport costs. For example, recently housing prices have grown significantly in Australia due to record low interest rates, as well as housing stimulus measures such as the Commonwealth's HomeBuilder grant. The modelling results do not account for these changes. The results should therefore be considered illustrative and directional only in terms of the impact of increased remote working on household costs.



2.5 Getting more bang for the office-space buck

Boston Consulting Group's report on employer considerations during COVID-19 observed that companies are reconsidering how much office space they need (Mattey et al., 2020). Nearly half of the Australian companies surveyed anticipate reducing real estate space in the long term.

Property Council of Australia members said larger companies that were able to maintain trading during 2020 have been the most likely to experiment with new space. Some larger companies have reduced their footprint, while others have moved from a large, centralised office space to smaller dispersed offices. Small and medium companies, on the other hand, have been more likely to retain their existing office space, or lease space within someone else's fit-out.

In reducing floor space, companies appear to be less interested in lowering costs, and more focused on increasing the quality of their premises to entice staff back into the office. According to Euan Matheson, a director at commercial and residential real estate group Knight Frank, *'many occupiers are now recognising that working from home patterns are here to stay, meaning they can commit to less floorspace than before.'*



It would be foolhardy to proclaim the death of the city. It is even possible that increased working from home could increase the concentration of office jobs in CBDs.

Chair of the Commonwealth Productivity Commission Michael Brennan (Wright, 2021)

This presents an opportunity to upgrade the calibre of their premises whilst remaining within their existing occupational budget.' ("North Sydney Office Rentals Boosted by COVID, as Area Competes for Status as Regional Tech Hub," 2021). Stuart McSorley, a director at commercial real estate services company CBRE also holds this view, saying *'a flight to quality was a trend across the market, and quality fitted space is the most sought-after by tenants looking to entice staff back into the office'* (Kelly, 2021).

Even if certain companies do reduce their office space requirements, this does not mean CBD office spaces will be vacant.

Office spaces that were previously occupied by larger companies can be repurposed in other ways. Small and medium companies are likely to take advantage of the opportunity to establish offices in the CBD for the first time (PwC Australia, 2021a).

As a result, the number of CBD-based companies and jobs could grow overall. PwC Australia's Future of Work team believes some companies may use freed-up space to incubate start-ups and not-for-profits linked to their organisation's purpose (PwC Australia, 2021a). Unused office spaces may also be turned into residential apartments, like those in New York, Hong Kong, and London (Smith, 2021). Through their 'future workplace experience' program, **Telstra's** management is starting to think about what to do with underutilised central office spaces and how to best consolidate the company's property holdings.



Box 5

Rethinking agglomeration in light of remote working

‘Agglomeration’ is the tendency for businesses and labour to cluster together in cities. Economists have long known agglomeration is associated with higher incomes and productivity (Duranton & Puga, 2004; Puga, 2010; Rosenthal & Strange, 2004). Many attribute this to ‘agglomeration economies’—benefits that come from clustering together, like better **matching** businesses with the right labour, **sharing** public infrastructure, and **learning** from each other.

But there is an ongoing debate about what agglomeration means for policymakers. Some aim to engineer agglomeration economies through ‘place-making’ investment in infrastructure and land use regulation (see, for example, Neumark & Simpson, 2015). Others question whether these policies work, suggesting that governments focus on removing barriers to agglomeration rather than trying to engineer it (Glaeser & Gottlieb, 2008; Graham et al., 2010)

The COVID-19 pandemic has created a unique ‘natural experiment’ that raises questions about how agglomeration works. High-earning workers who previously clustered in CBD offices have dispersed to their homes in the suburbs and regions to work remotely. Surprisingly, many report being as or more productive, despite being more dispersed (NSW Innovation and Productivity Council, 2020).

With the sudden rise of remote working, policymakers need to look more closely at ‘virtual agglomeration’—the economic, social, and professional networks, aided by technology, that link highly productive firms and workers together (Braesemann et al., 2020; Salvador et al., 2013). The widespread preference for hybrid working, which blends in-person and virtual interaction, suggests there are complex links between physical and virtual agglomeration (Bergeaud & Cette, 2021; Grzegorzczuk et al., 2021; Monteiro et al., 2019).

We still have much to learn.

3.1 Taking the bespoke approach

A ‘one-size-fits-all’ approach to remote work is unlikely to suit either employees or employers. Some workers will be able and keen to work from home.

But abilities, preferences, and needs will vary by industry, company, role, location, and individual personality. So will the approaches required to manage them.

This chapter draws lessons from the management approaches disclosed in our discussions with businesses and organisations.

3.1.1 Tailoring work arrangements to roles and functions

Our 2020 report noted that the potential to work remotely differs between industries. Workers in knowledge-intensive industries—such as financial, professional, and technical services—can work remotely most often, followed by those in population-serving industries—such as education and health care—and finally in producing industries—such as agriculture and mining (NSW Innovation and Productivity Council, 2020). One survey respondent said their employer’s policy on remote work was based on *‘each employee’s different work intensity and type of work’*.

A November 2020 McKinsey & Company global study analyses remote work potential in a different way, splitting them by jobs, tasks, and activities (Lund et al., 2020). Tasks and activities with minimal productivity loss when done remotely include updating knowledge and learning, interacting with computers, thinking creatively, and processing, analysing and interpreting information.

At the same time, the McKinsey study finds, more than half the global workforce has little or no opportunity for remote work. The people in this group include those with jobs which demand collaboration, jobs where specialised machinery is required, and jobs that must be done on location or physically performed outside.

Many organisations manage a group of people that covers a mix: some can perform their roles and responsibilities remotely, while others need to be on-site (see **Box 6**). This split is particularly common in population-serving and producing sectors such as health, manufacturing, and mining.

Rio Tinto is an example of an organisation with such a workforce split. Staff in areas such as Rio Tinto’s operations centre and safety jobs must be physically present to carry out their role. Others, such as Rio Tinto’s Perth-based central office staff, can work remotely. During COVID-19, Rio Tinto reduced the number of on-site roles for periods of time based on assessments of the different employee roles.

As critical frontline workers, clinicians at the **Hunter New England Local Health District** have continued to work on-site and face-to-face despite COVID-19 health restrictions. Acute medical services carried on business-as-usual, though with new anti-infection protocols and procedures. Backroom clinical and managerial staff, on the other hand, have been able to work remotely if their role does not require face-to-face interactions.

The **University of New England** is assessing who needs to be based on-site, asking *‘who actually has to be here?’*. For example, the university’s IT team used to work from an office in Parramatta but now work remotely from around Australia. Going forward, the university expects academic staff will work more on campus than professional support staff. This will maintain the on-campus student experience and let academic staff access specific equipment they need to perform their roles effectively.



Box 6

Chamberlain Group—Actively managing remote role expectations

Chamberlain Group staff's ability to work remotely is governed by their role. Factory based staff—such as machinists and assembly workers—cannot work remotely and must work from the factory, while office-based staff can work from home. As Chamberlain Group explained: *'The factory staff are very hands-on and had to continue to turn up to work during COVID'*.

Office-based staff fall into two clusters. The first cluster works from the North Ryde head office, mostly in sales, marketing, information technology, human resources, and customer service. The second works from an office at the West Gosford factory, supporting factory operations.

The **North Ryde head office** shut for several months in 2020 in response to the pandemic. Its cluster of office-based staff adapted quickly to working from home. Chamberlain Group provided required equipment such as laptops, printers, and headsets. The sales team functioned well, with the company reporting *'strong sales ... and customers still reaching the team'*.

These staff worked from home full-time for six months and continued to work from home when COVID-19 restrictions eased.

At the **West Gosford office**, between March and May 2020 Chamberlain Group split office-based staff into two teams and set up a roster system of two days in the office and three days at home. Factory-based staff found the arrangement difficult and asked for more face-to-face support. Managing expectations and perceptions of fairness between office-based staff supporting the factory and factory-based staff also created some challenges. *'We heard frustrations from the floor—"Why do they get to work from home?"'*

Based on this feedback, Chamberlain Group asked critical office-based staff supporting the factory—including quality assurance and purchasing officers—to come into the office four days a week from May 2020.

3.1 Taking the bespoke approach

3.1.2 Meeting employee preferences

Recent research (Atlassian & Paper Giant, 2020) suggests an employee's ability to adopt remote working is influenced by factors including:

- household complexity
- role complexity
- the level of social interaction they need
- the quality of their personal and organisational networks.

Our 2021 Remote Working Survey shows that NSW workers who can work remotely have the full range of work-location preferences, ranging from five days at home, through various hybrid options, to five days on-site (see **Figure 13**). This is broadly in line with the results from our last survey. Similarly in the UK, a survey of working adults has found that 40 per cent of workers want to work from home two or three days a week after the pandemic (Taneja et al., 2021). A survey of workers in the US found that, on average, workers would like to work remotely 2.4 days a week, while employers are preparing for only 1.2 days of remote work a week for their employees (Barrero et al., 2021b).

According to one survey respondent, employees also want *'more flexibility on being able to choose the hours/times of remote working'*.

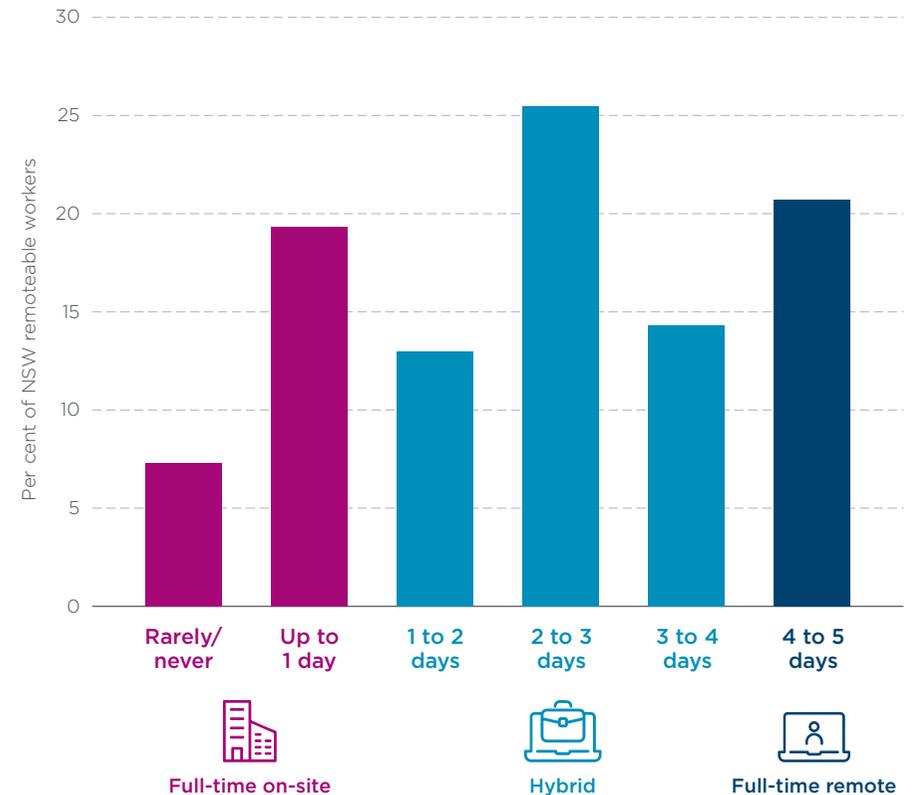
Different organisations are catering to this range of employee preferences in many ways. **GitLab's** 'all-remote approach' does not try to replicate a 9-to-5 work day, but seeks to offer 'work-life integration'. Employees get choices on how they structure their work days, allowing them to incorporate needs such as caring for children at home.

The **NSW Indigenous Chamber of Commerce** notes that around 70 per cent of their members wanted to return fully to face-to-face work: *'As Aboriginal People, our members generally prefer meeting with customers and suppliers face-to-face. Member feedback indicates that many people don't feel comfortable on camera where they can't see [each] other. This is a barrier because their contribution is impacted. Some however felt the remote working environment gave them great flexibility and more time for family commitments.'*

One survey respondent said their employer did not have a set policy on remote work as *'it's more of a flexible arrangement whereby if we need to work from home for any reason... then we can work from home'*.

FIGURE 13: POLICIES SHOULD ACCOMMODATE A RANGE OF WORKER PREFERENCES

NSW remoteable workers, preferred number of remote working days a week, early 2021



Source: IPC Remote Working Survey 2021

3.1 Taking the bespoke approach

3.1.3 Meeting team, organisation, and customer needs

For remote and hybrid working to be effective and sustainable, employers need to be sure that individual arrangements also meet team, organisation, and customer needs (see **Box 7**).

At **CommBank**, decisions about where to work are driven by getting the best outcome for customers: *'our approach is based on... an agreed balance between individual, team and better customer outcomes'*.

Legal Aid NSW takes a heavily team-based approach to flexible work:

- Teams, led by their manager, agree on how they will work and meet.
- At minimum, managers meet with each team member once a fortnight and every second meeting needs to be face-to-face.
- Teams hold a face-to-face meeting at least once a month.

These arrangements help to maintain connections between team members and gives managers the ability to check in on each member's wellbeing.

