BENCHMARK REPORT

How We Build Now

Tracking Technology in Asia Pacific Construction in 2022

PROCORE | YouGov

Foreword

When McKinsey published its global industry digitisation index in 2016, construction ranked second from the bottom, ahead only of agriculture and hunting. Since then, the technology tool belt available to construction companies has grown heavy with options. And yet, construction productivity continues to flatline.

The productivity problem is far more than "construction doesn't want to change". Each new building is unique, and it can take years between design and delivery. This makes it much harder to replicate than the next unit of output rolled out from the factory floor. Combine this with a history of technology that has over-promised and under-delivered, and it is easy to see why construction companies are cautious about digital transformation.

But construction companies are walking into significant headwinds. Labour shortages, raw materials costs, extreme weather events and geopolitical instability are all hurting bottom lines. In response, leaders are looking for new ways to boost productivity and profitability.

Construction companies are leveraging technology and data to run better businesses, and to use predictive insights to build smarter—and this is reflected in the latest instalment of Procore Technologies' How We Build Now report.

The report's third edition benchmarks technological advancements and business practices across an expanded geographical scope of Malaysia, New Zealand, Philippines and Singapore, as well as Australia.

What can we learn from the insights from 1,138 decision-makers and influencers?

Sentiment across all countries is strong, with 91% of respondents confident about the industry outlook over the next 12 months. Around two-thirds of respondents expect to see an increase in the number and value of projects over the next 12 months.

But scratch below the surface and our findings suggest a direct correlation between positive industry sentiment and the intention to adopt technology. The country with the most optimistic outlook, the Philippines, is also embracing digital technology at speed. The country with the lowest construction industry sentiment, Australia, is also more hesitant in its approach to digital transformation.

All the shiny Hollywood technology—whether that's artificial intelligence or drones or extended reality—may catch the headlines. But based on the survey results, around a third of respondents still use paper to capture, track and manage data. This is not limited to small businesses. Some of the region's largest companies are reliant on analog systems in the digital age. They are missing the easiest path to rapid digital transformation.

The aim of this report is to spark new conversations and to challenge construction leaders to think differently about technology. We look forward to your feedback on the findings, and to partnering with you as we work together to drive construction up the digital curve.

Tom Karemacher
Vice President, Asia Pacific
Procore

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PROCORE

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Who We Surveyed

Procore commissioned independent research company, YouGov, to conduct an online questionnaire in February 2022 with 1,138 construction decision-makers and influencers.

