

WHITE PAPER

Road to recovery

An industry report on the outlook for construction in Australia





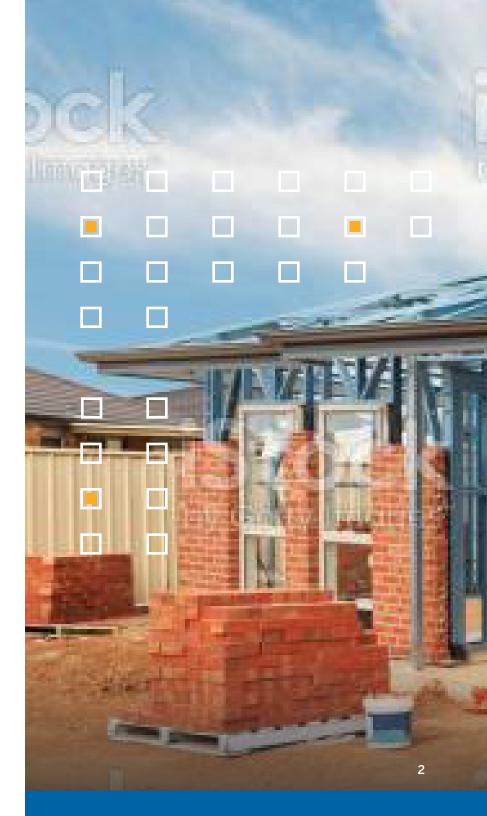


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Foreword

Road to recovery is a report from construction software solutions provider Trimble Viewpoint APAC and The Australian National Construction Review (ANCR). This is a study of Australian construction workers in May 2021 to determine how the Australian construction industry has been impacted by the COVID-19 pandemic, as well as the level of digital enablement construction companies have achieved in their business operations. Findings from the survey were supplemented with insights from in-depth interviews and other industry publications.

At the time of writing this report in September 2021, many states in Australia were in the midst of battling the Delta wave of the coronavirus, including lockdowns, increased restrictions and temporary shutdowns of the construction industry. While the findings in this report pre-date this latest outbreak of COVID-19 in Australia, they provide helpful insight into how the industry recovered from the first and second waves of the virus in 2020.



Introduction

The impact of the COVID-19 pandemic in Australia has been far-reaching, with 72% of businesses reporting a decrease in revenue in May 2020, according to the **Australian Bureau of Statistics**. While the construction industry has fared better than the hardest hit sectors, such as accommodation and food services, it's not been without its challenges.

In April 2020, during the first wave of the virus in the country, the **Australian Performance of Construction Index (PCI)** dropped to a record 21.6, the lowest point since the survey began in September 2005. A score below 50 indicates that the industry is contracting, with the distance from 50 representing the strength of contraction. According to the Australian Construction Industry Forum's (ACIF) **Bridge to Recovery report** in June 2020, this industry slowdown was due to the cancellation or delay of many construction projects when lockdowns were introduced. Consequently, there was a sharp fall in activity, new orders and employment.

However, a year later, thanks to rapid economic recovery in Australia and the stimulus packages introduced by the Federal Government, the Australian PCI reached a record high of 61.8 in March 2021, the highest level of industry expansion witnessed since the survey began in 2005.



Introduction continued

ACIF's Australian Construction Market Report — May 2021

identified where this growth was coming from. At the time the report was released, the building of new houses had experienced 10% growth thus far in 2021 thanks to a surge in house demand, record low interest rates, government support programs, such as **HomeBuilder**, and increasing optimism regarding employment growth. Government spending and investment in social infrastructure and other essential services had also increased, while infrastructure spending was expected to enlarge.

In the space of a mere 11 months, the construction industry experienced both its lowest and highest points in 15 years. A true rollercoaster of change. And while some sub-sectors continued to struggle, most notably accommodation, recreation, entertainment and offices, the outlook for the industry as a whole was more positive than expected in May 2021. The ACIF forecast a growth rate of 2.7%, which would bring the work of the building and construction industry up to \$243 billion at the end of 2021.