Box 7

KPMG's hub model—ensuring employee decisions meet team and organisational needs

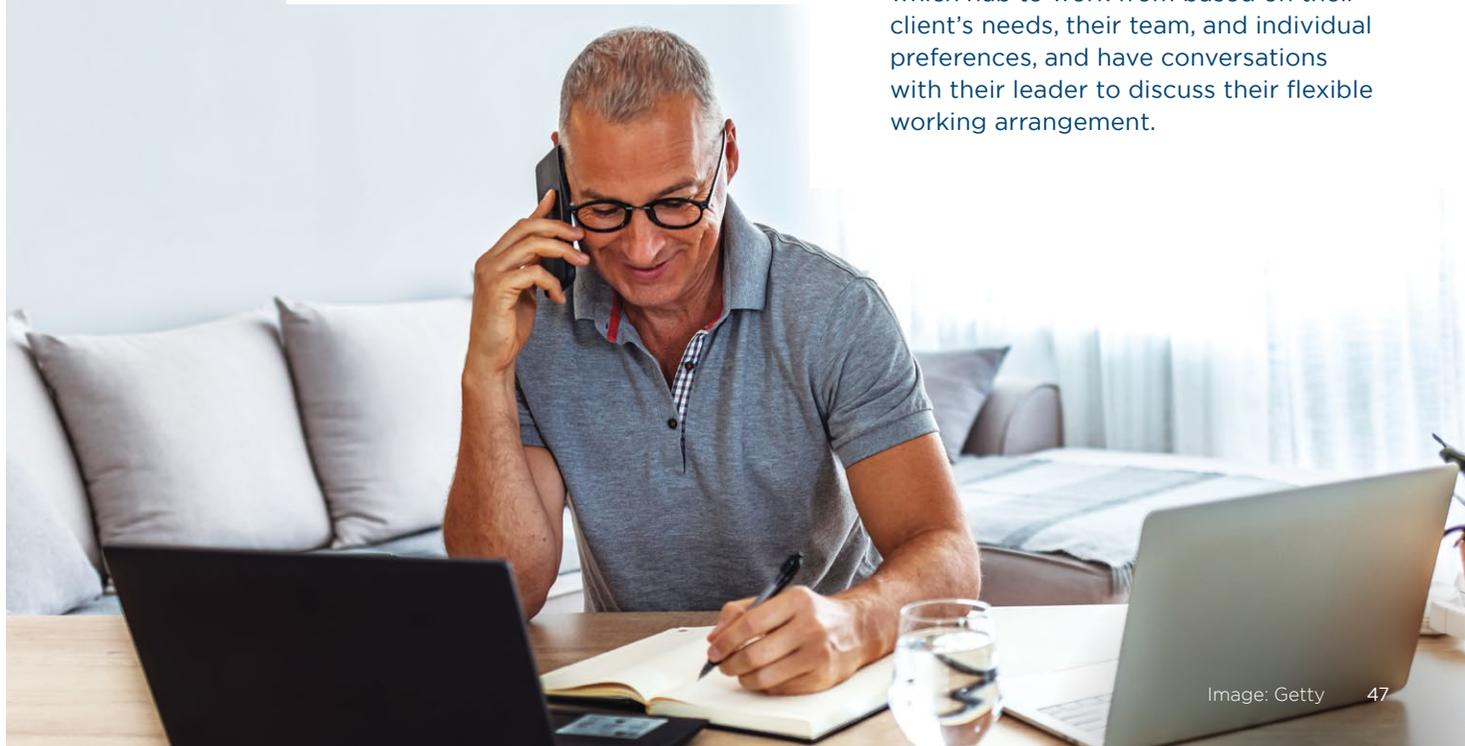


KPMG recognises that there is no 'one-size-fits-all' approach to working and that each individual's work preferences, and work needs, can change over time and are influenced by life outside work.

The way KPMG works has evolved significantly over the COVID-19 lockdown. As COVID-19 restrictions are lifted, it wants to make the most of its newfound agility. Therefore, KPMG has introduced three different settings for different work activity, the three working 'hubs':

- the **Home Hub** allows individuals more focus time, less travel, increased work-life balance, and the ability to spend time with family
- the **Office Hub** provides a space for individuals to collaborate, connect, and share
- the **Client Hub** allows individuals to work alongside their clients and access the people and materials they may need.

KPMG encourages staff to choose which hub to work from based on their client's needs, their team, and individual preferences, and have conversations with their leader to discuss their flexible working arrangement.



3.1 Taking the bespoke approach

3.1.4 Iterating, experimenting, and seeking feedback

Employers deployed remote and hybrid working arrangements rapidly during COVID-19, leaving many of them uncertain about whether they had landed on the right arrangements. Organisations are now taking an experimental and iterative approach as they seek the remote and hybrid working arrangements that most fit their needs. They are asking staff what is working and what could be improved, often using surveys to help identify what staff want and need (see **Box 8**).

- **Atlassian** conducts a fortnightly ‘vital signs’ survey. It is now exploring which leading indicators will better identify and respond to staff needs. As Atlassian explained, *‘Atlassian have a tonne of data, but we don’t want lagging data. If you use a lagging indicator it’s too late’*.

- **Telstra** says it sees curiosity and humility as key values. It aims to listen to staff and recognise that nobody has all the answers. *‘You have to be willing to say, “we got that wrong”’*.
- To manage risk, factory-based staff at **Chamberlain Group** worked longer shifts across three days instead of five at the start of the COVID-19 pandemic. Based on positive feedback, it now allows staff to work 10-hour days, four days a week.

Some organisations are also including workers in operational policy development. **Legal Aid NSW’s** flexible work policy was developed in conjunction with robust employee and union engagement. The first draft of the policy developed by the human resources team was circulated to staff, with facilities for email and phone feedback. Legal Aid NSW highlighted the importance of listening and responding, rather than *‘giving lip service’* to their experiences.



Box 8

CommBank—listening and responding to staff

One of the key elements supporting CommBank’s move to remote and hybrid working was listening to staff and responding to their ideas and concerns.

In response to COVID-19, CommBank increased the frequency of its biannual ‘Your Voice’ survey in 2020 to provide pulse checks on work, health, and wellbeing: *‘At the start we did it monthly, then moved it to every six weeks and have pushed it out now’*.

CommBank says it focused on wellbeing during 2020, especially in locations with extended lockdowns. *‘We did a great job in listening to people and doing regular pulse checks and responding to feedback and doing things differently. We did a really good job on moving forward quickly’*.

CommBank considered the survey feedback in developing its ‘Hybrid Working’ policy, released in February 2021. Guides and frequently asked questions support this policy to help teams choose whether to work from branch, office, or home. CommBank and its staff negotiate an agreed balance between the individual, the team, and better customer outcomes.

Many contact centre staff moved to fully remote working during the initial lockdown. Of teams that previously worked from an office, 65 per cent shifted to fully remote work—a move informed by ‘pulse check’ survey results.

3.1 Taking the bespoke approach

3.1.5 Capitalising on opportunities in the regions

Remote and hybrid working can have significant benefits for regional places and communities. Deloitte Access Economics (2021) estimates that local spending in the Illawarra region could increase by \$4.1 million per annum if around 11,900 commuters could work remotely for an additional 1.3 days a week on average.

Remote and hybrid working can help regional companies and organisations access metropolitan talent pools. A metropolitan worker can work remotely for a regional business while living in their city. Or they can work in hybrid mode while regularly visiting their city family or social network. For example, the **University of New England** found during recent rounds of recruitment that the possibility of flexible working arrangements has *'opened up the mindset'* of applicants to move to Armidale.

The backbone of remote and hybrid work is connectivity. Our *2021 Remote Working Survey* found internet connectivity was a bigger barrier to remote working for regional workers than for those in metropolitan centres.

Hunter New England Local Health District identifies stable internet and sufficient bandwidth as crucial to the success of its service. Telehealth depends on the ability of doctors and patients to access video content.

The **University of New England** too identifies poor connection quality in regional areas as a major challenge for distance education delivery. This can impact the delivery of a quality product and thus student experience. The university has given staff wireless internet dongles as a safeguard. But the quality of a student's internet connection is outside its control, and some must turn off their video due to a lack of bandwidth.

Employers can also support and accommodate regional employee circumstances in other ways. One option is to use a co-working space—like **WorkLife** (see **Box 9**)—as a 'third space' between the home and a central office. A co-working space is a physical location where workers from different organisations come together to work. These spaces are normally membership-based and offer shared office facilities including internet, printing, and furniture.

Co-working spaces are a solution that can be used for:

- regional-based remote workers working for metropolitan companies
- metropolitan businesses that wish to provide workers with regional remote work hubs
- regional small businesses that need access to office facilities.

Property Council of Australia members have also reported greater interest in 'third space' options among clients whose office space leases have come to an end during COVID-19.



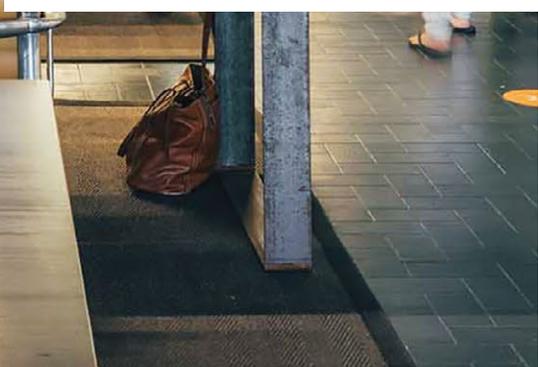
Box 9

WorkLife—enabling people to work from NSW’s South Coast

WorkLife is a network of co-working spaces on NSW’s South Coast, with sites in Berry, Kiama, and Coledale. WorkLife’s founder believes the space setup *‘suits anyone whose job is principally on a phone or at a computer’*. WorkLife’s member base largely comprises of individuals who own their own small business in the professional services sector, but recently employees of larger corporations that live on the South Coast have taken memberships. WorkLife’s founder argues that co working spaces are an important intervention in what she terms a ‘false choice’—*‘work from home or get back on the commute’*.

Members agree that the benefits of having access to a ‘third space’ include not having to commute, having a workspace that is not home, having secure internet, technology and equipment available, and the social benefits of being part of an office community. For sole operators or very small businesses, working out of WorkLife *‘shows that this is a serious business and not just a side hustle’* and gives their work legitimacy for family members and clients.

WorkLife’s founder explains that *‘WorkLife is here to support people to live their best lives in thriving regional communities. Earn a Sydney salary and live in the regions, spend money locally, spend time with your families. It demonstrates you don’t need to live in the CBD to have a successful career/business’*. WorkLife spaces have also allowed local businesses to grow and expand, taking up their own office spaces in regional towns. For example, two international technology companies have ‘outgrown’ the WorkLife offices and are now based in Berry.



3.2 Creating fit-for-purpose workplaces and work practices

Remote and hybrid working arrangements have fundamentally challenged the function of the central office.

Among those industries and organisations that are able to work effectively remotely, there is a broad consensus between employers and employees. Both believe that gathering staff together in a central office, at least some of the time, is important for team morale, socialisation, and collaboration (Deloitte, 2020; Matthey et al., 2020).

3.2.1 Investing in the right hardware and platforms

The past 12 months have shown that organisations can adapt tools and processes to support remote and hybrid working. An ARC Centre of Excellence in Population Ageing (CEPAR) report analysing Australian employers' experiences of COVID-19 identified responding with speed and agility as an important factor for supporting employees, including providing the technology and skills to work remotely (Baird et al., 2021).

A survey of 1,000 employees across small- and mid-sized businesses found that they wanted two key supports for remote working: the right environment, and the right technology (Bastion Insights et al., 2021). Almost half of employees (48 per cent) reported lacking an ergonomic home office setup that is comfortable and safe to use for extended periods. Internet connectivity and reliability also remain issues: 27 per cent of respondents said they lacked fast and reliable internet access that allows them to stay connected.

Reliable internet connectivity was also noted as a risk by the **Small Business Association of Australia** and the **NSW Indigenous Chamber of Commerce**, which both have many members in regional and remote areas. One survey respondent highlighted the need for *'greater certainty or clarity on expenses—what equipment for remote working can be charged back'*.

Some organisations had established remote work policies and processes before the pandemic arrived. **GitLab's** 'all-remote' policy means that staff can work from anywhere. It supports this policy with measures including 'rough spend' guidelines workers are trusted to follow to buy the materials they need to work remotely. **Atlassian** takes a similar approach. When the company hires an employee, it delivers a laptop to their home. It budgets approximately \$750 a year for each employee's home office setup. Exception processes are in place for those with additional support requirements, including employees with disabilities. Employees can also ask to be sent specialised equipment where needed, such as a microphone, light, and camera for presentations.

Other organisations had to adapt processes at short notice. When COVID-19 restrictions arrived, **Legal Aid NSW** responded quickly to get all staff working remotely and supported with IT equipment. The organisation repurposed office equipment from its central offices (stools, keyboards, monitors, mouse, dock) to enable staff to work from home comfortably. The **University of New England** invested in 1,000 laptops for permanent staff to encourage and support staff to work remotely when COVID-19 restrictions were introduced.

Employers have found many ways to enable virtual and remote collaboration. For **Sustainable East**, shifting to a fully remote model meant it needed to formalise and integrate its online systems. Sustainable East explains: *'We went from a group of separated people to being integrated together on a server'*. Several cloud-based digital tools—including Dropbox, React, Google Console, and Zoom—help it work remotely.

Organisations from the population-serving sector have maintained service delivery during the COVID-19 pandemic using remote service delivery tools and processes (see **Box 10**).



Box 10

Hunter New England Local Health District—using online tools and processes for healthcare



Hunter New England Local Health District was well prepared for the pandemic-induced increase in telehealth, with a decade of experience using Scopia telehealth platform. This platform has recently been succeeded by NSW Health's statewide enterprise solution 'myVirtualCare'.

Telehealth has significant benefits, particularly for Local Health Districts like Hunter New England, with large service areas and coverage of regional and remote communities. Hunter New England's representative commented that *'once patients have a good experience of telehealth, they drive this change'*.

A study of 346 general practices across NSW, found that telehealth comprised almost 30 per cent of weekly general practitioner consultations between January and September 2020, up from 2.7 per cent in 2019. Patients used a median of 42,850 phone consultations and 805 video consultations a week, up from none and four a week respectively in 2019 (Hardie et al., 2021).

To maintain high-quality patient care, Hunter New England Local Health District, with support from eHealth NSW, held virtual 'grand rounds' using the Skype for Business Broadcast function (NSW Government, 2020a). *'These grand rounds are an opportunity for clinicians to hear from their peers on medical education and information so they are all up to speed, and that has fantastic outcomes for patient care'*, said Leanne Johnson, General Manager of John Hunter Hospital in the Hunter New England Local Health District.

John Hunter Hospital also began using Skype for Business to deliver digital ante-natal parenting classes (NSW Government, 2020b). This saved time for parents-to-be, who could attend 4.5 hours of online classes instead of the previous 12 hours of face-to-face learning. The Hospital also saw an increase in culturally and linguistically diverse couples attending the digital classes.

3.2 Creating fit-for-purpose workplaces and work practices

At the same time, digitisation creates new risks to the employer including data protection and privacy. Employees are likely accessing company data and documents on their personal/home Wi-Fi connections, which are far less secure than business enterprise connections. PwC Australia's Future of Work team recommends that organisations put new protocols in place for the use and sharing of company data and equipment (PwC Australia, 2021b). The Bastion Insights et al. (2021) survey of 300 employers across Australia found that throughout 2020, around four in 10 employers had provided additional cyber security information or training to support remote working. **Legal Aid NSW** has updated their privacy management plan to cover the safe destruction and transportation of client related documents when working from home. Staff also complete mandatory privacy training to learn how to protect their own personal privacy from clients when meeting remotely.

3.2.2 Using offices' face-to-face advantages

Most organisations interviewed plan to retain a central office, viewing it as crucial for collaboration and socialisation. They recognise, however, that the office's purpose has changed substantially with the uptake of remote working.