314 Australia

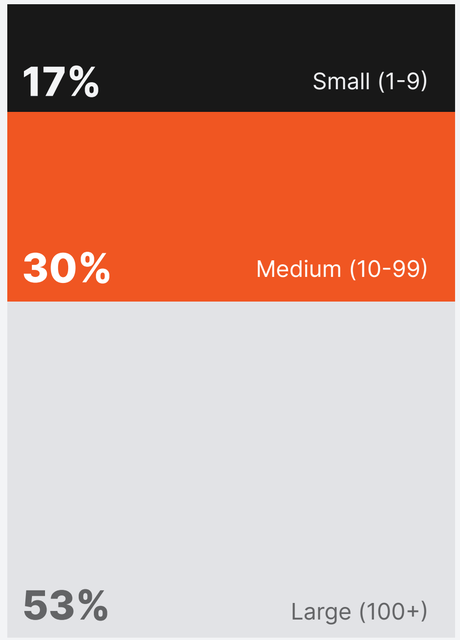
223 Malaysia

114 New Zealand

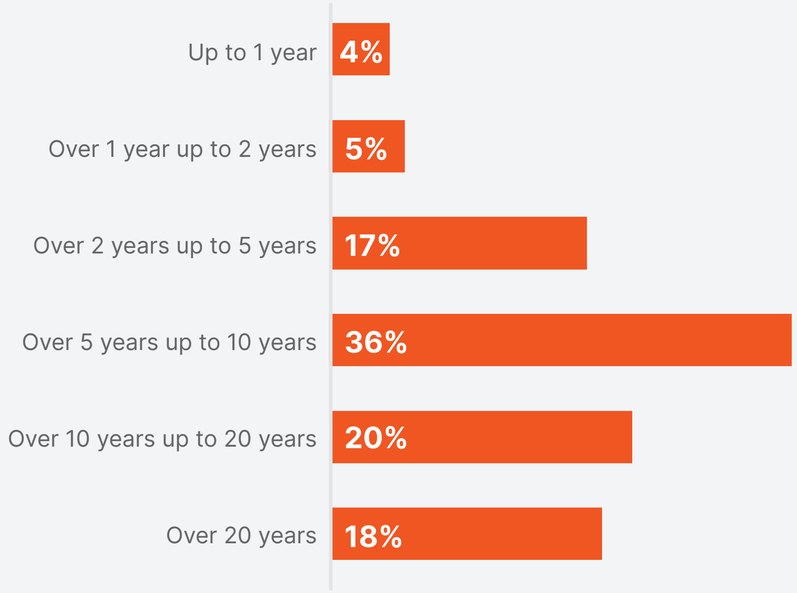
259 Phillipines

228 Singapore

Business size



Business age



62% **of construction businesses, established within the last decade, were “born digital”**

02

Key Highlights

The story varies slightly from country to country—with people in the Philippines the most buoyant and those in Australia the most cautious about the future.