Introduction continued

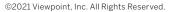
However, as we have all learnt in the last year, change can come rapidly and unexpectedly.

At the time of writing in September 2021, the industry is again experiencing significant flux. The spread of Delta throughout a number of states in Australia since July 2021, including NSW, Victoria and Queensland, has led to a second contraction in the industry. The Australian PCI fell from 55.5 in June 2021 to 48.7 in July, before dropping a further 10.3 points to 38.4 in August.

Most notably, in the midst of the NSW Delta outbreak, construction in Greater Sydney was suddenly shut down on 19 July 2021 — the first time such a decision had been made in any Australian jurisdiction. The shutdown, which lasted for two weeks, affected all non-urgent works and **reportedly cost the NSW economy \$1.4 billion**. The industry restarted with additional restrictions in place, including new vaccination and COVID-19 testing requirements for workers.

Two months later, almost to the day, Victoria made the same decision, announcing a two-week shutdown of construction in metropolitan Melbourne, City of Ballarat, City of Greater Geelong, Surf Coast Shire and Mitchell Shire on 20 September 2021. Some estimates put the cost of this shutdown at <u>more</u> than \$2 billion.

Stock



Introduction continued

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While the studies and reports in this whitepaper pre-date the events of the Delta outbreak in Australia, they provide insight into how the construction industry recovered from its first COVID-induced contraction in 2020. This offers a reassuring reflection on the sector's resilience and its ability to bounce back from uncertainty, a welcome observation in light of ongoing restrictions, the state of the pandemic worldwide and probability of future waves of the virus in coming years.



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About the survey

In May 2021, Trimble Viewpoint and ANCR surveyed 98 individuals working in the Australian construction industry to learn how they and their companies had been impacted by COVID-19 in the past year, as well as the degree of digital enablement present in the business operations of their companies.

Respondents were from across the country, with most working predominantly in NSW, followed by Victoria, Queensland and Western Australia (see Figure 1). The vast majority were in the 35–64 years age bracket, accounting for 76.53% of respondents, with just 13.26% younger than 35 years and 10.2% older than 65 years (see Figure 2).

Figure 1. Which state/territory do you predominantly work in?

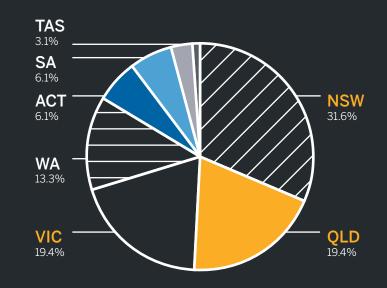
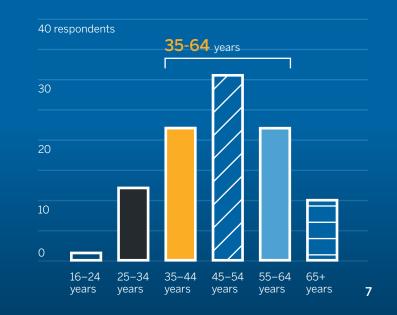


Figure 2. Age of respondents



About the survey continued

Small to medium-sized businesses with less than 100 employees accounted for almost 70% of respondents (see Figure 3).

The majority of respondents (70.4%) worked in the commercial sector, while an almost equal number worked in residential or civil, with 43.9% and 45.9% respectively. Approximately 60% of respondents worked in more than one sector.

Approximately one-third of respondents worked in project management and operations within the construction industry. A further 30% identified themselves as the business owner or CEO within their company, while 23% worked in the finance department.

The remaining 12.2% of respondents worked in HR, IT or as superintendent/foreman of a site (see Figure 4). The responses in these categories were too few to draw any conclusive insights, so the role-specific section of this report focuses on the findings related to project management, finance and business ownership.