Remote workers also see in-person interactions with their colleagues—whether social or professional—as a key benefit of on-site work. According to our *2020 Remote Working Survey*, a lack of opportunities to socialise and worsening working relationships were rated as two of the worst aspects of remote work. In our *2021 Remote Working Survey*, 53 per cent of NSW remoteable workers report feeling better when they see their colleagues in person.

As workers return to their employer's workplaces fostering this aspect of on-site work will be important. This is likely to leave traditional offices somewhat unmatched to their purpose. A 2021 PwC Australia report argues that employees will not return to the office until property decisions are made based on their needs (PwC Australia, 2021a). An organisation's office will need to be a place that employees actively want to be at, it claims. This includes incorporating attractive physical and non-physical elements, for example office plants and easy-to-use technology.

To overcome this new expectation gap over central offices, a Boston Consulting Group report on Australian companies' COVID-19 experiences recommends listening to employees and mirroring what they find valuable in office design (Mattey et al., 2020). Some employers—like **Atlassian** (see **Box 11**)—are already redesigning their office spaces.

Employers are aware they may need to offer other incentives in addition to providing a COVID-safe workplace (Bastion Insights et al., 2021). The incentives may be needed to counteract the cost savings that workers have realised by foregoing the daily commute and incidental costs such as buying lunch and maintaining a corporate wardrobe.

Telstra is already considering this.

'We've looked a lot at working from home; now we need to look at the other side of the equation'.

Telstra is currently using a survey to ask staff what they miss about the office and what would make it more attractive to them.



Box 11

Atlassian—Reimagining the central office

Atlassian has always customised offices around the world based on team make-up and culture. For example, the Amsterdam and Austin offices both have strong customer service functions—but the type of customer service differs, with many pods in the Amsterdam office and many social breakout areas in Austin. Atlassian's Bangalore office, meanwhile, responds to local cultural preferences with a cricket pitch.

In August 2020, Atlassian introduced a 'fully distributed' work model, 'Team Anywhere'. Yet Atlassian will still have offices post-COVID-19. It sees value in them as places to gather and socialise. As Atlassian explains: *'We don't need an office to deliver; we need an office to gather and socialise, and for sparks of opportunity.'*

Atlassian's Sydney headquarters at Tech Central, now under construction, will be the first developed under this new policy. How the space within the building is designed is still being worked through. But the aim is to respond to team needs, with a designated floor for off-sites. *'We are being more deliberate about getting people together and asking deliberately why people are coming together'*, says Atlassian.

Atlassian is considering how to create office spaces for the new 'digital first' policy. This generates lots of additional office noise, with employees joining different virtual meetings from their desks. Atlassian is also thinking about what different demographic groups need—for example, new graduates may enjoy ping pong tables.

3.2 Creating fit-for-purpose workplaces and work practices

3.2.3 Designing hybrid-ready offices

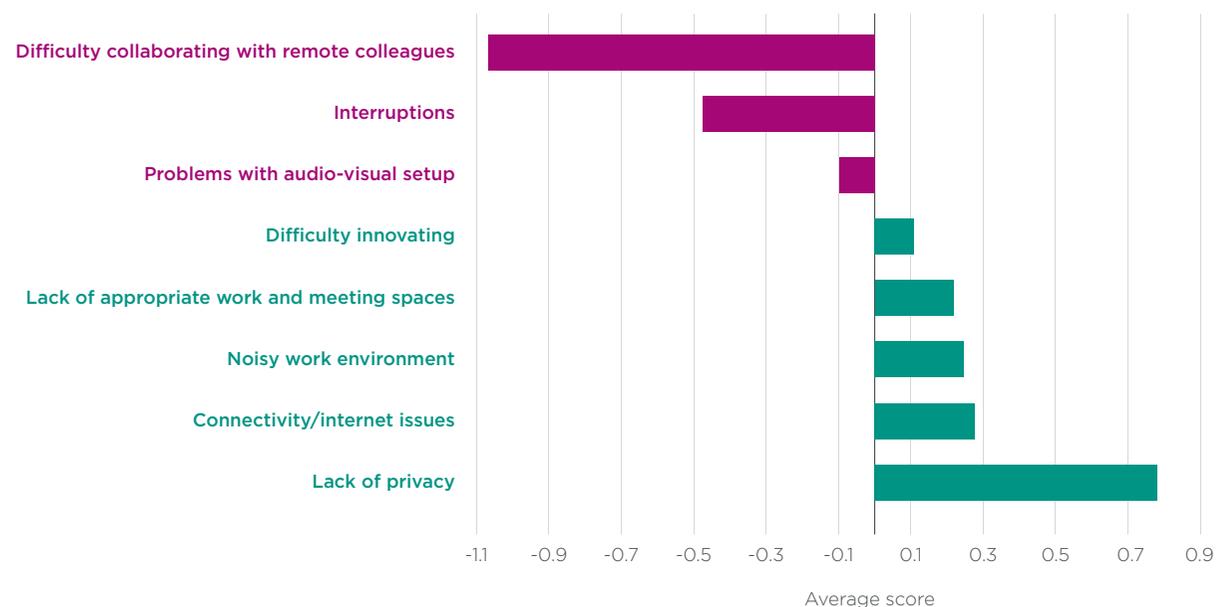
Workers report that the biggest challenge of working in a hybrid environment is collaborating (see **Figure 14**). Working together can be challenging when some colleagues are in the office and others are remote. But solutions are emerging.

Hybrid environments require employers to rethink their office designs. The **Recruitment, Consulting and Staffing Association** said many employers recognise that the design of their current office spaces is not suitable for hybrid environments. For example, open-plan office designs are not conducive to phone and video discussions. Employers can redesign their office spaces to include hybrid-friendly elements like collaboration spaces, virtual meeting rooms, and meeting booths (Innovation and Productivity Council, 2020). Offices may need more sound-absorbing materials in task-focused and teleconferencing areas to reduce ambient noise, but harder surfaces in common and social spaces to create a 'coffee shop buzz' (Fayard et al., 2021). While connectivity/internet issues were seen as a smaller barrier, one survey respondent identified the need for *'better technology available and connectivity so there were no delays and reception glitches'*.

Other solutions relate to developing new work practices and etiquettes for hybrid environments. When asked what would make hybrid working environments easier, one survey respondent highlighted the importance of *'being able to work, communicate, service and produce together as a team'*. Another called for *'better coordination of when certain people can meet face-to-face to collaborate on certain tasks—rather than going back and forth from remote to office'*.

FIGURE 14: THE NEW WORK CHALLENGES IN HYBRID OFFICES

Barriers to hybrid work environments, ranked from biggest to smallest



Source: IPC Remote Working Survey 2021

Note: Net number of responses is number of largest barrier responses minus smallest barrier responses.

3.2 Creating fit-for-purpose workplaces and work practices

3.2.4 Adopting location and time-agnostic work practices

Remote and hybrid working is testing established working rhythms, especially the rigidity of the 9-to-5 working day. Returning to a central office environment in a hybrid working model also involves considering who is needed on-site, and when.

As organisations start to adjust to hybrid working, they are likely to set new rhythms and routines for their workforce (see **Box 12**). These will be more suited to a world where not everyone works in the same place at the same time. They will offer greater flexibility and choice about hours and places. A Deloitte (2020) report on ‘re-architecting’ work models suggests the ‘when and where’ of work is broadening from ‘on-site and standard hours’ to ‘location and time-agnostic’.

For global companies like **Rio Tinto**, managers who already worked across time zones had more developed practices and tools in place to support remote and hybrid teams. As Rio Tinto observes, ‘for those used to managing time zones and global roles, there was a different maturity around working remotely’.

Key to the success of **GitLab’s** ‘all-remote’ approach is documentation. GitLab says that ‘documentation means that you never need to go to a single person to get information’. GitLab’s online team handbook is a publicly viewable resource of more than 10,000 pages of text, which ensures transparency of information across the entire team. This handbook enables the ‘all-remote’ approach. The result of documentation is that all meetings are optional. A public agenda is provided that everyone in the company can access if needed. Documentation also helps overcome the main challenge of working remotely for GitLab: working across time zones. Reporting makes ‘asynchronous communication’ possible.

Box 12

Atlassian’s ‘Team Anywhere’ supports work from all over

At Atlassian, ‘work is a thing you do, not a place you go’. Atlassian’s Team Anywhere policy means an employee could come into the office every day for a week and then not come in for a quarter. Atlassian co-chief executive, Scott Farquhar, has told the *Sydney Morning Herald* that employees will only be required to travel to their nearest office four times a year (Waters, 2021).

As Atlassian’s outlines: ‘Many other companies have a “hybrid” model, which the company dictates. We’re not going to do that. We want to create a flexible environment for employees’.

Atlassian has around 6,000 employees located across 23 different time zones in 14 countries, with 12 physical offices. While Team Anywhere enables asynchronous working, Atlassian also asks teams to find four overlapping work hours. This involves ‘leaning into a distributed work style—as we were already quite distributed across different time zones’.



3.2 Creating fit-for-purpose workplaces and work practices

3.2.5 Managing the peak of the week

One of the challenges when everyone is only in the office some days of the week is implementing demand management or demand smoothing. A **Property Council of Australia** and Ernst & Young (2021) report *Reimagining our economic powerhouses*, finds that Thursday is the most popular day in the office, while Monday and Friday are the least. This may be because people enjoy working remotely close to the weekend.

While other research indicates that the spread of remote working days is fairly even across Monday to Friday (Beck & Hensher, 2021), insights from our interviews and consultations suggest that work still needs to be done to manage the peak of the week.

Iain Franklin, Head of Strategic Consulting EMEA at JLL Work Dynamics, observes that corporate real estate teams need to actively manage this peak of the week in hybrid office spaces (Franklin, 2021). Without management, lower off-peak demand will lead to empty, inefficiently used offices which consume valuable cash and reduce businesses' carbon efficiency.

This will likely push organisations to reduce office space below the point where it can accommodate all staff at the same time. That in turn will require employers to consciously choose policies that spread demand, and to use technology and concierge-style services to manage demand on any given day.

Franklin (2021) proposes three initiatives for successful demand management:

- Stronger and more agile space management—such as using app booking systems or sensors on desks—will let staff know that the space they need is available.
- Robust change management and incentives will smooth demand through the working week.
- Management groups will tie the efficiency narrative to the carbon agenda, with smaller and better utilised spaces leading to improved carbon efficiency through fewer staff commutes.

As mentioned in **Section 2.5**, remote and hybrid working also present opportunities to better manage transport demand issues, such as congestion on roads and overcrowding on public transport. To realise these benefits, TfNSW encourages employers to help their employees (Transport for NSW, 2020a):

- **Reset:** establish new ways of working and commuting.
- **Reduce:** work remotely to reduce travel.
- **Retime:** travel outside peak periods by allowing half-day remote working or staggered hours.
- **Remode:** shift travel from car to public and active transport.

3.2 Creating fit-for-purpose workplaces and work practices

3.2.6 Building new health and safety practices

Employers report being unclear about their legal responsibility for workers' safety when they are working remotely. Workplace health and safety (WHS) is the joint responsibility of employers and workers. But this becomes more complex during remote working because the 'home office' is largely unique to each employee and beyond the control of their employer.

As the Commonwealth Productivity Commission (2021) notes, the upcoming 2023 WHS law review represents an opportunity for governments to update legislation and provide more clarity.

As a first necessary action, many organisations have adapted or updated their WHS policies to meet the legal responsibilities of providing a safe place to work. These updates primarily concern ergonomics and requirements for dedicated working environments, with guidance on setting them up.

Telstra's approach to ensuring safe working environments follows similar WHS employer obligations. Telstra says: *'If you are working from home full-time, it makes you rethink your setup. If you are only one day a week, it may have been fine at the dining room table.'*

The equipment request process to support Telstra staff to work remotely has automatic approvals in place; employees are trusted to personally go online and order the required equipment to support their home office, and charge it to their manager's cost centre.

Pre-COVID-19, **Legal Aid NSW** sent an occupational therapist to people's houses to check their home office set-up. This was not possible when rolling remote working out to 1,400 staff during the pandemic. Instead, the Flexible Working form includes an entire WHS section, with a checklist and links to tools. Legal Aid NSW's WHS manager also organised five webinars with an occupational therapist to support establishing healthy routines. The webinars addressed topics such as ergonomics and sleeping well.

The home environment can also be unsafe for other reasons—particularly for women. A guide introduced by the Australian Services Union identified that for many women experiencing domestic violence, the workplace had traditionally been the only 'safe space' (Australian Services Union, 2020). COVID-19 has led to increased physical isolation, financial stress, higher levels of unemployment and underemployment, increased workload with no extra pay, increased alcohol and drug use, and an increase in family and domestic violence.

Co-working spaces can help support remote and hybrid working by mitigating some of the hidden costs of the 'home office' that we are yet to see. **WorkLife's** sites are designed by architects to Australian WHS standards and have ergonomically compliant desk setups. WorkLife members also speak to the social benefits of being part of an office community.

The transition to remote working also made many organisations more focused than ever on the mental health and wellbeing of their employees (see **Box 13**).

At a panel discussion on 'Mental health at work: COVID-19' hosted by the Mental Health Commission of NSW, **KPMG's** Lainie Cassidy, Head of People Operations—Mental Health, said

'employers need to give permission and empower people to establish daily habits, rituals and behaviours that support not just balance, but also recovery, self-regulation and routine, placing that emphasis on the power of switching off'

(Mental Health Commission of New South Wales, 2020).

Box 13

Supporting remote workers' mental health and wellbeing

The World Health Organization (2020) published mental health and psychosocial considerations during the COVID-19 outbreak. Tips for employers included:

- Ensure good quality communication and accurate information updates are provided to all staff.
- Rotate workers from higher-stress to lower-stress areas and functions.
- Partner inexperienced workers with more experienced colleagues.
- Initiate, encourage, and monitor work breaks.
- Implement flexible schedules for workers who are directly impacted by COVID-19 or have a family member affected by a stressful event.
- Build in time for colleagues to provide social support to each other.
- Ensure that staff are aware of where and how they can access mental health and psychological support services and facilitate access to such services.
- Be a good role model for self-care strategies.

3.2 Creating fit-for-purpose workplaces and work practices

3.2.7 Integrating remote work into working conditions

Unions and employers are searching for the best ways to integrate remote and hybrid arrangements into working conditions (see **Box 14**). **Unions NSW** says that some employers have provided their employees with allowances or made one-off payments to help cover additional expenses incurred, but these need to be negotiated further. Unions NSW has also raised the issue of workers' compensation claims, both for mental health problems and for those caused by poor ergonomics.