91%

of decision-makers are confident about the 12 months ahead

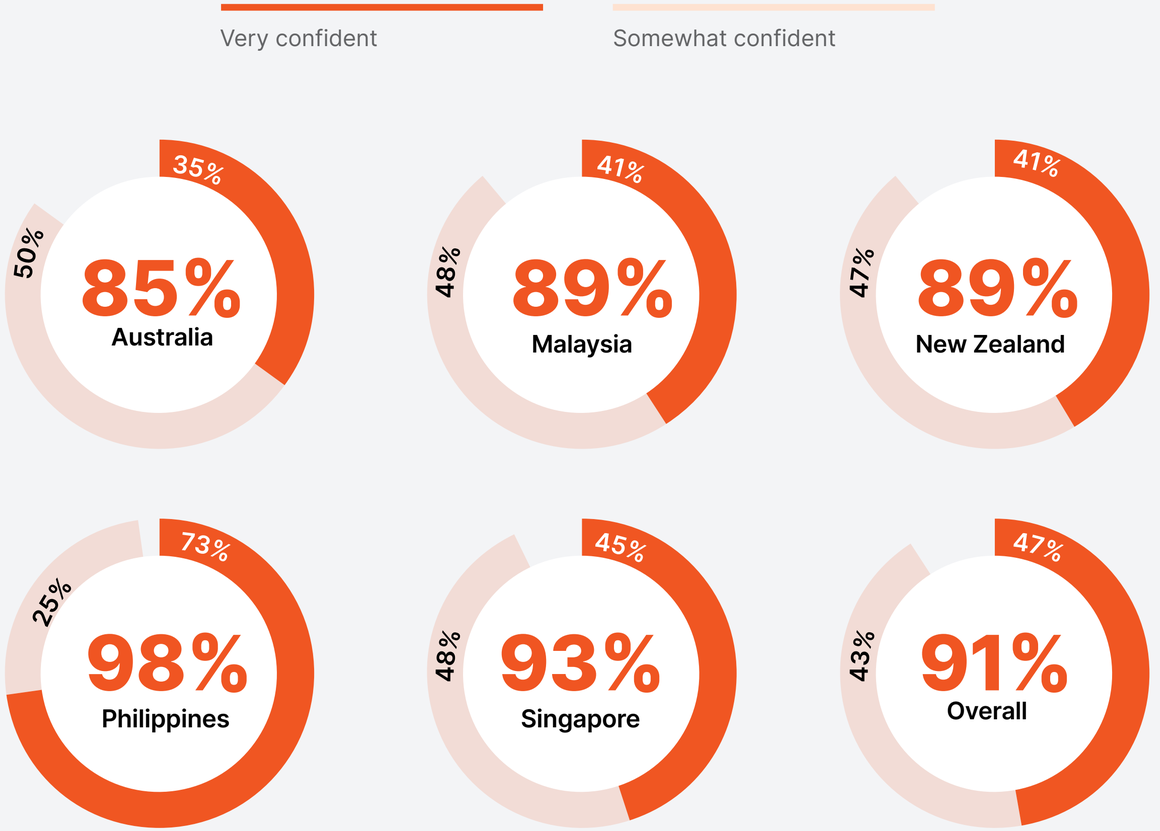
64%

expect an increase in the number of projects

61%

expect an increase in the value of projects

Construction Industry Sentiment Over the Next 12 Months



Top 5 Headaches on the Horizon

1. Rising costs of raw materials and equipment
2. Staff management, especially hiring and retaining skilled staff
3. Winning competitive bids at a sustainable margin
4. Maintaining safe work environments
5. Keeping up to date with new building and construction technologies

53% say Covid-19 has accelerated their adoption of digital technologies. But changing established practices and behaviours are the biggest barriers to digital transformation.

How Will Digital Technology Transform Construction?

Percentage of respondents who think technology will...

49%