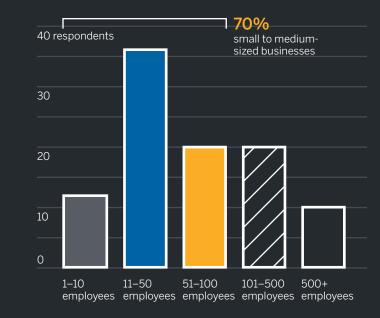
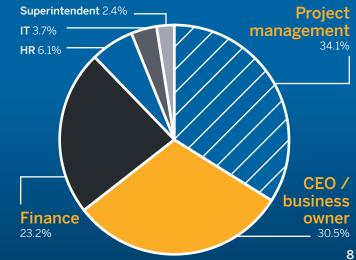


Figure 4. What best describes your role in the business?





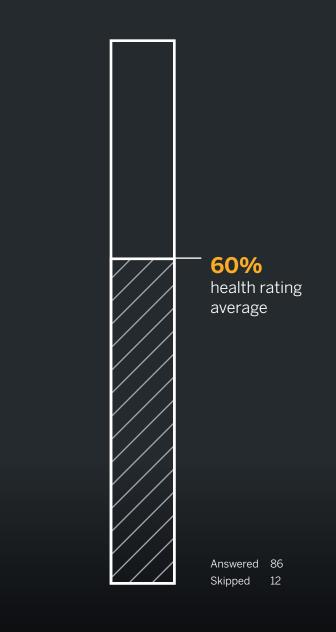
The outlook for the Australian construction industry

Overview

Overall, the general outlook of survey respondents on the Australian construction industry was positive. When asked about their views on the health of the industry, 72% of respondents gave a rating of 5 out of 10 or higher, for an average 60% health rating.

The outlook on the competitiveness of the industry was similar, with an average rating of 7 out of 10.

This aligned with the Australian Construction Market Report — May 2021 (ACMR), which noted that the construction industry outlook was more favourable than previously expected, with a projected growth rate of 2.7%. This was attributed to Australia's ability to manage the pandemic, as well as a number of stimulus packages designed to help the industry recover. **Q8.** How would you rate the current health of the Australian construction industry?



Overview continued

However, despite an overall positive outlook, recovery was not even across the different construction sectors.

For those working solely in the commercial sector, the industry health average rating was 53.6, the lowest response given for any sector. In recent years the non-residential building sector has experienced a surge in work, however according to the ACMR, COVID-19 has put an end to this; the sector is expected to see a reduction of work in areas such as accommodation, entertainment and recreation, education and retail. This is despite growth in other industries such as health. ACIF predicts that the fall in the non-residential building sector will reach its lowest point in the next two years.

Respondents working in the residential building sector had the most positive outlook on industry health. While the sector dropped significantly in 2020, continuing a downturn that began in 2019, at the time of the ACMR's release, ACIF expected the sector to recover in 2021, with more than \$105 billion of work forecast to be generated by the sector by the end of the year. However, whether this will play out now that the Delta wave has swept through Australia's east coast remains to be seen.



Overview continued

Civil construction (or engineering construction as in the ACMR) was projected to recover in 2021 thanks to government infrastructure investment programs. The uplift was expected to grow from \$90 billion in 2021 to \$97 billion in 2025, with a peak in 2022.

Time will tell how the Delta wave of the COVID-19 pandemic will impact these predictions. However, in positive news, the NSW construction industry is set to return to 100% capacity on 27 September 2021, thanks to increased vaccination levels amongst workers. With the easing of restrictions, the industry can hopefully look forward to recovering from this latest outbreak.

In the following sections, we will take an in-depth look at some of the results from the survey that give insight into how the construction industry was impacted by COVID-19 and consequently recovered from the first two waves in Australia.

Sector	Industry Health Average	Competitiveness Average
Commercial only (27)	53.6	72.5
Residential only (4)	70	77
Civil only (17)	60	65
Commercial & residential (17)	60.5	71.6
Commercial & civil (8)	71.3	75.3
Residential & civil (1)	66	90
Commercial, residential & civil (14)	61.4	65.4
Total responses	60	70

Workload

Impact of COVID-19

When asked about their level of busyness, 41.9% of survey respondents said they had moderately or significantly more work in May 2021 than in pre-COVID times, while 31.4% said their workload was similar to before the onset of the pandemic.