Business Illawarra notes that while 85 per cent of employees who were surveyed want to work remotely, enterprise agreements are a 'stumbling block'. Firms will have to adjust recruitment and onboarding, advertise their policies internally and externally, and review their compliance with all relevant WHS and privacy laws.

Box 14

Remote and hybrid working— worker's rights and protections

Australian Unions' (2020) *Working from Home* report argues for a Working from Home Charter of Rights, to ensure that all workers have rights and protections when working remotely.

The proposed Charter would incorporate five elements:

- **Worker's rights at home:** all time paid; productivity gains shared; more performance monitoring; payment of work-related expenses.
- **Work health and safety:** risk assessment; mental health support; provision of ergonomic equipment.
- **Work/life balance:** carer's responsibilities; restriction of excessive hours; privacy; the 'right to disconnect'.
- **Connection and support:** connection to co-workers; support from employers; the right to join and be represented by the union.
- **Job quality across workplaces:** remote working not used to undermine protections elsewhere.



3.3 Managing for high-performance remote working

3.3.1 Measuring outputs, not just inputs

The rise of remote and hybrid working has prompted many employers to think harder about how they measure productivity. Some worry productivity is falling because they can no longer watch employees working. But many also realise that watching workers was always a poor way to measure their productivity: it focuses on inputs but forgets about outputs.

As W. B. Chew (1998) famously explained in his *No-Nonsense Guide to Measuring Productivity*, productivity is how much input it takes to produce a unit of output. Measuring productivity requires measuring both what is produced (the outputs), and all the labour and capital used to produce it (the inputs). Productivity is measured in physical not financial terms. And because organisations produce different physical outputs using different physical inputs, there is no one-size-fits-all approach to measurement. The measure of productivity differs depending on the business, product, or worker in question.

Labour productivity is measured by looking at how much output a worker produces **per hour** worked. Working more hours raises production, but it may not raise productivity. Production can rise while productivity (output per hour) is falling. It is often easy to measure what front line workers produce each hour, be it bread baked, or customers served, or patients seen. Whereas the productivity of administrators and back-office workers can be more challenging to measure because they often contribute to output indirectly—by making front-line workers more efficient.

The challenges of measuring productivity are often the same whether workers are in the office or working remotely. But the shift to remote working has brought them to the fore. The inputs are often easy to measure; the real challenge is measuring the outputs and outcomes. As **Business NSW** notes *‘we need to measure the quantity of work but also quality’*.

Leading employers have built a focus on outcomes into their management systems. **Telstra** manages dispersed teams through its focus on Objectives and Key Results (OKRs). This data informs quarterly retrospectives which help staff improve performance. Telstra encourages employees to update their annual plan every quarter to set quarterly employee performance goals. Similarly, at **Atlassian**, individual performance is outcomes focused and measured by OKRs. Company metrics flow down to teams and it says employees have a degree of autonomy to define the metrics to which they will hold themselves accountable.

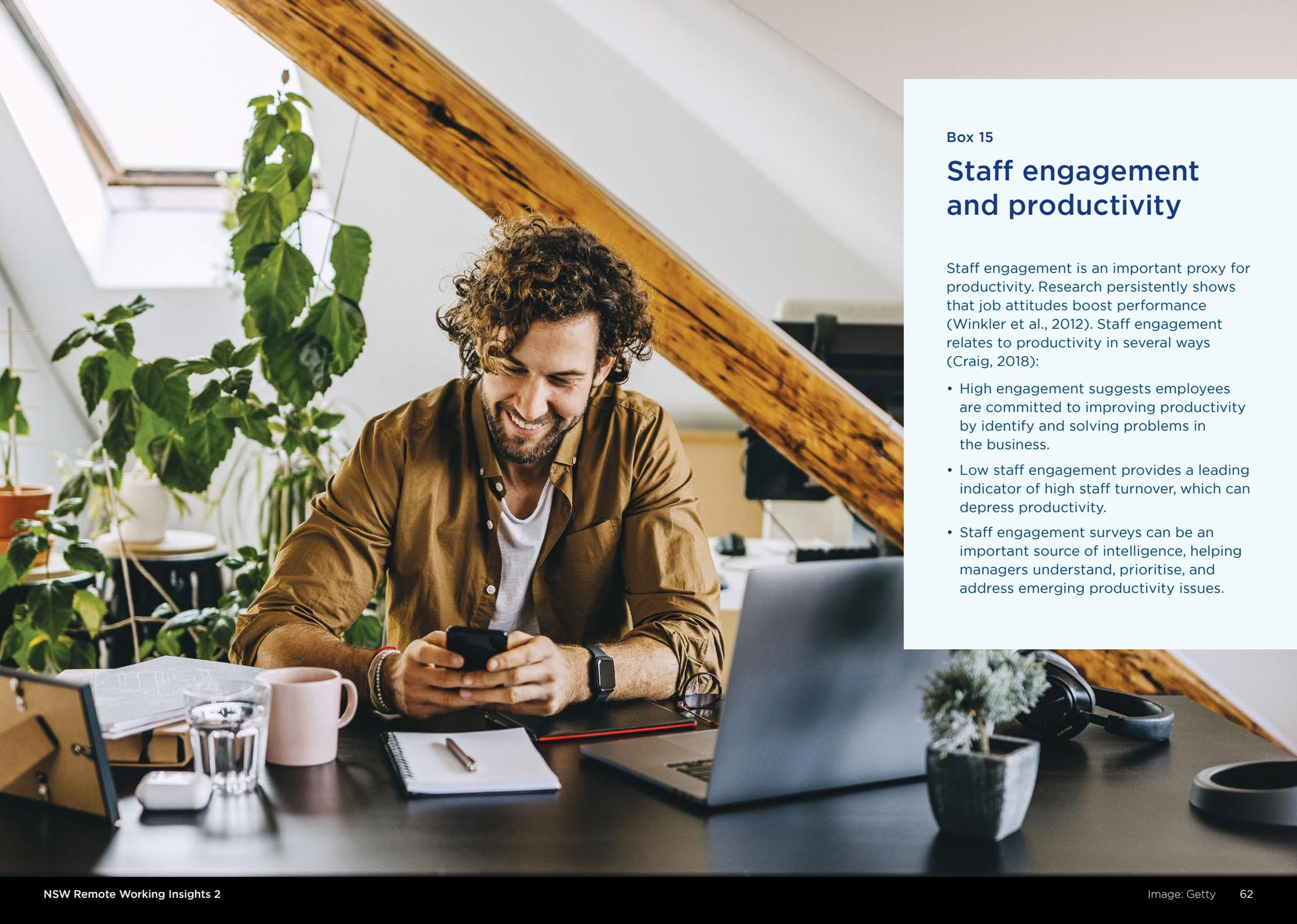
The focus on outcomes is not exclusive to large employers. **Sustainable East’s** projects are managed based on milestones and not hours worked: *‘Milestone based management is key. This prioritises the ability to do quality work over being in an office’*.

As it is often too costly or difficult to measure outcomes directly, many organisations also use **proxies**—quick and easy indicators that provide useful (though imperfect) information about underlying outcomes and productivity.

Organisations can often gather useful proxy information on remote workers’ productivity by asking them directly, as we did in our 2020 and 2021 surveys. Remote workers appear to have a good sense of their own productivity—their self-assessments have been broadly confirmed by both managers (see **Section 2.3**) and experimental evidence (see NSW Innovation and Productivity Council, 2020).

While noting that productivity is a *‘very hard thing to measure’* and *‘not an exact science’*, **Telstra** has used surveys to help assess the productivity of its remote workers. According to a recent survey, 72 per cent of Telstra employees self-report being more productive when working from home and less than 10 per cent say they are less productive.

Organisations also been using staff engagement as another quick and easy proxy for productivity (see **Box 15**). When asked about staff performance, many organisations mentioned engagement surveys conducted during the pandemic. For instance, **Legal Aid NSW** pointed to a 97 per cent response rate in their 2020 NSW Public Sector Employee Survey as suggesting strong productivity.



Box 15

Staff engagement and productivity

Staff engagement is an important proxy for productivity. Research persistently shows that job attitudes boost performance (Winkler et al., 2012). Staff engagement relates to productivity in several ways (Craig, 2018):

- High engagement suggests employees are committed to improving productivity by identify and solving problems in the business.
- Low staff engagement provides a leading indicator of high staff turnover, which can depress productivity.
- Staff engagement surveys can be an important source of intelligence, helping managers understand, prioritise, and address emerging productivity issues.

3.3 Managing for high-performance remote working

3.3.2 Reconfiguring management

The Bastion Insights et al. (2021) survey found that 40 per cent of employers are thinking about how to manage performance in a hybrid environment. Organisations with more than one workplace are more likely to have considered this than those with one site only. Being clear about expectations and communications are seen as priorities. But there is a lot of work to do to adapt performance management frameworks to allow autonomy and trusted working relationships to thrive, while also supporting those who need it.

Atlassian undertook research to understand changing work practices in response to the pandemic. The research showed that people have been ‘managing more’—that is, they have been needing to manage dramatic changes in personal and professional lives in a way that is time-consuming (Atlassian & Paper Giant, 2020).

3.3.3 Fostering proactive, authentic, communicative leadership

Traits such as kindness, authenticity, and transparency from leadership have been identified as crucial to the success of remote and hybrid working over the last 12 months.

Boston Consulting Group’s report on Australian employer experiences during COVID-19 found that employers believe ‘soft skills’ such as collaboration and empathy are emerging as central to team effectiveness (Mattey et al., 2020). Similarly, a *Harvard Business Review* study on leading remote teams recommends the leadership model should be one of vulnerability and empathy—considering the full breadth of employees’ needs as people (Joly, 2020).

The Bastion Insights et al. (2021) survey found that most employers (89 per cent) considered their organisation’s communications and engagement with employees to be good (34 per cent) or very good (55 per cent).

During lockdown, 65 per cent of employers created new ways of communicating, with Zoom and Teams the two most cited communication methods. Six out of 10 employers have continued using virtual meeting tools on an ongoing basis.

Legal Aid NSW said managers had to become ‘better managers’ to support remote workers:

‘Management stepped up and became better managers—had to check in more often with their team and have a better connection with the team’.

During COVID-19, employees were provided with frequent messaging direct from managers and executives to assure staff about decisions and to provide direction. This was a deliberate action led by Legal Aid’s CEO, putting organisational values into practice around kindness, authenticity, and resilience.

Telstra reported its managers perceive a need to work harder to help remote workers manage mental health and wellbeing: *‘When you don’t see people as often, it’s just harder. It’s harder to pick up on that stuff when people work from home. It makes you work harder as a leader’.*

3.3 Managing for high-performance remote working

3.3.4 Creating a culture of trust

Trust is a central component for managing remote and hybrid teams. It is both an individual and organisational cultural issue—some managers are more trusting than others, and some organisations have more trusting cultures than others.

Deloitte's (2020) *Re-Architecting Work Models* report argues that COVID-19 has seen a trend among businesses away from control and command to increased autonomy and trust. The report describes this as 'the devolution of decision authorities and a need to trust employees' (Deloitte, 2020, p. 6). Employee trust of managers has been shown to positively impact workplace performance in relation to financial performance, productivity, and product or service quality, and reduces staff turnover (Brown et al., 2015; Zak, 2017). These attributes are critical for successful remote and hybrid working (see **Box 16**).

A culture of trust is built through open and transparent communication. Organisations spoke about COVID-19 flattening the hierarchy of communication between employees and employers, and between staff and management. Gallup's *State of the Global Workplace* report also connects open and consistent communication with high levels of staff engagement, leading to dividends for productivity and performance (Harter & Mann, 2017).

During COVID-19, **Telstra's** CEO and other senior leaders began broadcasting directly to the whole organisation, rather than allowing messaging to trickle down through management. These once- or twice-weekly 'All Hands' broadcasts have a good following with staff and the company believes they have driven a '*democratisation of communication*'.

Unions NSW sees communication between employees and employers as key because it '*helps work through uncertainty of adapting team models to different ways of working... to look at the benefits and make this work and manage the challenges that arise*'.

“

[Remote working] shows a degree of trust and therefore [encourages] more commitment from employees. ”

Female, 35, Lake Macquarie, Specialist Manager

Remote working has also shifted expectations of 'old school' managers. As **Chamberlain Group** is a business that sells residential garage door openers, commercial door operators and gate entry systems, some managers previously thought selling face-to-face was the only way to work effectively and were nervous about remote working. Many at Chamberlain Group, however, changed their mindset to become more accepting of a hybrid model based on international stories: '*You've got to trust your employees a bit more, there's not so much direct supervision*'. Despite operating remotely, Chamberlain Group reports that the sales team has maintained strong sales and customer communication.



Box 16

GitLab's all-remote approach— built on trusting employees

GitLab's 'all-remote' policy was in place before COVID-19 and is outlined in its *Remote Playbook*, released in March 2020.