Improve resource efficiency through fewer errors and less rework

47%

Reduce need for human labour

44%

Increase quality of build

41%

Boost capacity to handle more projects

39%

Carve out more time to spend with clients

36%

Deliver a better customer experience

34%

Enhance reputation

32%

Extend the building lifecycle

Sentiment and Business Confidence

Construction Leaders Remain Resilient

The construction industry has weathered the Covid storms with tenacity, thanks to technology.

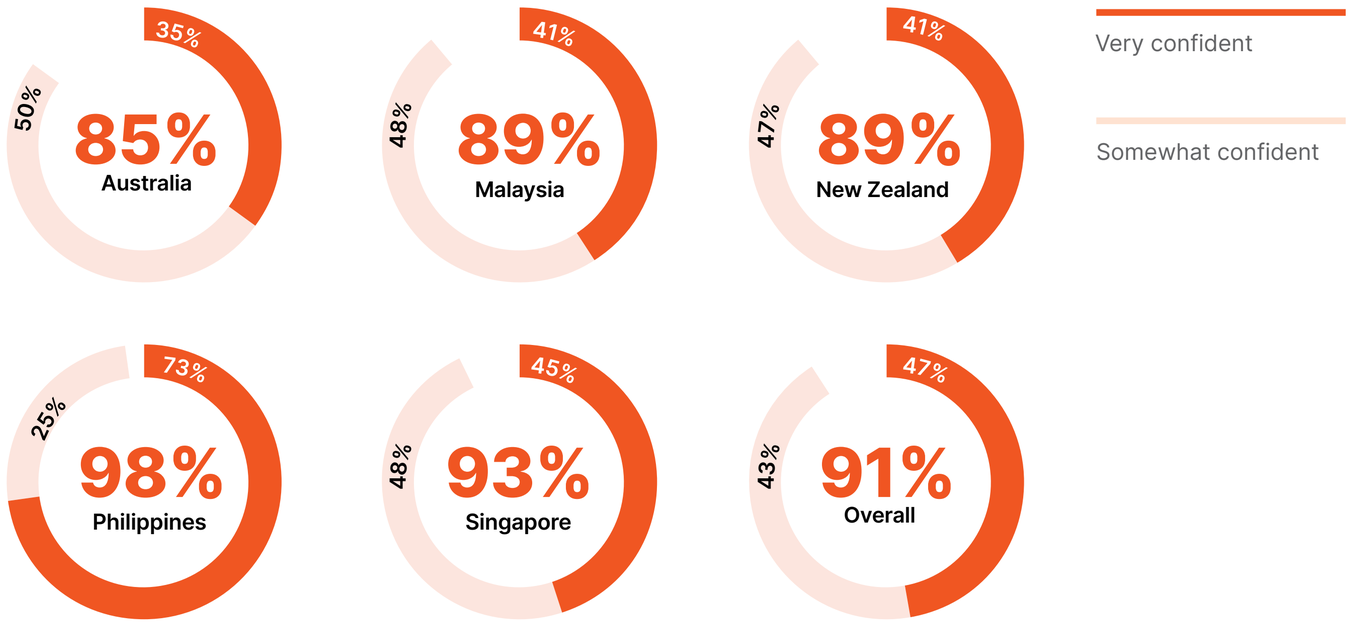
Confidence is high across all 5 surveyed countries regardless of business size, with larger companies slightly more positive than smaller companies. Across the Asia Pacific, 97% of large companies are confident versus 84% of smaller companies. The most confident markets are also those adopting digital technology at speed.