26.7% reported being less busy compared to before the pandemic, with almost all of these respondents working at least partly in the commercial construction sector.

When compared to May/June 2021 during the first lockdowns in Australia, 48.9% of respondents said that their workload had increased. A further 30.2% said that their workload had stayed the same. Of this number, 6 out of 10 reported no change to their workload compared to pre-pandemic, suggesting that for almost a one-fifth of respondents, any impact to their workload was minimal or short-lived. 48.9% of respondents said their workload had increased compared to during the first wave of COVID-19 in Australia.

Looking ahead: Workload increases expected

Despite one-quarter of respondents being less busy than before the pandemic at the time of the survey, there was a generally positive outlook on the future of the industry.

15.1% expected a significant increase in their workload, 43% predicted a moderate increase and 29.1% thought their workload would remain the same. Only 12.8% expected their workload to decrease.

The vast majority of respondents were also confident that their company leadership was steering them in the right direction for growth. 46.5% were very confident, while 38.4% were moderately confident. Only 3.5% said that they were moderately worried and no one reported significant concern about their leadership's decision-making.

Even after adjusting the findings to remove those who identified themselves as a CEO or business owner, who presumably have some bias when evaluating the quality of leadership in their company, the results were still very positive. 83.6% of respondents who weren't business owners or CEOs expressed confidence in their leadership's ability to manage the company well.

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84.9% of respondents are confident that their business leaders are steering their company in the right direction.

Jobs

Impact of COVID-19

Employment in the construction industry fell by 2.6% in 2020, according to the ACMR. In line with this, most respondents in the survey were unaffected, with 83.5% remaining in the same job from May 2020 to May 2021. Of those that had changed jobs (16.5%), half had moved roles within their company and half had moved to a new company.

The top reasons for changing jobs were: offered a promotion (28.6%), offered a more interesting role (21.4%), redundancy (21.4%) and finding a role that fit better with their personal commitments, such as family and health (21.4%). Consequently, approximately 3.5% of survey respondents lost their job due to redundancy, slightly more than the industry average.



Jobs continued

While there was limited job mobility amongst the survey respondents themselves, 73.3% reported that their company had hired new employees in the last 6 months. This was predominantly to meet an increase in work (68.3%) and/or to replace staff who had left or retired (63.5%).

Almost 4 in 10 respondents (37.7%) also reported that their company had let staff go in the last 6 months. This was mostly due to a decrease in work (56.3%), or redundancy for other reasons that did not include a decrease in workload, internal restructuring or service reduction (43.8%).

Approximately 28% of respondents indicated that their company had both hired new employees and let some go within the last six months, suggesting significant fluctuation and uncertainty for some businesses. The results also suggest that small companies experienced less staff mobility than larger companies. Only 22.2% of small businesses with 10 employees or less hired any new staff. In comparison, 100% of companies with 101–500 employees and 87.5% of those with 500+ hired new employees. 50% of 500+ employee companies also let staff go in the last 6 months compared to just 11.1% of small businesses with 10 or fewer employees.

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Respondents from large companies reported greater staff mobility in the 6 months to May 2021 than those from smaller companies.

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Company Size	Hired new staff in last 6 months	Let staff go in the last 6 months
1–10 employees	22.2%	11.1%
11–50 employees	70.6%	41.2%
51–100 employees	70.6%	35.3%
101–500 employees	100%	41.2%
500+ employees	87.5%	50%

Jobs continued

This may in part be attributable to more small businesses being eligible for the government support payments. Smaller companies with a turnover of less than \$1 billion were only required to have lost 30% of their income to be eligible for JobKeeper payments, compared to a required 50% loss for larger companies with a turnover of more than \$1 billion. Additionally, the apprentice and trainee subsidy support package was initially only open to businesses with 20 or fewer employees, or companies of any size that re-employed an out-of-work apprentice, before later being expanded to include some larger companies.