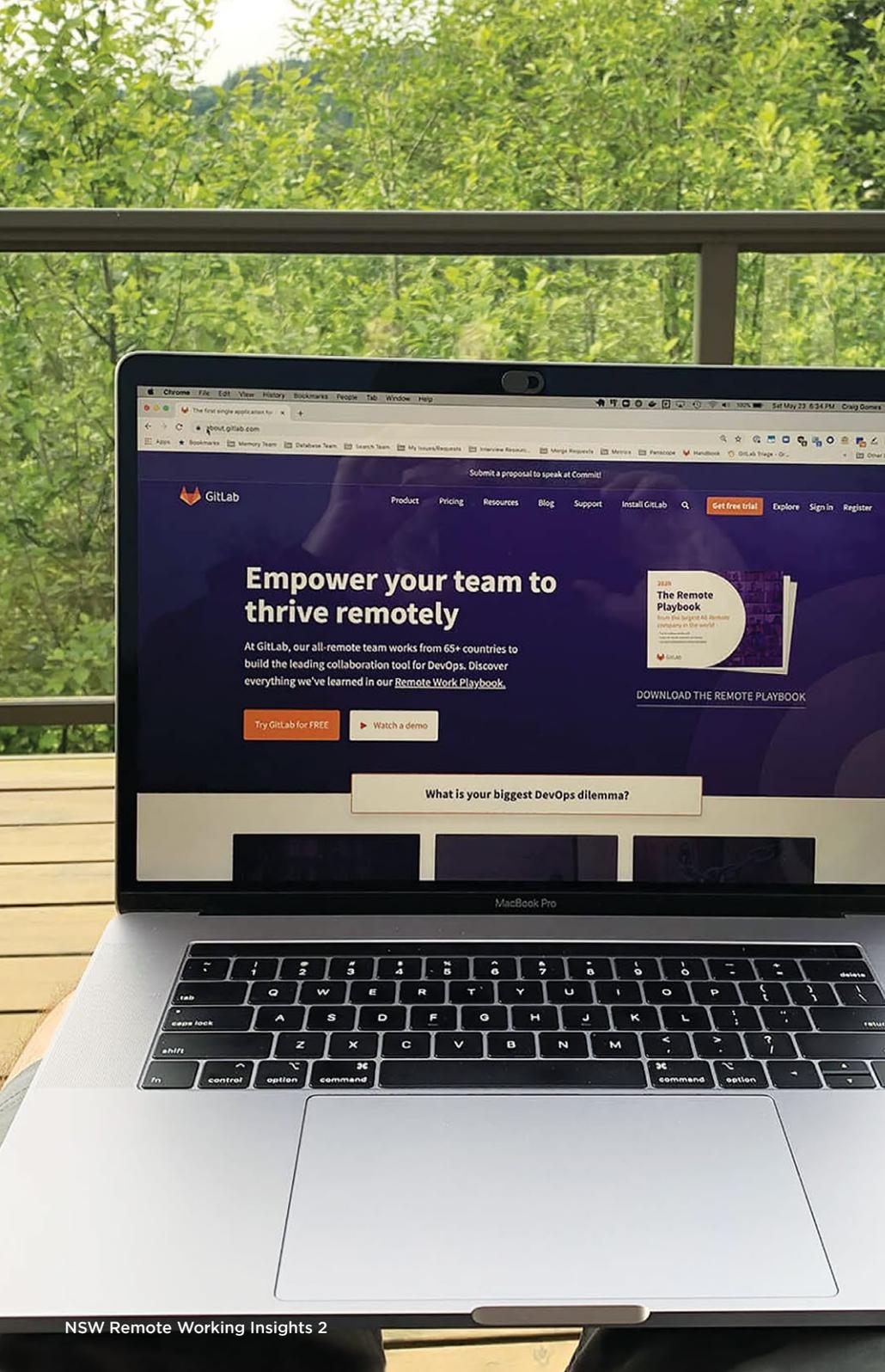
Employees are provided with full support from the organisation to work remotely. They are given a budget to buy the materials required to work remotely, and trusted to follow rough spending guidelines to get their office set up. If they prefer, they can work from a co-working space.

GitLab explained that remote working models need a culture *'focused on managing people based on results rather than time'*. GitLab's all-remote policy is driven by results-based management. GitLab's engineers, for example, are expected to make 10 code changes a month.

Trust is also built into how employees and managers interact with each other. While GitLab discourages direct messages to promote transparency across teams, when they are sent, there is a company-wide expectation that the recipient needs to reply within 24-hours.

Trust is crucial to ensure the reported benefits of remote and hybrid working for employees are retained. All-remote does not try to replicate a 9-to-5 workday, but seeks to offer 'work-life integration'. In practice this means giving employees choice around how they structure their workday, and allowing staff to balance other things such as caring responsibilities at home. This approach supports equal work experiences across different environments and time zones.

When asked to offer advice to other employers, GitLab said employees need to be encouraged to build their own workday that suits their needs and preferences: *'Don't try to replicate the office experience at home, or you're not taking advantage of remote working'*. For example, to manage international time zones this could mean working in the morning and evening and having 12pm to 5pm free. If you are working remotely without that freedom, you will get stressed, and that free time quickly becomes work time. Leadership needs to model 'work-life integration' or it will not stick.



3.3 Managing for high-performance remote working

Sociologist Tracy Brower (2021) recommends four tactics to create a 'constructive culture' in a hybrid work model:

- **Shared purpose:** Leaders need to explain company goals and show how the work of individuals and teams is connected to the big picture.
- **Fairness:** Maintaining a sense of equity and justice helps keep employees motivated. Employers need to consider fairness for on-site and remote employees.
- **Transparency:** Hybrid working relies on open communication and transparency.
- **Social capital:** Employers need to encourage employees to build their networks within the team. Employers can help connect people across departments, provide learning opportunities, and create time for people to have social interactions.

This is easier said than done. Some organisations talked about managers being unsure about what trust entails and 'how much' to trust employees. This has ramifications for management styles focused on presenteeism and requires robust systems for measuring productivity (see **Section 3.3.1**).

3.3.5 Equitable environments and positive incentives

Employers are thinking about how to create equitable environments for remote and hybrid teams. **GitLab's Remote Playbook** assesses organisational team structures across a spectrum from no-remote to all-remote (GitLab, 2020). It identifies 'hybrid remote' as a common working arrangement.

The *Remote Playbook* notes that 'hybrid remote' brings several challenges. They include:

- less access to information
- fewer career and development opportunities
- isolation
- different work expectations, such as expectations that without a commute, remote colleagues should be more productive.

Any variance and difference across team roles and responsibilities must be treated as equitably as possible. A recent survey of Australian employers identified the management of organisational equity as key to COVID-19 adaptation (Baird et al., 2021).

Inequities have emerged in workforces, including:

- over location, between those who can work remotely and those who cannot
- over work burden, between overworked and underworked staff
- over pay and leave, between longer-serving and shorter-serving staff.

Employers are facing the challenge of accounting for employee location and cost of living. **Atlassian**, for instance, asks: '*Do you inadvertently penalise people who are continuing to work in Sydney instead of Queensland?*'. Atlassian manages this by considering the cost of living and offering location-based pay.

GitLab also offers a 'location-based' pay structure: salaries are based on the San Francisco cost of living, and pay is adjusted for different employees' locations. GitLab's compensation calculator ensures transparent and consistent compensation across the company. At the time of hiring, candidates enter their individual inputs (that is, where they live, their position level, and currency) and GitLab's compensation calculator determines the salary band. This compensation calculator ensures transparent and consistent compensation across the company.



3.3 Managing for high-performance remote working

Employees consider the pay system when they think about relocation. For example, an employee contemplating a move to Tasmania might have to take into account the resulting pay cut.

Telstra, on the other hand, does not vary pay ranges within Australia based on location. Its Flexible Working Policy allows employees to be location-agnostic. That opens talent pools and aligns its pay policy with its workforce strategy of encouraging regional employment.

Managers also need to recognise the risks of 'proximity bias'. PwC recommends that steps are taken when some staff return to a central office and others stay remote, so remote staff are not 'out of sight, out of mind' (PwC Australia, 2021b). These steps can include monitoring disparities between returnees and non-returnees—for instance, to check whether a higher proportion of men are returning to work than women (see **Box 17**). There is much employers can do to level the playing field between remote and on-site workers. As noted earlier, **Atlassian** has a 'digital first' approach to reduce such disparities—if someone is on a video call, everyone in the meeting must join by video.

For the **University of New England** approximately 80 per cent of the student body was not on campus pre-COVID-19. Online education was the primary method of delivery.

Despite this, the University sees keeping academic staff on-site as essential to maintaining the on campus student experience, particularly by providing contact with teachers. The lack of contact would affect the value proposition of the University: *'we need to deliver what we say on our tin'*. The equity of academic experience is also important for service delivery—in particular, *'making sure that an off-campus student gets the same experience and value'*.

But some problems remain unresolved. For example, **Property Council of Australia** members observe that access to partners and directors is driving time in the office for their clients. Senior staff are spending more time in the office, and in response junior staff see benefit in being there at the same time.

To make remote work equitable, Ibarra et al. (2020) recommend that organisations:

- Collect, analyse, and act upon data about how remote working is affecting different groups—for example women, workers with disabilities, and entry-level workers.
- Challenge gender norms, such as assuming women are primarily responsible for childcare.
- Promote a culture of equity and collaboration, and avoid creating two tiers of employees, with remote employees seen or treated as 'lesser-than'.



Box 17

How remote work impacts women at work and home

Some worry the shift to remote and hybrid working could exacerbate gender inequality in the workplace (Partridge, 2021). There are concerns women are more likely than men to continue working from home after the pandemic, and that they will miss out on face-to-face relationship building and career opportunities as a result.

Our *2021 Remote Working Survey* results may help ease these concerns. Men and women in fact have very similar preferences for remote work. After the pandemic, men want to work remotely about 50 per cent of the time, and women 53 per cent. And while historical studies have found lower promotion rates for remote workers (see, for example, Bloom et al., 2015), this may be changing too. In our 2021 survey, neither men nor women believed remote working lowered their chances of promotion.

This is supported by an analysis of European Union Labour Force Surveys from 1992 to 2008, which uncovered a positive relationship between flexible working hours and women's access to leadership positions (Iversen et al., 2020).

Indeed, the flexibility offered by remote working may prompt an increase in female workforce participation after the pandemic, with positive impacts on women's incomes. As the Grattan Institute comments, 'the normalisation of flexible and remote work during the crisis could be a game-changer for women juggling work and care. If businesses support these working arrangements long-term, it could help to reduce the gap in unpaid work between women and men.' (Wood et al., 2021). A 2018 study in the UK found that flexible working helps women continue working and maintain their working hours after childbirth (Chung & van der Horst, 2018).

Finally, there are concerns a shift to remote working could exacerbate the already disproportionate burden of domestic work shouldered by women (see Ibarra et al., 2020; Patty & Wade, 2021). Our survey results put these concerns in context. On days when they work remotely, rather than in the office, women spend an extra 15 minutes on domestic and caring duties, whereas men spend an extra 12 minutes. On average, female remote workers report spending 8 minutes more a day on caring and domestic responsibilities than males. Remote work does not equalise men and women's contributions to domestic work, but it does encourage men to do more at home.

3.3 Managing for high-performance remote working

3.3.6 New approaches to professional development

Among the structures and processes changed by remote working arrangements are those that deliver professional development. The Bastion Insights et al. (2021) survey found that 7 per cent of employers saw professional development as a challenge for hybrid working, though this was not raised as an issue by employees.

Hunter New England Local Health District is carefully monitoring how remote working may impact professional development in a health context. A representative said remote supervision *'is an ongoing challenge—we have an obligation to provide an effective training environment'*.

Junior clinical staff highlight the importance of continued opportunities for face-to-face connection with senior staff and exposure to role models.

Business NSW also questioned what may be lost by staff not coming into a central office for mentoring and professional development opportunities.

But remote working could also create new professional development opportunities. For example, learning and development previously undertaken face-to-face with restricted capacity could be transitioned to virtual modules accessible by all.

Recommendations for employers managing the professional development of remote and hybrid workers include the following (Mendoza, 2020; Ryba, 2020):

- Managers should talk with employees about their goals, and about how remote/hybrid working will support meeting these goals.
- Managers should invest time in catching up with and transferring knowledge to staff, holding more frequent one-on-one meetings with staff when one party is working remotely.
- Managers should curate face-to-face professional activities for staff.
- Managers should support networking opportunities (either in-person or virtual).
- Managers should support mentorship between supervisors and their staff.
- Companies should make targeted investment in virtual training tools and programs and ensure that face-to-face trainings and presentations accommodate virtual participation.





3.3 Managing for high-performance remote working

3.3.7 Redesigning onboarding

Microsoft's *2021 Work Trends Report* suggests 2021 is 'the year of the Chief Human Resources Officer' and argues that, to be successful, organisations need to reimagine hiring and onboarding for a hybrid world (Microsoft, 2021).

Some organisations completely redesigned their onboarding process during COVID-19, so as to be able to onboard new starters remotely.

- **Telstra** rebuilt its whole onboarding process with an online portal that employees access before they start. Its aims were to prompt employees to think about how they will work, and to provide technical support.
- **CommBank** also moved to digital onboarding of new staff when COVID-19 hit. This worked well during 2020. Now employees across the business are calling for it to be permanent.

Other organisations already had remote onboarding in place before the pandemic. **Atlassian** has a 90-day process which brings new starters on board with a global cohort and features them in a company-wide 'Welcome blog'. **GitLab's** (2021) onboarding method for remote work environments has three dimensions: organisational, technical, and social.

- Organisational onboarding involves introducing staff to the GitLab handbook and encourages staff to be self-sufficient and proactive.
- Technical onboarding ensures new employees access and understand the tools they need to do their job.
- Social onboarding facilitates staff connections, and assigns each new staff member an 'onboarding buddy' who communicates via Slack, video calls, and coffee chats.

With less opportunities to be spontaneous as they onboard, new remote recruits and team members should be encouraged to build relationships by scheduling formal conversations—for instance, regarding rules, roles, and responsibilities—and informal ones, such as one-on-one coffee and lunch chats. Employers should be 'proactive and intentional' in facilitating formal and informal interactions, as these are important for a new starter to learn and understand the company's social dynamics, culture, and individual roles and expectations (Citrin & DeRosa, 2021). **CommBank** is considering what is potentially lost in the digital onboarding process as it only covers 'formal' learning: *'We need to think about the other learning requirements and the experience from sitting next to people, observing behaviour in meetings and learning culture'*.

04.

Appendices



4.1 Appendix A

2021 Remote Working Survey

Whereas our *2020 Remote Working Survey* captured the experiences and attitudes of NSW remoteable workers at the height of the 2020 NSW lockdown, our 2021 survey captures experiences in early-2021, when COVID-19 community transmission and health restrictions were minimal and returning to lockdown seemed unlikely to many. It provides a first glimpse of how remote and hybrid working patterns may settle after the COVID-19 pandemic. Our *2021 Remote Working Survey* was designed to:

- explore how employer policies, practices, and attitudes to remote and hybrid work evolved as COVID-19 community transmission and health restrictions eased
- illuminate people managers' perspectives on remote and hybrid work
- explore the challenges, opportunities, and evolution of hybrid working
- update data on worker attitudes, preferences, and behaviours collected in the previous *2020 Remote Working Survey*.

As with our 2020 survey, our 2021 survey included a large sample of 1,500 NSW remoteable workers. Fieldwork was conducted between March and April 2021, a period when COVID-19 community transmission and health restrictions were minimal. Workers were asked questions about their recent experiences of remote and hybrid work (either in the preceding six months or since the beginning of 2021). Additionally, questions were asked of remote workers who managed people as part of their job, as a proxy for how employers were thinking about and adapting to increased utilisation of remote work.

To be eligible, survey respondents had to be employed NSW residents with experience of remote working in their current job. After accounting for unemployed people and those whose jobs cannot be done remotely—for example, dentists, cashiers, and cleaners—our sample represents around 59 per cent of the NSW workforce. We also asked NSW remoteable workers if they had ever worked in a hybrid work environment; that is, if they had worked at their employer's workplace while others in their team worked remotely. This allowed us to gather data about experiences of hybrid working.