Further insights into variations in sentiment are explored in the individual country snapshots.

Despite the sense of confidence, there are a few concerning headaches on the horizon.

9 in 10 decision-makers are confident about the 12 months ahead and nearly half are “very confident”.

Construction Industry Sentiment Over the Next 12 Months



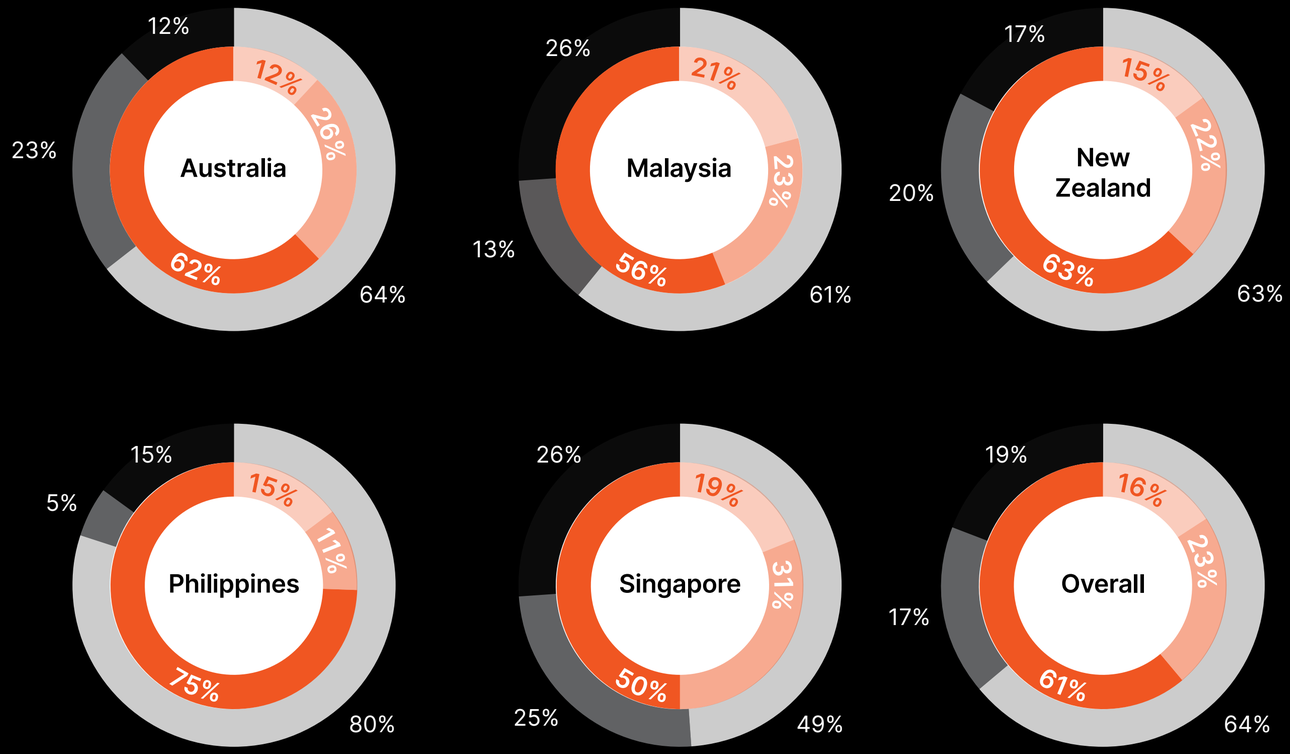
Positive Signs for Projects

Around 6 in 10 construction businesses expect to see an increase in the number and value of projects over the next 12 months.

Businesses in the Philippines are most upbeat about their near-future prospects, while Singaporean and Malaysian companies are more cautious. Optimism among Filipino builders may be aligned with government spending programs, which have prioritised construction as a path to economic recovery.

Number of projects	Value of projects
Increase	Increase
No change	No change
Decrease	Decrease

Expected Change Over the Next 12 Months



04

Construction Challenges

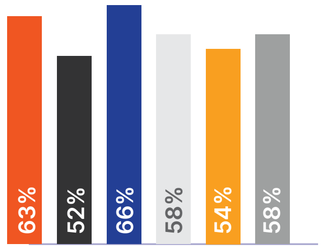
Headaches on the Horizon

Despite its universal confidence, the industry acknowledges a host of challenges on the horizon that are putting intense pressure on costs.

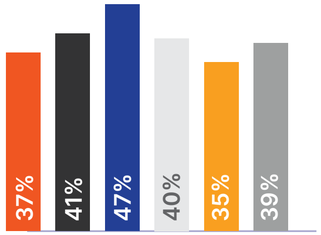
Covid-19 disrupted global production and supply chains, but the pandemic was just one of many factors driving up prices. Extreme weather, labour and materials shortages, supply bottlenecks, geopolitical instability and emissions-reduction policies have contributed to double-digit price spikes that have squeezed construction profits.

The research was conducted before the Ukraine crisis and Australia's floods, both of which will have an impact on material costs. But cost blowouts are just one of many headaches for construction companies, with labour shortages and on-site safety also high priorities.

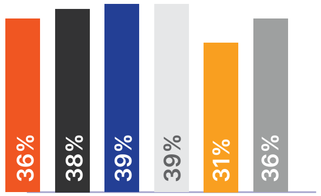
Great Challenges Over the Next 12 Months



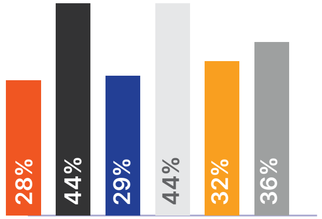
Dealing with the increasing cost of raw materials and equipment



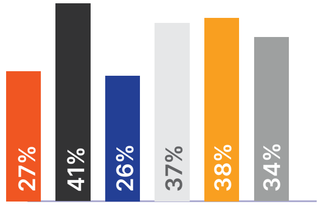
Staff management



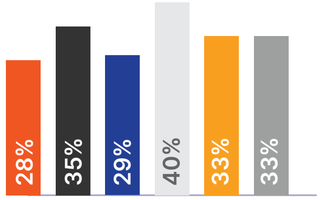
Winning competitive bid/tenders at a sustainable margin



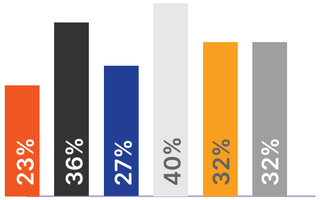
Maintaining safe working environments



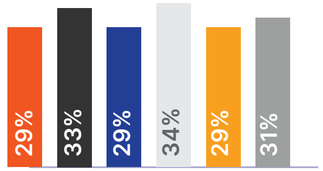
Keeping up to date with new building and construction technologies