Looking ahead: Jobs growth predicted

In May 2021, the ACIF noted in their report that a strong rebound in residential and civil construction was already driving recovery in employment. At the time, they predicted that job numbers would return to around 1.2 million in 2021, with sustained growth into 2022. However it remains to be seen what the ongoing effects of the Delta wave will be. Even before the Delta lockdowns, there was industry concern about labour shortages in particular geographic areas and skill sets, which may have been compounded due to interstate travel restrictions throughout Australia.



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Investment & growth

Almost half of the survey respondents (49%) indicated that their company had increased investment in work health and safety in the past 12 months. This was not unexpected given the need for new procedures around contact tracing, sanitisation and social distancing related to the pandemic.

Increased investment in administrative or management software and hardware was the next most popular answer with 45% of respondents, followed by onsite technology and equipment with 43%.

While most respondents were aware of areas in which their company had increased investment, significantly less (49%) were aware of areas in which investment had been reduced.

49% of respondents said their company had increased investment in work health and safety in the past 12 months.

Investment & growth continued

Of those who were able to answer, 52.4% (or 22 respondents) indicated that their company had decreased investment in marketing and advertising spend in the past 12 months. This was somewhat surprising, as 29 respondents had reported that their companies had increased investment in marketing and advertising in the previous question. There was almost no overlap between these respondents, suggesting a strong divide in how different businesses chose (or were forced) to ride out the pandemic. Large companies with 100+ employees were slightly more likely to have increased marketing and advertising spend, while SMEs were slightly more likely to have decreased investment, a difference which is likely attributable to company turnover and cash flow allowances.

The second most popular area for decreased investment was remote and hybrid working practices, with 26% of those able to respond. This also came as a surprise; however, it can likely be attributed to the timing of the survey. It was recorded more than six months after the first wave of the COVID-19 outbreak in Sydney and the second wave in Melbourne, and a little over 12 months since the start of the pandemic. At that point, businesses may have been looking to decrease investment as life appeared to return to normal following a long period without any extended lockdowns.

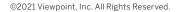


Investment & growth continued

The post-pandemic construction industry

Despite the undeniable effects of the COVID-19 pandemic on Australian construction and the wider economy, the industry made a good recovery from the first and second waves of the virus. In fact, recovery was better than expected, thanks in part to government support packages for businesses and stimulus packages for the economy. In May 2021, more than 70% of survey respondents had the same or more work compared to pre-pandemic times. Employment was increasing and more than 40% of respondents indicated that their companies had been able to increase investment in new business and onsite technology and equipment. Additionally, the outlook of workers in the industry was largely positive.

As construction companies now look towards how they will guide their companies through this second recovery, what opportunities can they take advantage of to boost growth and outbid their competitors? One underappreciated area lies in the untapped potential of business data.







The critical role of accurate business data

The majority of reports on digital enablement within the construction industry focus on technology related to the design, manufacturing and construction process, such as Building Information Modelling (BIM), 3D printing and more. Much less thought is given to the essential business software that enables those in finance, project management, HR, IT, inventory management and other business-side roles to perform their jobs.

Unfortunately, we did not receive enough responses in our survey to report on every business function within the construction industry, however, we were able to draw out some insights related to the finance, project management and business owner/CEO roles. This allows us to provide some highlevel commentary, particularly on the critical role of business data in improving efficiency, forecasting and decision-making. These areas are key to driving business growth during times of economic stability and consequently, even more important during times of uncertainty. (+)(+)22

Finance

Only 11% of respondents in a finance role reported that they definitely had the right software to do their job well. Instead, most respondents deemed that their tech stack was somewhat adequate, but with room for improvement. The reasons for this can be explained by the following insights:

- On average, respondents reported that only 41% of regular, repetitive finance processes were automated.
- 28% of respondents said it took them more than 8 hours to gather data for each reporting period, with another 28% saying it took them between 3–8 hours.
- Only 5.6% of respondents reported that their finance systems integrated seamlessly with all other systems and departments in their company. 44.4% said that they either had no integration or some basic integration between particular systems.
- 50% of respondents said they had a moderate ability to accurately forecast, with another third saying it was mostly easy to forecast. Only 5.6% indicated that it was very easy to accurately forecast, indicating no need for improvement.