Workers answered questions on:

- their attitudes to remote working
- the amount of time they spent working remotely
- their employers' policies, practices, and attitudes
- how they spent their time when working remotely
- how barriers to remote working have changed
- the barriers they faced to hybrid working
- their expectations for future remote working.

The NSW Innovation and Productivity Council designed its survey with expert advice and assistance from the Data and Statistical Analysis Branch of the NSW Department of Premier and Cabinet. Survey programming and fieldwork was conducted by Quality Online Research Pty Ltd.

4.1 Appendix A: 2021 Remote Working Survey

4.1.1 Our survey covered key groups in the NSW workforce

We used quotas to interview a large sample covering important demographics in the NSW workforce, including males, females, Sydney-based, and regional workers. Although regional workers were somewhat underrepresented in our sample, all the results we report are statistically significant (see **Table 1**).

The workers we interviewed were evenly spread across key demographics like age, household type, time in their current job, and the size of their organisation. We also interviewed a roughly equal number of people-managers and non-managerial workers (46 per cent of people interviewed managed people as part of their current job).

TABLE 1: COMPARISON OF SAMPLE AND POPULATION BY GENDER AND LOCATION

	Sample (%)	All of NSW (%)
Gender		
Male	48	49.3
Female	52	50.7
Location		
Metro NSW (Sydney)	77	64.5
Regional NSW	23	35.5

4.1 Appendix A: 2021 Remote Working Survey

4.1.2 We asked workers about their productivity and managers about the productivity of their employees

NSW workers were asked how productive they were when working remotely on an hourly basis. Managers were also asked how productive their employees were when working remotely on an hourly basis. Respondents could offer an answer anywhere between '50 per cent less productive, or less' and '50 per cent more productive (or more)', in 10 percentage point increments.

NSW workers who completed the survey were also able to indicate that their productivity was roughly equal when working remotely and at their employer's workplace.

4.1.3 We asked workers to complete 'Likert tasks'

To assess attitudes to remote work, we asked NSW remoteable workers whether they agreed or disagreed with various statements about their attitudes to remote work, and those of their employer.

NSW remoteable workers were asked to think about the preceding six months and how strongly they agreed or disagreed with statements regarding their own and their employer's attitudes to remote work. The statements were:

- My organisation encouraged people to work remotely.
- My organisation was well prepared for me to work remotely.
- It was common for people in my organisation to work remotely.
- It was easy to get permission to work remotely.
- I could easily collaborate with colleagues when working remotely.
- Working remotely reduces my chances of promotion.
- I take more regular breaks while working remotely.

Finally, NSW remoteable workers were asked to think about the future, after the risk of COVID-19 had passed. They were asked how much they agreed or disagreed with the following statements:

- My employer would encourage more remote working.
- My employer would make changes to support remote working.
- I would have more choice about whether I work remotely.

4.1 Appendix A: 2021 Remote Working Survey

4.1.4 We also asked workers to complete ‘best-worst’ tasks

We asked NSW workers questions about what they identified as the most and least important barriers when working in hybrid work environments—that is, working from the employer’s workplace while colleagues work remotely. We identified eight possible barriers in hybrid working environments and asked workers to pick the most and least important from groups of four of these barriers. The difference between the number of times an option was selected as the biggest and smallest barrier across the survey group gave us the relative ranking of each barrier. The ranking of barriers from most significant to least significant is presented in **Table 2**. The net score is the total number of times a barrier was selected as the least significant barrier, minus the total times the barrier was selected as the most significant. The net score of a barrier indicates the overall attitude of the survey group, with a lower score indicating a greater barrier.

TABLE 2: BARRIERS TO HYBRID WORKING, FROM BIGGEST TO SMALLEST

Barrier to hybrid working	Net score
Difficulty collaborating with remote colleagues	-965
Interruptions	-429
Problems with audio-visual setup	-86
Difficulty innovating	103
Lack of appropriate work and meeting spaces	194
Noisy work environment	224
Connectivity/internet issues	254
Lack of privacy	705

Note: A lower net score indicates a larger barrier to hybrid working.

4.2 Appendix B

How we estimate changes across the NSW workforce

The *2021 Remote Working Survey* targeted NSW workers who could complete at least some of their work tasks remotely. This gave the NSW Innovation and Productivity Council and the NSW Productivity Commission detailed insights into the experiences of workers who experienced the recent shift to remote working. As noted above our survey represents the experiences of the 59 per cent of the NSW workforce, who are able to undertake some or all of their work remotely. To assist policymakers to understand the overall size of the recent shift to remote working, we combined our survey data with 2016 Census data to estimate the aggregate NSW workforce's remote working shift.

There is limited data to estimate the total proportion of work completed remotely prior to COVID-19. 2016 Census data for 'working from home' has been used as a proxy for remote working (see for instance ABS 6333.0—Characteristics of Employment, Australia). We note, however, that working-from-home data does not include people who work from alternative locations like cafes or shared offices, or on public transport. Further, the working-from-home Census data does not measure the proportion of total work time completed remotely, but rather the proportion of workers who worked from home on the day of the Census.

By asking NSW workers how much time they worked remotely in 2019 (in our *2020 Remote Working Survey*), and between January and April 2021, we estimated the total proportion of work completed remotely between January and April 2021. During 2019, slightly more than 83 per cent of NSW workers surveyed reported at least some time working remotely. This is a relatively high estimate compared with other data including the 2016 Census working from home measure. But it does not mean that a large proportion of work was undertaken remotely during 2019. The most common duration of remote work time was one day or less a week. Remote working is something most workers did on occasion, but few did regularly.

4.3 Appendix C

How we estimate NSW's remote work potential

To assess the remote working potential of the people of NSW, we have used two datasets. Data for calculations of the reality of remote work come from our 2020 and 2021 *Remote Working Surveys*. Calculations of remote work potential are underpinned by data from Faethm, an artificial intelligence platform whose workforce model analyses over 1,500 occupations, broken down into more than 20,000 tasks. Each occupation is broken down into a distinct set of tasks, with each task assessed as 'remoteable' or not. This data enables us to infer the proportion of work that can be done remotely by each occupation.

Finally, employment in each occupation is added together to determine the distribution of remoteability across the NSW working population. For a full-time workload, 'two days' represents an occupation where a worker could conceivably work remotely for two days a week. These 'remoteability' estimates align with other study estimates that between 30 per cent and 47 per cent of the Australian workforce could potentially work remotely some of the time (Beck & Hensher, 2020; Pennington & Stanford, 2020; Ulubasoglu & Onder, 2020).

4.4 Appendix D

How we estimate remote jobs and output during lockdowns

We used four datasets to calculate the number of jobs and amount of output supported by remote work during a NSW-wide lockdown:

- ABS Census Table Builder for the 2016 Census—Employed persons by occupation in each NSW local government area, and proportions of occupations in each industry in NSW.
- ABS national, state, and territory population—NSW population, December 2020.
- ABS State Accounts—NSW GSP.
- Faethm AI's assessment of remoteability, by occupation.

Essential occupations were not included in our calculation of remote-supported jobs as they continue to work in a NSW-wide lockdown regardless of whether they can work remotely. To determine 'essential' occupations, we used the list of authorised workers and businesses that could be open, as published by the NSW Government as at 20 August 2021.

To calculate the number of non-essential workers who rely on remote work to continue working during a NSW-wide lockdown, we multiplied the number of people employed in each non-essential occupation by the occupation's Faethm remoteability score. Occupations that were less than 50 per cent remoteable were set to 0. We assumed these occupations did not include enough remoteable tasks for employment to continue remotely during a lockdown. By excluding these workers, we identified jobs likely to continue remotely during a lockdown.

Based on 2016 Census data, we apportioned each occupation among relevant industries to estimate how much of each industry's output could be produced by remote work during a NSW-wide lockdown.

Finally, we multiplied the proportion of each industry supported by remote work by the industry's contribution to GSP (in 2020), to estimate the GSP supported by remote work.

4.5 Appendix E

How we translated productivity improvements into higher Gross State Product

Based on our *2021 Remote Working Survey* results, we estimate that remote working accounted for about 30 per cent of total work tasks in NSW in early 2021.

We also found workers reported being about 17 per cent more productive when working remotely and managers reported their staff were about 15 per cent more productive when working remotely. Taking the average of these figures, we estimated NSW labour productivity for remote workers could be about 16 per cent higher, which corresponds to an increase of about 1.9 per cent across the NSW economy.

We translated this labour productivity growth into additional economic output by multiplying it by the labour share of GSP. This method is consistent with other studies (Barrero et al., 2021a). We estimated that a 1.9 per cent labour productivity boost equates to at least \$6 billion a year in higher GSP (in 2021 dollars). This is based on the labour share of NSW GSP in the latest state accounts, which are for 2020 (State Accounts, ABS 2021).

These estimates are indicative only. They assume changes in remote working rates are the only factor affecting labour productivity. The estimates do not consider other relevant factors, such as changes in technology, capital use, or the broader impacts of the pandemic on total factor productivity.

4.6 Appendix F

Our case studies and qualitative research

We commissioned Astrolabe Group to conduct employer case studies, peak body consultations, and related research, data gathering, and analysis.

Our aim was to explore the drivers of NSW employer decision-making on remote and hybrid working, and document leading-edge best-practice policies, procedures, and initiatives to benefit NSW workers, employers, and policymakers.

4.6.1 We interviewed a diverse range of employers

Astrolabe Group developed a shortlist of target employers based on a matrix of the following factors (see **Table 3**):

- **Industry category:** knowledge-intensive, population-serving, and producing.
- **Office location:** metropolitan Sydney, metropolitan NSW, regional NSW, or elsewhere.
- **Work arrangements:** spectrum of fully remote to fully on-site.
- **Sector:** private and public.
- **Size:** small to medium enterprises (SMEs), large multi-nationals, single-site, and multi-site organisations.

We confirmed the final list of organisations with Astrolabe, subject to their availability.

The following employers were interviewed:

- **Atlassian** is a technology company that specialises in the development of software to facilitate collaboration and 'open work'. Atlassian's collaborative tool suite includes Jira and Trello. The company is international, with staff located across 23 different time zones in 14 countries and across 12 physical offices. Atlassian has around 6,000 staff and most are based in Sydney, Australia (approximately 2,000) and San Francisco. Staff are involved predominately in engineering, research and development, and product design; other staff fulfill general and administrative functions.
- **Chamberlain Group** is an advanced manufacturer specialising in smart access solutions and ecosystems. It designs and engineers residential garage door openers, dock levelling, commercial door operators, gate entry systems and supporting smart technologies. Chamberlain Group is international with its head office in the United States. Oceania operations include a head office in North Ryde, factory operations in West Gosford, and six offices across Australia, New Zealand, and the Middle East.
- **Commonwealth Bank** ('CommBank') is one of Australia's 'big four' banks and provides a range of integrated financial services including retail banking. It has 48,000 resident Australian employees; 18,500 work in retail banking.
- **GitLab** is a software development operations company. It has more than 30 million estimated registered software users in more than 100,000 organisations. Founded in 2014 in San Francisco, GitLab has more than 1,300 employees across 68 countries, with 56 staff in Australia and 28 in NSW.
- **Hunter New England Local Health District** primarily delivers a clinical service, looking after the inpatient and outpatient community health care and delivery for the Hunter and New England areas. An education, training, and research function makes up about 10 per cent of its activity. The Hunter New England Local Health District employs around 17,000 people. Frontline clinical staff are the largest group of employees, of whom around two-thirds are nurses, and the remainder medical and allied health staff. The workforce also includes backroom clinical staff and managers.

- **KPMG** is a global network of firms that provide audit, tax, and advisory services, with over 6,500 employees nationally. KPMG Australia's headquarters are in Sydney, with other NSW offices in Parramatta, Penrith, and Wollongong.
- **Legal Aid NSW** is a statewide organisation that provides legal services to socially and economically disadvantaged people across NSW. Services cover criminal, family, and civil law. Legal Aid NSW employs more than 1,400 staff, comprised primarily of lawyers (approximately 700), administrative staff (approximately 500), managers and executives, social workers, financial counsellors, and intake and referral officers. Legal Aid NSW operates 25 offices across the State, with its largest office in Sydney's CBD.
- **Rio Tinto** is a large mining and metals company operating in 35 countries, including Australia. Rio Tinto's Operations Centre in Perth supports 16 integrated iron ore mines in Western Australia.

4.6 Appendix F: Our case studies and qualitative research

- **Sustainable East** was founded in December 2019 and is a consulting company specialising in land use planning, spatial data, and economics. Sustainable East is made up of four sub-contractors—a junior economist, two senior infrastructure advisors, and a graphic and web designer—and two to three casual staff (depending on project requirements).
- **Telstra** is Australia's leading telecommunications and technology company, supporting the country's largest and fastest mobile network. Telstra provides a full range of communications services for personal, business, and enterprise clients.
- **The University of New England** employs over 1,300 staff, who provide and facilitate education to more than 22,000 students. Students have the option to study online or study on campus. Studying online is the preferred option for students with an estimated 80 per cent of students enrolled via distance education. The University's main campus is in Armidale, with sites in Tamworth, Taree, and Parramatta and a network of Regional Study Centres across NSW's New England North West region.
- **WorkLife** is a network of co-working spaces with three locations on the South Coast, in Berry, Kiama, and Coledale. Its founders established its first site in Berry in 2017, motivated by personal experiences and experiments with long distance commuting and working from home. WorkLife opened its third co-working space in Coledale in September 2020. The WorkLife brand is affiliated with WorkClub, a global network of co-working spaces whose Australian sites include Sydney, Melbourne, Canberra, and Brisbane.

4.6 Appendix F: Our case studies and qualitative research

TABLE 3: EMPLOYERS INTERVIEWED

Employer	Industry category	NSW office location	Work arrangements	Sector	Size
Atlassian	Knowledge-intensive	Metropolitan Sydney (CBD)	Hybrid	Private	Large, international
Chamberlain Group	Producing	Metropolitan Sydney (North Ryde) and West Gosford	On-site/hybrid	Private	Large, international
Commonwealth Bank	Knowledge-intensive	Metropolitan Sydney (CBD) and branches across metropolitan and regional NSW	Hybrid	Private	Large, international
GitLab	Knowledge-intensive	N/A—no offices	Remote	Private	Large, international
Hunter New England Local Health District	Population-serving	Hunter, New England, and Lower Mid North Coast	On-site/hybrid	Public	Large, NSW only
KPMG	Knowledge-intensive	Metropolitan Sydney (CBD, Parramatta, Penrith) and Wollongong	Hybrid	Private	Large, international
Legal Aid NSW	Knowledge-intensive/ population-serving	Central office in Metropolitan Sydney (CBD); 24 offices in metropolitan and regional NSW	On-site/hybrid	Public	Large, NSW only
Rio Tinto	Producing	N/A—no offices in NSW	On-site/hybrid	Private	Large, international
Sustainable East	Knowledge-intensive	Metropolitan Sydney (Bondi Junction)	Hybrid/remote	Private	SME
Telstra	Knowledge-intensive/ population-serving	Metropolitan Sydney (CBD); stores in metropolitan and regional NSW	Hybrid	Private	Large, international
University of New England	Knowledge-intensive/ population-serving	Armidale	On-site/remote	Public	Large, national
WorkLife	Multiple (depends on member)	South Coast (Berry, Kiama, Coledale)	N/A	Private	SME

4.6 Appendix F: Our case studies and qualitative research

The representatives Astrolabe Group consulted at each organisation are identified by role description in **Table 4**.