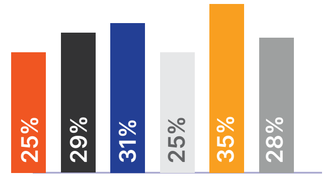
Dealing with trade contractors



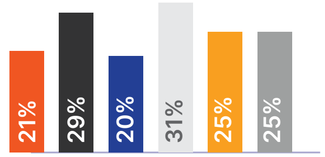
Increasing productivity



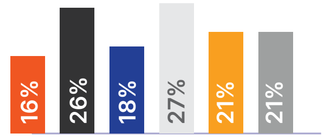
Keeping up/complying with regulatory changes



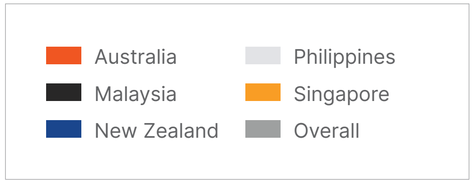
Lack of certainty/visibility on the potential pipeline of future work



Managing customer disputes and getting paid



Accessing and reporting on project finance



Paper-based Processes are Hard to Shift

Specialist and standard office software are widely used across the project lifecycle. However, around a third of construction companies of all sizes still use paper to capture, track and manage data.

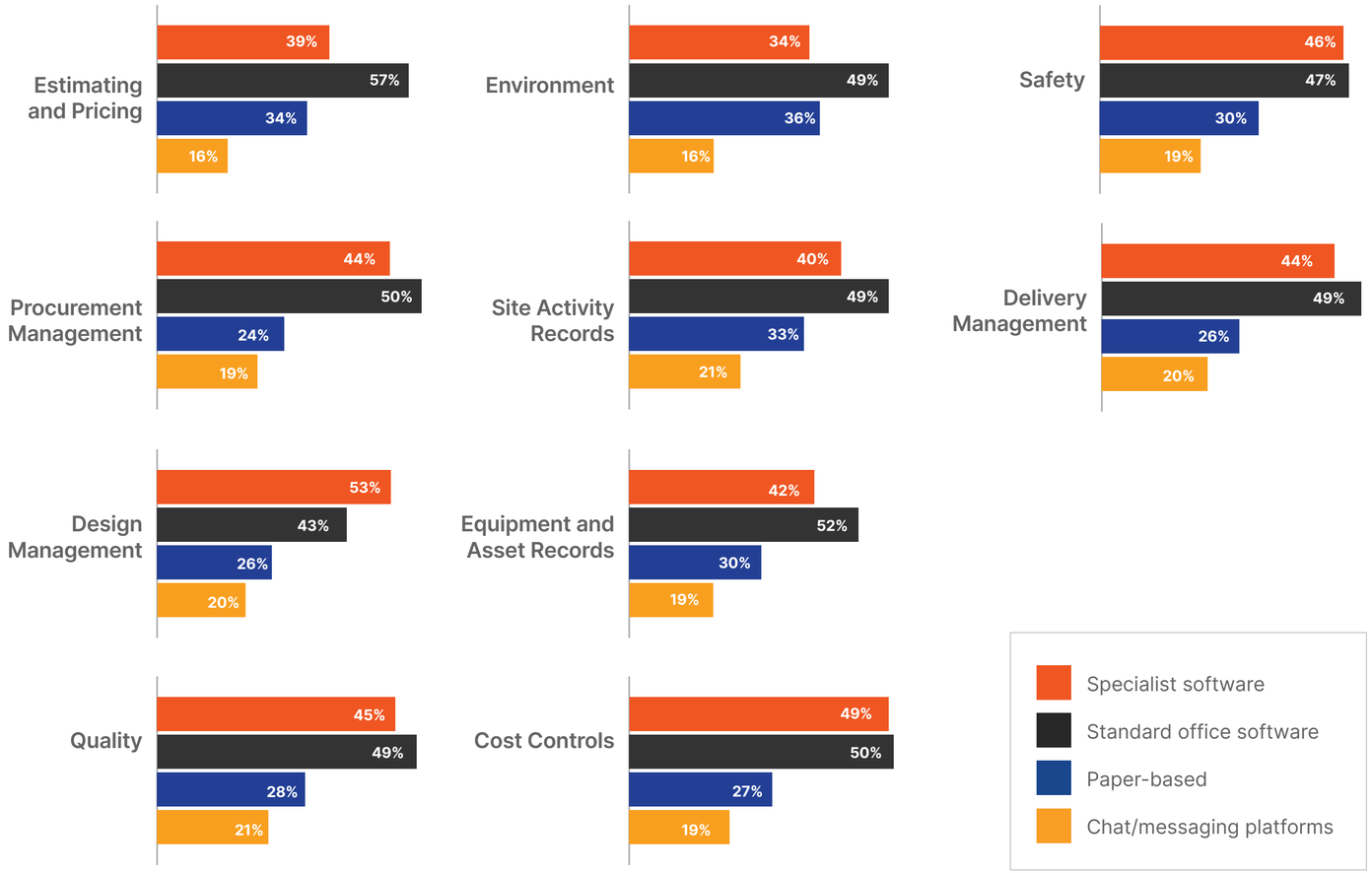
Large businesses are just as likely to use paper across the project lifecycle as their smaller counterparts—in some cases more likely. For instance, 28% of large companies use paper for procurement management, compared with 20% of smaller companies.