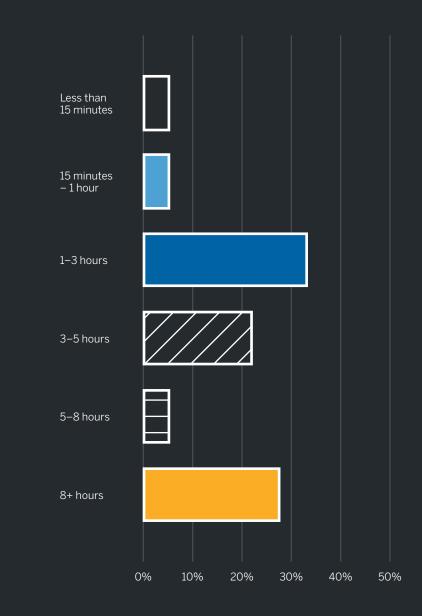
Finance continued

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When considering some of the challenges on the right, it's not surprising that one-third of finance respondents believe that their current tech stack will **not** be sufficient to meet their company's needs over the next three years. In fact, only 5.6% were completely confident in the future readiness of their tech stack.

There are many opportunities for construction businesses to improve efficiency and productivity with increased automation, integration and access to data.

Q31. How much time does it take you to gather data for each reporting period?



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Case Study

Shaun Perrett, Finance and Business Director at WSP, faced a similar problem when looking at his old finance solution. His team needed a better way of managing the cost of projects across the timeline in a more integrated and accurate way.

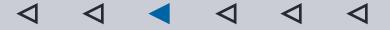
"We were attempting to use the project management system that we were running at the time, coupling that together with spreadsheets and our financial software one of those off-the-shelf accounting packages," he said.

As the company took on more project management work, particularly in the construction space, it became clear that their current disconnected approach wasn't working.

After a lot of research, Mr Perrett and his team decided to implement the Trimble Viewpoint Jobpac and FieldView products, which together offered an integrated finance and mobile field management solution. "It was the offer of managing those two areas together, particularly with the in-build accounting package, that really attracted us," he said. "If the offering was just the accounting package or just the field management solution, it wouldn't have been enough. It was the two together that really got us on board."

By updating their systems with a cloud-based integrated solution, WSP was better equipped to manage the shift to remote work when the pandemic hit.

"It would have been a game-stopper [without it], I'm sure," said Mr Perrett. "The fact that we can get onto Jobpac of FieldView remotely to work on it together in a meeting is great. We wouldn't have been able to work without it."



Project management function

Those in project management fared better than finance, with the majority (69.6%) stating that their current tech stack was at least somewhat adequate in enabling them to do their job well. However, a little over one-third of respondents were unsure if it would be sufficient for the next three years. Only 13% reported that they were very confident in the future readiness of their current set-up.

Customisation of the software doesn't appear to be the main problem — 39% of respondents reported that their software was moderately customisable for individual projects, with another 30.4% indicating that their platform was highly customisable. Instead, project managers are being let down in the area of integration.





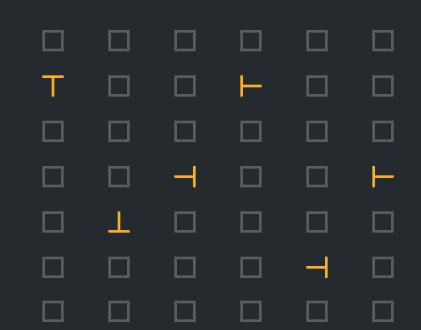
Project management function continued

48% of respondents said their project management software had only basic or no integration capability with other systems or departments in their business. Another 17.4% reported moderate integration, while just 4.4% said that everything was seamlessly integrated and problems were rare.

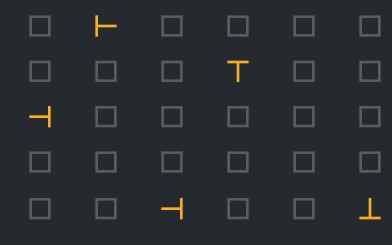
Furthermore, project management teams spent an average of 41% of their weekly work hours keeping their platform upto-date. This could suggest that teams are manually inputting data into their project management software — a task that could be automated with improved integration between business systems.