TABLE 4: REPRESENTATIVES CONSULTED AT EACH ORGANISATION

Employer	Role
Atlassian	<ul style="list-style-type: none"> • Director of Global Public Policy • Global Head of Innovation Programs
Chamberlain Group	<ul style="list-style-type: none"> • Head of Operations—Oceania
Commonwealth Bank	<ul style="list-style-type: none"> • Executive General Manager Organisational Development • Executive General Manager Human Resources Retail Bank Services
GitLab	<ul style="list-style-type: none"> • Vice President of Incubation Engineering
Hunter New England Local Health District	<ul style="list-style-type: none"> • Director John Hunter Innovation Precinct
KPMG	<i>Not disclosed</i>
Legal Aid NSW	<ul style="list-style-type: none"> • Director Human Resources • Project Officer
Rio Tinto	<i>Not disclosed</i>
Sustainable East	<ul style="list-style-type: none"> • Director
Telstra	<ul style="list-style-type: none"> • Human Resources People and Change
University of New England	<ul style="list-style-type: none"> • Chief Operating Officer • Executive Change Director • Director for People and Culture
WorkLife	<ul style="list-style-type: none"> • Founder • Representative group of five members

4.6 Appendix F: Our case studies and qualitative research

4.6.2 We asked employers about their innovative policies, procedures, and initiatives in relation to remote and hybrid working

Astrolabe Group reviewed Australian and international literature to determine key themes and trends relating to remote and hybrid work arrangements. This informed the focus of semi-structured interviews with employer organisations.

Employers answered questions on:

- their policy on remote and hybrid working
 - the views of staff, people managers, and senior leadership on remote and hybrid working
 - the factors that influenced their decisions around remote working (for example, office space expense, industrial relations, productivity, access to and retention of talent)
 - whether they were collecting data or other forms of feedback to inform decisions around remote and hybrid working arrangements
 - the benefits and opportunities of remote and hybrid working
- the challenges, risks, and costs of remote and hybrid working
 - their innovative policies, processes, or initiatives to increase the benefits or mitigate the challenges of remote and hybrid working
 - the transition between different working arrangements
 - what working arrangements will look like once COVID-19 is no longer a threat.

4.6.3 We consulted peak bodies

Astrolabe Group consulted eight peak bodies on their observations of remote working trends and to uncover remote and hybrid working innovations, barriers, and opportunities for their members. For most of the peak bodies, this consultation took the form of a virtual roundtable held on 11 May 2021. The Property Council of Australia was consulted at the Property Council of Australia Commercial Office Sub-committee meeting on 19 May 2021.

Astrolabe selected peak bodies that could provide an overview of the impacts and experiences of remote working and trends across sectors and industries pre-COVID-19, during initial COVID-19 restrictions in 2020, and after the lifting of these restrictions in 2021.

The peak bodies were:

- **Business Illawarra** is the Illawarra region's peak business organisation.
- **Business NSW** is the State's peak business organisation. It oversees a network of four metropolitan and seven regional offices across the State. Its advocacy agenda is to 'make NSW a better place to do business'.
- **Business Sydney** is the 'voice for business in Sydney'. It advocates for economic growth and opportunities to invest, work, live, and visit Sydney. Business Sydney's member base is broad and multi-sector, united by a geographic focus on central Sydney.
- **NSW Indigenous Chamber of Commerce** was established in 2006 and aims to support Aboriginal people to establish and operate their own businesses. The NSW Indigenous Chamber of Commerce advocates at all levels of government to increase and support economic participation of Aboriginal people.
- **Property Council of Australia** represents the interests of more than 2,200 member companies and is the leading advocate for Australia's property industry.
- **Recruitment, Consulting and Staffing Association** is the peak body for the recruitment and staffing industry in Australia and New Zealand.
- **Small Business Association of Australia** is a business organisation that supports and advocates for the SME sector. It provides guidance and advice to SMEs on business services and creates promotional opportunities for members.
- **Unions NSW** is the peak body for the State's trade unions, representing more than 600,000 union members across the State. Unions NSW campaigns for fair and decent wages and conditions for employees.

The representatives Astrolabe Group consulted at each peak body are identified by role description in **Table 5**.

4.6 Appendix F: Our case studies and qualitative research

TABLE 5: REPRESENTATIVES CONSULTED AT EACH PEAK BODY

Peak Body	Role
Business Illawarra	Executive Director
Business NSW	General Manager, Advocacy and Engagement
Business Sydney	Executive Director
NSW Indigenous Chamber of Commerce	Chief Executive Officer
Property Council of Australia	Commercial Office Sub-committee
Recruitment, Consulting, and Staffing Association	Head of Advocacy and Policy Advocacy and Public Affairs Adviser
Small Business Association of Australia	Chief Executive Officer
Unions NSW	Assistant Secretary

Peak bodies answered questions on:

- Remote/hybrid working practices and views among members prior to COVID-19 and over the last 12 months.
- Benefits and opportunities of remote/hybrid working to members—including examples of any innovative policies, processes, or initiatives members have introduced to increase the benefits or grasp the opportunities of remote/hybrid working.
- Challenges, barriers, and risks of remote/hybrid working to members—including examples of any innovative policies, processes, or initiatives members have introduced to mitigate the challenges, risks, and costs of remote/hybrid working.
- Looking forward—the future of remote/hybrid working and how the NSW Government can help.

References

- Atlassian & Paper Giant. (2020). *Reworking Work: Understanding the rise of work anywhere*.
- Australian Services Union. (2020). *Working from home isn't safe when home isn't safe: How to respond to family & domestic violence in home-based workplaces*. https://www.asumembers.org.au/working_from_home_when_home_isnt_safe
- Australian Unions. (2020). *Working From Home*. ACTU.
- Baird, M., Hamilton, M., Gulesserian, L., Williams, A., & Parker, S. (2021). *An employer lens on COVID-19: Adapting to change in Australian workplaces*. ARC Centre of Excellence in Population Ageing Research [CEPAR].
- Barrero, J. M., Bloom, N., & Davis, S. J. (2021a). *Internet Access and Its Implications for Productivity, Inequality, and Resilience*. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3895137>.
- Barrero, J. M., Bloom, N., & Davis, S. J. (2021b). *Why Working from Home Will Stick* (Working Paper No. 28731; Working Paper Series). National Bureau of Economic Research. <https://doi.org/10.3386/w28731>
- Bastion & Pitcher Partners. (2021). *Adapting to the new normal - Special report: Hybrid Working 2021*. Bastion Insights. https://www.pitcher.com.au/wp-content/uploads/2021/01/New_Normal_Report_Bastion_PitcherPartners.pdf
- Beck, M. J., & Hensher, D. A. (2020). *Insights into the impact of COVID-19 on household travel and activities in Australia - The early days of easing restrictions*. *Transport Policy*, 99, 95-119. <https://doi.org/10.1016/j.tranpol.2020.08.004>
- Beck, M. J., & Hensher, D. A. (2021). *Insights into Work from Home in Australia in 2020: Positives, Negatives and the Potential for Future Benefits to Transport and Society* (No. 11; Transportation Research Part A).
- Bergeaud, A., & Cette, G. (2021). *Teleworking: How will it affect productivity?* (no 198; Eco Notepad Post). Banque de France. <https://blocnotesdeleco.banque-france.fr/en/blog-entry/teleworking-how-will-it-affect-productivity>
- Bergen, M. (2021, April 29). Google Is Saving Over \$1 Billion a Year by Working From Home. Bloomberg. <https://www.bloomberg.com/news/articles/2021-04-28/google-is-saving-over-1-billion-a-year-by-working-from-home>
- Bloom, N., Bunn, P., Mizen, P., Smietanka, P., & Thwaites, G. (2020). *The Impact of Covid-19 on Productivity*. 49.
- Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does Working from Home Work? Evidence from a Chinese Experiment *. *The Quarterly Journal of Economics*, 130(1), 165-218. <https://doi.org/10.1093/qje/qju032>
- Braesemann, F., Lehdonvirta, V., & Kässi, O. (2020). ICTs and the urban-rural divide: Can online labour platforms bridge the gap? *Information, Communication & Society*, 0(0), 1-21. <https://doi.org/10.1080/1369118X.2020.1761857>
- Brennan, M. (2021, August 17). *The Working from Home Evolution* [Speech]. Seminar panel event for RMIT University. <https://www.pc.gov.au/news-media/speeches/working-from-home-evolution>
- Brower, T. (2021, February 7). *How To Sustain Company Culture In A Hybrid Work Model*. Forbes. <https://www.forbes.com/sites/tracybrower/2021/02/07/how-to-sustain-company-culture-in-a-hybrid-work-model/?sh=8851d2910091>
- Brown, S., Gray, D., McHardy, J., & Taylor, K. (2015). Employee trust and workplace performance. *Journal of Economic Behavior & Organization*, 116, 361-378. <https://doi.org/10.1016/j.jebo.2015.05.001>
- Buffer. (2021). *2021 State of Remote Work*. <https://buffer.com/2021-state-of-remote-work>
- Caputo, P., Murali, R., Jackson, A. J., & Rauch, M. (2021). *Return to a world transformed: How the pandemic is reshaping corporate travel* (Deloitte Insights). Deloitte. <https://www2.deloitte.com/us/en/insights/focus/transportation/future-of-business-travel-post-covid.html>

References

- Chew, W. B. (1998, January). No-Nonsense Guide to Measuring Productivity. *Harvard Business Review*. <https://hbr.org/1988/01/no-nonsense-guide-to-measuring-productivity>
- Choudhury, P. (Raj), Foroughi, C., & Larson, B. (2021). Work-from-anywhere: The productivity effects of geographic flexibility. *Strategic Management Journal*, 42(4), 655–683. <https://doi.org/10.1002/smj.3251>
- Chung, H., & van der Horst, M. (2018). Women's employment patterns after childbirth and the perceived access to and use of flexitime and teleworking. *Human Relations*, 71(1), 47–72. <https://doi.org/10.1177/0018726717713828>
- Citrin, J. M., & DeRosa, D. (2021, May 10). How to set up a remote employee for success on day one. *Harvard Business Review*. <https://hbr.org/2021/05/how-to-set-up-a-remote-employee-for-success-on-day-one>
- Craig, W. (2018, August 9). *8 Benefits of Measuring Employee Engagement*. Forbes. <https://www.forbes.com/sites/williamcraig/2018/09/18/8-benefits-of-measuring-employee-engagement/?sh=62a0963a7c55>
- Deloitte. (2020). *Re-architecting Work Models: Four future worlds of work*. <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/human-capital/deloitte-au-hc-re-architecting-work-models-111120.pdf>
- Deloitte Access Economics. (2021). *The decentralisation of work and the Illawarra: Practical insights for business*. Deloitte Access Economics. <https://www2.deloitte.com/au/en/pages/economics/articles/decentralisation-work-illawarra.html>
- Dempsey, S. (2020, October 19). *Workplace 2021: The new hybrid office model*. Australian Institute of Company Directors. <https://aicd.companydirectors.com.au/membership/membership-update/workplace-2021-the-new-hybrid-office-model>
- Donut. (2020, October 28). Donut Watercooler: Recreate Office Banter and Bonding in Slack. *Donut*. <https://www.donut.com/blog/introducing-donut-watercooler/>
- Duranton, G., & Puga, D. (2004). Chapter 48—Micro-Foundations of Urban Agglomeration Economies. In J. V. Henderson & J.-F. Thisse (Eds.), *Handbook of Regional and Urban Economics* (Vol. 4, pp. 2063–2117). Elsevier. [https://doi.org/10.1016/S1574-0080\(04\)80005-1](https://doi.org/10.1016/S1574-0080(04)80005-1)
- Dutcher, G. (2012). The effects of telecommuting on productivity: An experimental examination. The role of dull and creative tasks. *Journal of Economic Behavior & Organization*, 84(1), 355–363. <https://doi.org/10.1016/j.jebo.2012.04.009>
- eHealth NSW. (2020, May 19). *Telestroke 'a model for COVID-19 care and beyond.'* eHealth NSW. <https://www.ehealth.nsw.gov.au/features/telestroke>
- Fayard, A.-L., Weeks, J., & Khan, M. (2021, March 1). Designing the Hybrid Office. *Harvard Business Review*. <https://hbr.org/2021/03/designing-the-hybrid-office>
- Franklin, I. (2021). *The flip side to hybrid working*. LinkedIn. <https://www.linkedin.com/pulse/flip-side-hybrid-working-iain-franklin/?trackingId=GEJKzfuSEzTnb%2B34eInSew%3D%3D>
- Ge, K., Kulish, M., & Maguire, L. (2021). *Sensitivity Analysis on Sydney's Urban Structure and House Prices for the 2021 Intergenerational Report*. NSW Government. https://www.treasury.nsw.gov.au/sites/default/files/2021-01/2021_igr_ttrp_-_sensitivity_analysis_on_sydney_urban_structure_and_house_prices_for_the_2021_nsw_intergenerational_report.pdf
- GitLab. (2020). *The Remote Playbook*. <https://about.gitlab.com/resources/ebook-remote-playbook/>
- GitLab. (2021). *The guide to remote onboarding*. GitLab. <https://about.gitlab.com/company/culture/all-remote/onboarding/>
- Glaeser, E. L., & Gottlieb, J. D. (2008). The Economics of Place-Making Policies. *Brookings Papers on Economic Activity*, 2008, 155–239.
- Graham, D. J., Melo, P. S., Jiwattanakupaisarn, P., & Noland, R. B. (2010). Testing for Causality Between Productivity and Agglomeration Economies. *Journal of Regional Science*, 50(5), 935–951. <https://doi.org/10.1111/j.1467-9787.2010.00676.x>