There is regional variation too. Almost half (47%) of Malaysian businesses and around 2 in 5 Filipino and Singaporean businesses (42% and 38% respectively) use paper to manage environmental data, compared to 1 in 4 Australian and New Zealand businesses (27% and 24% respectively).

Chat and message services, which are preferred communication tools in many Asian countries, are more frequently the go-to in Malaysia (30%), Singapore (28%) and Philippines (19%), compared to New Zealand (11%) and Australia (7%).

Why are these entrenched habits hard to shift? The most common reason is the challenge of changing established behaviours (42%), followed by cost concerns (39%) and worries about data security (34%).

How Data is Typically Tracked and Managed



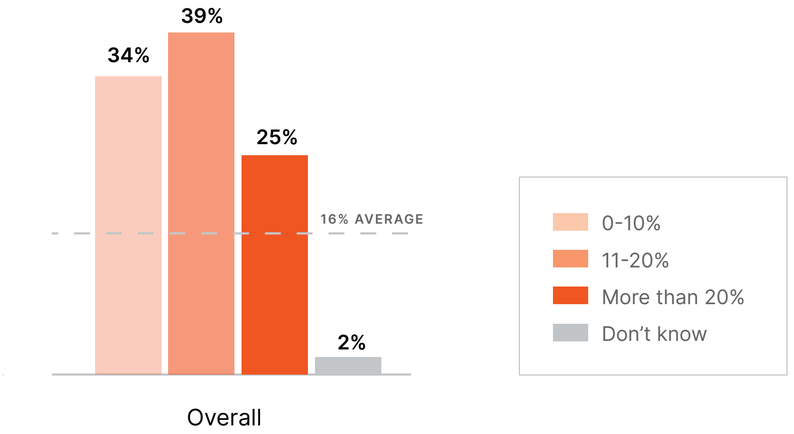
Businesses across the Asia Pacific region report potential savings of 20%, on average, on total project spend just by managing data more efficiently.

Reducing Errors and Rework

Overall, rework takes up 16% of the time budget on the average construction project.

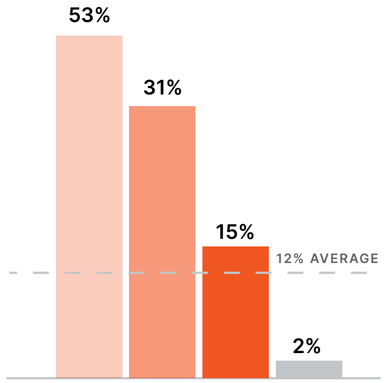
Well over a third (39%) of businesses across the region estimate that between 11% and 20% of their time allocated to a project is spent on rework. Additionally, 1 in 4 (25%) construction companies spends more than 20% of the time allocated to a project on rework.