Forecasting also emerged as a challenge for those in a project management role. The majority of respondents (61%) said they had a moderate ability to accurately forecast, while just 21.7% said it was quite easy to forecast. No one indicated that it was a very simple task. Given that 56.5% of respondents also said they only had access to real-time data some of the time, this isn't surprising, as without access to the right data, accurate forecasting is virtually impossible.

These challenges with data and forecasting can potentially be attributed to the lack of integration between systems and the time required to keep project management software up to date.



48% of project managers said their software had only basic or no integration with other systems in their company.



Business owner / CEO function

28% of business owners and CEOs had complete confidence in their company's current tech stack to support growth in the next three years, contrasting with just 5.6% of finance and 13% of project manager respondents who said the same.

In fact, the vast majority of business owners (84%) were at least moderately confident in the future readiness of their tech setup, and 68% indicated that they had no plans at the time of completing the survey to increase investment in technology in the coming 12 months. For the vast majority, this was because they were happy with their existing tech stack, however, 17.7% also said that they didn't have the budget to increase investment.

Business owners and CEOs were
more confident in the future
readiness of their tech stack
and their ability to accurately
forecast than project managers
and finance personnel.

Business owners also had greater confidence in their ability to accurately forecast profits and growth. 40% reported that accurate forecasting was quite easy or very easy, while another 28% indicated that they had a moderate ability to forecast.

48% of respondents also said that they always had access to real-time data, compared to 26% of project managers.

Potentially, business owners are unaware of some of the struggles faced by finance and project managers in the day-to-day tasks they perform. On the surface, it might appear to a CEO or owner that they easily have access to the data they need in the finance reports, without any awareness of the eight hours the finance worker spent trying to gather that information — eight hours that could be better served elsewhere.





Conclusion

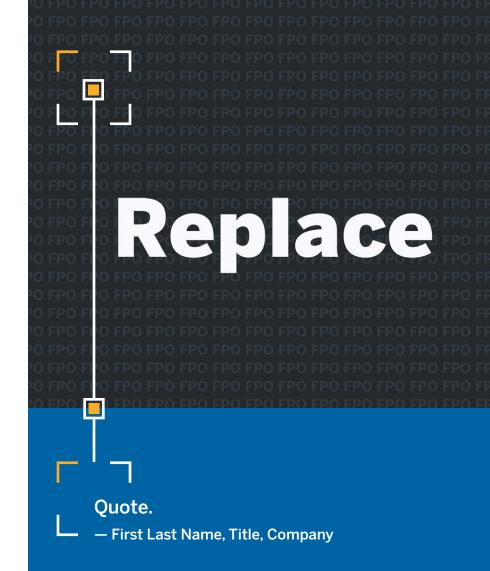
At the time of writing, Australia is in the midst of its third wave of the pandemic, but business leaders in construction can be encouraged that the industry has already shown resilience in its ability to bounce back from previous lockdowns. Additionally, the outlook of employees in the industry is largely positive, particularly for those in residential and civil construction. And workers have expressed confidence in their leaders' ability to guide them through this time of uncertainty.

For construction leaders now planning how to boost growth on the other side of the latest lockdown, a great opportunity lies in the business operations of their companies. Business data has significant untapped potential in the industry. With the right digital technologies enabling real-time access to data, accurate forecasting and an integrated overview of company operations, construction leaders will be better equipped to make informed decisions and build resilience into their business model. Then, however uncertain the future may still be, they can be confident that their company is prepared to meet new challenges and opportunities as they arise.



Learn more about Trimble Construction One

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ABOUT TRIMBLE VIEWPOINT

Trimble Viewpoint construction software solutions, part of Trimble Connected Construction, allow contractors to better manage their projects, processes and people, using the data gathered to lower risk and improve margins. With more than 40 percent of the ENR 400 on our platforms, Trimble Viewpoint innovations are transforming the construction industry by connecting operations across financial and HR systems, project management tools and mobile field solutions.

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