References

- Grzegorzczak, M., Mariniello, M., Nurski, L., & Schraepen, T. (2021). Blending the physical and virtual: A hybrid model for the future of work. *Bruegel*, 14/2021, 22.
- Hardie, R. A., Sezgin, G., Dai, Z., & Georgiou, A. (2021). The uptake of GP telehealth services during the COVID-19 pandemic. *COVID-19 General Practice Snapshot*, 1. <https://doi.org/10.25949/C3HE-F430>
- Harter, J., & Mann, A. (2017, December 4). *The right culture: Not just about employee satisfaction*. Gallup Workplace. <https://www.gallup.com/workplace/236366/right-culture-not-employee-satisfaction.aspx>
- Hensher, D. A., Wei, E., Beck, M. J., & Balbontin, C. (2021). *The impact of COVID-19 on the time and monetary cost outlays for commuting—The case of the Greater Sydney Metropolitan Area after three months of restrictions* (No. 101; Transport Policy, pp. 71–80).
- Hopkins, J., & Bardoel, A. (2020). *Key working from home trends emerging from COVID-19: A report to the Fair Work Commission*. Fair Work Commission.
- Ibarra, H., Gillard, J., & Chamorro-Premuzic, T. (2020, July 16). Why WFH Isn't Necessarily Good for Women. *Harvard Business Review*. <https://hbr.org/2020/07/why-wfh-isnt-necessarily-good-for-women>
- Irvine, J. (2021, July 12). Slacking off working from home? The productivity tsar doesn't think so. *The Sydney Morning Herald*. <https://www.smh.com.au/business/the-economy/slacking-off-working-from-home-the-productivity-tsar-doesn-t-think-so-20210709-p588er.html>
- Iversen, T., McCall Rosenbluth, F., & Skorge, Ø. (2020). The Dilemma of Gender Equality: How Labor Market Regulation Divides Women by Class. *Journal of the American Academy of Arts & Sciences*, Dædalus (Winter 2020). <https://www.amacad.org/publication/dilemma-gender-equality-how-labor-market-regulation-divides-women-class>
- Joly, H. (2020, May 8). Lead your team into a post-pandemic world. *Harvard Business Review*. <https://hbr.org/2020/05/lead-your-team-into-a-post-pandemic-world>
- Kelly, M. (2021, August 5). Resilient CBD keeps below 10pc. *The Australian Financial Review*.
- Koehn, E., & Irvine, J. (2021, July 12). The five-day office week is dead, long live the hybrid model. *The Sydney Morning Herald*. <https://www.smh.com.au/business/companies/the-five-day-office-week-is-dead-long-live-the-hybrid-model-says-productivity-boss-20210706-p587d4.html>
- KPMG Private Enterprise. (2021). *Mastering a comeback: How family businesses are triumphing over COVID-19*.
- Kraut, R. E., Fussell, S. R., Brennan, S. E., & Siege, J. (2002). Understanding effects of proximity on collaboration: Implications for technologies to support remote collaborative work. In P. Hinds & S. Kiesler (Eds.), *Distributed Work*, 137–162.
- Lund, S., Madgavkar, A., Manyika, J., & Smit, S. (2020, November 23). *What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries*. McKinsey & Company. <https://www.mckinsey.com/featured-insights/future-of-work/whats-next-for-remote-work-an-analysis-of-2000-tasks-800-jobs-and-nine-countries>
- Mann, S., & Holdsworth, L. (2003). The Psychological Impact of Teleworking: Stress, Emotions and Health. *New Technology Work and Employment*, 18(3), 196–211. <https://doi.org/10.1111/1468-005X.00121>
- Mattey, C., Russell, R., Sibilio, N., & Wong, D. (2020). *The expectation gap in the future of work: Employee vs. Employer sentiment and the emerging division of Australian organisations*. Boston Consulting Group.
- Mendoza, N. F. (2020, September 17). *The COVID-19 effect on career development: Forward, backward, or stalled?* TechRepublic. <https://www.techrepublic.com/article/the-covid-19-effect-on-career-development-forward-backward-or-stalled/>
- Mental Health Commission of New South Wales. (2020, November 24). *Mental Health at Work: COVID-19*. Mental Health at Work: COVID-19. <https://www.nswmentalhealthcommission.com.au/news/mental-health-work-covid-19>

References

- Microsoft. (2021). *2021 Work Trend Index: Annual Report*. <https://www.microsoft.com/en-us/worklab/work-trend-index/hybrid-work>
- Monteiro, N. P., Straume, O. R., & Valente, M. (2019). *Does Remote Work Improve or Impair Firm Labour Productivity? Longitudinal Evidence from Portugal* (SSRN Scholarly Paper ID 3507262). Social Science Research Network. <https://papers.ssrn.com/abstract=3507262>
- Neumark, D., & Simpson, H. (2015). Chapter 18—Place-Based Policies. In G. Duranton, J. V. Henderson, & W. C. Strange (Eds.), *Handbook of Regional and Urban Economics* (Vol. 5, pp. 1197–1287). Elsevier. <https://doi.org/10.1016/B978-0-444-59531-7.00018-1>
- North Sydney office rentals boosted by COVID, as area competes for status as regional tech hub. (2021, July). *North Sydney Sun*, 1–2.
- NSW Department of Planning, Industry and Environment. (2020). *Public Spaces Streets as Shared Spaces Engagement Report*. https://www.dpie.nsw.gov.au/__data/assets/pdf_file/0006/348027/Public-Spaces-Streets-as-Shared-Spaces-Engagement-Report.pdf
- NSW Government. (2020a). *eHealth NSW News: COVID-19 Edition*. 12.
- NSW Government. (2020b, December). *eHealth News: A Year in Review*. https://www.ehealth.nsw.gov.au/__data/assets/pdf_file/0007/625084/eHealth-Newsletter-December-2020.pdf
- NSW Innovation and Productivity Council. (2020). *NSW Remote Working Insights: Our experience during COVID-19 and what it means for the future of work*. NSW Innovation and Productivity Council. <https://www.treasury.nsw.gov.au/sites/default/files/2020-12/Full%20Report-IPC-NSW-Remote-Working-Insights-Report-1-2020-accessible.pdf>
- NSW Productivity Commission. (2020). *Productivity Commission Green Paper: Continuing the Productivity Conversation*. https://www.productivity.nsw.gov.au/sites/default/files/2020-08/Productivity_Commission_Green%20Paper_FINAL.pdf
- Palmer, A. (2020, October 29). Amazon says the coronavirus pandemic saved it \$1 billion in travel expenses. *CNBC*. <https://www.cnbc.com/2020/10/29/amazon-saved-1-billion-in-travel-expenses-due-to-the-pandemic.html>
- Partridge, J. (2021, June 20). Switch to more home working after Covid 'will make gender inequality worse'. *The Guardian*. <http://www.theguardian.com/business/2021/jun/19/switch-to-more-home-working-after-covid-will-make-gender-inequality-worse>
- Penn, A. (2020). *The future of the workplace post-COVID-19—The new normal isn't coming, it's here now*. Telstra Exchange. <https://exchange.telstra.com.au/the-future-of-the-workplace-post-covid-19-the-new-normal-isnt-coming-its-here-now/>
- Pennington, A., & Stanford, J. (2020). *Working from Home: Opportunities and Risks* [Briefing Paper]. The Australia Institute: Centre for Future Work. https://www.futurework.org.au/working_from_home_in_a_pandemic_opportunities_and_risks
- Pesutto, J. (2021, July 18). WFH experiment not working for everyone. *The Sydney Morning Herald*. <https://www.smh.com.au/national/victoria/wfh-experiment-not-working-for-everyone-20210718-p58aoq.html>
- Productivity Commission. (2021). *Working from home* [Research Paper]. <https://www.pc.gov.au/research/completed/working-from-home/working-from-home.pdf>
- Property Council of Australia & Ernst & Young. (2021). *Reimagining our economic powerhouses: How to turn CBDs into central experience districts*. https://www.ey.com/en_au/real-estate-hospitality-construction/how-do-we-turn-cbds-into-central-experience-districts
- Property Council of Australia. (2021a, May 6). *Big step up in CBD office occupancy*. <https://research.propertycouncil.com.au/blog/big-step-up-in-cbd-office-occupancy>
- Puga, D. (2010). The Magnitude and Causes of Agglomeration Economies*. *Journal of Regional Science*, 50(1), 203–219. <https://doi.org/10.1111/j.1467-9787.2009.00657.x>

References

- PwC Australia. (2021a). *Changing Places: How hybrid working is rewriting the rule book* (The Future of Work). <https://www.pwc.com.au/important-problems/future-of-work-design-for-the-future/changing-places-hybrid-working/changing-places-report.html>
- PwC Australia. (2021b). *Changing Places: Uplifting, measuring and managing hybrid work performance* (The Future of Work).
- Rosenthal, S. S., & Strange, W. C. (2004). Chapter 49—Evidence on the Nature and Sources of Agglomeration Economies. In J. V. Henderson & J.-F. Thisse (Eds.), *Handbook of Regional and Urban Economics* (Vol. 4, pp. 2119–2171). Elsevier. [https://doi.org/10.1016/S1574-0080\(04\)80006-3](https://doi.org/10.1016/S1574-0080(04)80006-3)
- Ryba, K. (2020, January 12). *Professional Development for Remote Workers: Top Tips and Strategies*. Quantum Workplace. <https://www.quantumworkplace.com/future-of-work/professional-development-for-remote-workers>
- Salvador, E., Mariotti, I., & Conicella, F. (2013). Science park or innovation cluster? *International Journal of Entrepreneurial Behaviour & Research*, 19(6), 656–674. <http://dx.doi.org.ezproxy.library.sydney.edu.au/10.1108/IJEER-10-2012-0108>
- Smith, A. (2021, April 19). Vacant Sydney CBD offices could be used for housing, NSW chief economist Stephen Walters says. *The Sydney Morning Herald*. <https://www.smh.com.au/politics/nsw/vacant-cbd-offices-could-be-used-for-housing-nsw-chief-economist-says-20210419-p57kh9.html>
- Spataro, J. (2020, July 8). The future of work—The good, the challenging & the unknown | Microsoft 365 Blog The Future of Work Report | M365 Blog. *Microsoft 365 Blog*. <https://www.microsoft.com/en-us/microsoft-365/blog/2020/07/08/future-work-good-challenging-unknown/>
- Stockwell, S., Trott, M., Tully, M., Shin, J., Barnett, Y., Butler, L., McDermott, D., Schuch, F., & Smith, L. (2021). Changes in physical activity and sedentary behaviours from before to during the COVID-19 pandemic lockdown: A systematic review. *BMJ Open Sport & Exercise Medicine*, 7(1), e000960. <https://doi.org/10.1136/bmjsem-2020-000960>
- Taneja, S., Mizen, P., & Bloom, N. (2021, March 15). Working from home is revolutionising the UK labour market. *VoxEU.Org*. <https://voxeu.org/article/working-home-revolutionising-uk-labour-market>
- Transport for NSW. (2020a). *COVID Safe Travel Choices Summer Edition 2020-2021*. Transport for NSW.
- Transport for NSW. (2020b). *State of the Cities Report: Data Insights*. Transport for NSW. (2021a). *Opal Data*.
- Transport for NSW. (2021b). *Sydney Coordinated Adaptive Traffic System Data*.
- Tuttle, B. (2021, March 5). Cast and crew of “Raya and the Last Dragon” talk about the challenges of making a movie from home. *Attractions Magazine*. <https://attractionsmagazine.com/cast-and-crew-raya-and-the-last-dragon-talk-the-challenges-of-making-a-movie-from-home/>
- Ulubasoglu, M., & Onder, Y. K. (2020, June 29). Teleworkability in Australia: 41% of full-time and 35% of part-time jobs can be done from home. *The Conversation*. <http://theconversation.com/teleworkability-in-australia-41-of-full-time-and-35-of-part-time-jobs-can-be-done-from-home-140723>
- Vij, A., Barrie, H., Anilan, V., Onur, I., Souza, F., Goodwin-Smith, I., & Beer, A. (2021). *Encouraging the continuation of work-from-home practices in a post-pandemic world*. Commonwealth of Australia as represented by the Department of Infrastructure, Transport, Regional Development and Communications; University of South Australia; and the iMOVE Cooperative Research Centre.
- Waters, C. (2021, April 29). Four times a year in the office: Atlassian goes all in on WFH. *The Sydney Morning Herald*. <https://www.smh.com.au/business/small-business/four-times-a-year-in-the-office-atlassian-goes-all-in-on-wfh-20210428-p57n4w.html>

References

Winkler, S., Konig, C. J., & Kleinmann, M. (2012). New insights into an old debate: Investigating the temporal sequence of commitment and performance at the business unit level. *Journal of Occupational and Organizational Psychology*, 85(3), 503–522. <https://doi.org/10.1111/j.2044-8325.2012.02054.x>

Wood, D., Griffiths, K., & Crowley, T. (2021). *Women's work: The impact of the COVID crisis on Australian women*. Grattan Institute. <https://nla.gov.au/nla.obj-2989927154>

World Health Organisation. (2020). *Mental health and psychosocial considerations during the COVID-19 Pandemic*. World Health Organisation. <https://apps.who.int/iris/handle/10665/331490>

Wright, S. (2021, May 26). Will flexible working kill the CBD? Not likely, Productivity Commission says. *The Sydney Morning Herald*. <https://www.smh.com.au/politics/federal/will-flexible-working-kill-the-cbd-not-likely-productivity-commission-says-20210526-p57vbo.html>

Xiao, Y., Becerik-Gerber, B., Lucas, G., & Roll, S. C. (2021). Impacts of Working From Home During COVID-19 Pandemic on Physical and Mental Well-Being of Office Workstation Users. *Journal of Occupational and Environmental Medicine*, 63(3), 181–190. <https://doi.org/10.1097/JOM.0000000000002097>

Zak, P. J. (2017, January). The neuroscience of trust. *Harvard Business Review*. <https://hbr.org/2017/01/the-neuroscience-of-trust>



**Jointly published by
Investment NSW and
NSW Treasury**

FIRST PUBLISHED NOVEMBER 2021.

DPC21/06002

© State of New South Wales through
Investment NSW and NSW Treasury 2021.

This publication is copyright. You may download, display, print and reproduce this material provided that the wording is reproduced exactly, the source is acknowledged, and the copyright, update address and disclaimer notice are retained.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (November 2021) and may not be accurate, current or complete. It is produced entirely on a non-reliance basis. The State of New South Wales (including Investment NSW and NSW Treasury), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice relevant to their own circumstances when making decisions related to material contained in this publication.