Given the extent of rework required across the industry, there is widespread agreement among business decision-makers that digital working practices can streamline processes, improve collaboration and communication, and boost baseline capabilities.

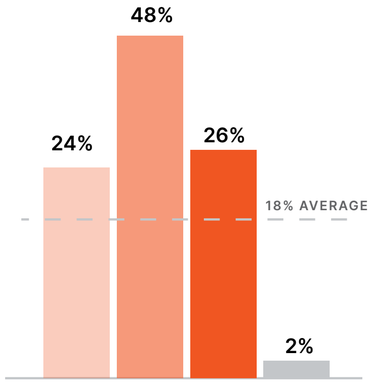


Overall

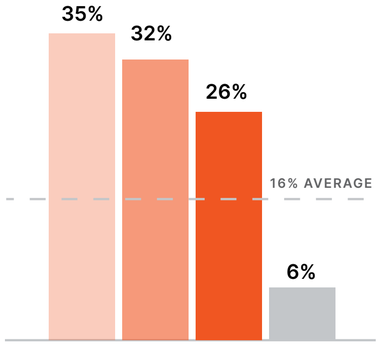
Proportion typically spent on rework



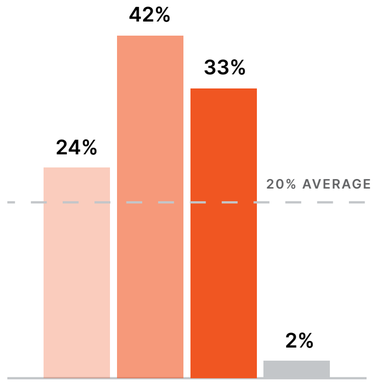
Australia



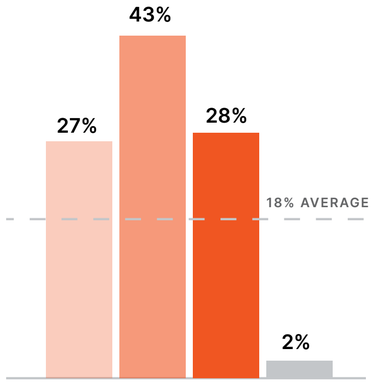
Malaysia



New Zealand



Philippines



Singapore

05

Technology

Day-To-Day Tech Drives Change

Builders aren't buying into the hype of "Hollywood technologies". Instead, they are looking to technologies that transform day-to-day operations and to better manage data.

More than half (53%) of construction companies have accelerated their investment in digital technology since Covid-19.

Cutting edge technologies like 3D printing, robotics and drones may capture headlines and headspace. But they are less likely to drive industry transformation, according to our respondents, than more tried-and-true technologies, like digital project management platforms, building information modelling or prefabrication.

What technologies will drive the most change over the next 3 years?

42% Prefabrication and offsite construction

42% Digital project management platforms

38% Big data analytics

35% Traditional BIM

34% Next generation BIM (digital twins)

31% Telematics and asset tracking

30% AI and machine learning

27% Internet of Things

25% Extended reality

25% 3D printing

22% Robotics

19% Drones

Tools for Productivity and Profitability

Construction businesses are improving information access and upskilling staff to boost productivity and profitability.

Despite labour shortage and cost escalation challenges, 9 in 10 (90%) construction businesses are confident they will have a sufficiently skilled workforce in the next 12 months. They are, however, turning to technology to improve productivity and profitability.

Top 3 Strategies to Boost Productivity and Profitability

1. Upskill staff (both technology and soft skills)

To increase productivity (63%)

To increase profitability (62%)

2. Improve access to project information

To increase productivity (48%)

To increase profitability (46%)

3. Improve stakeholder engagement in project planning

To increase productivity (41%)

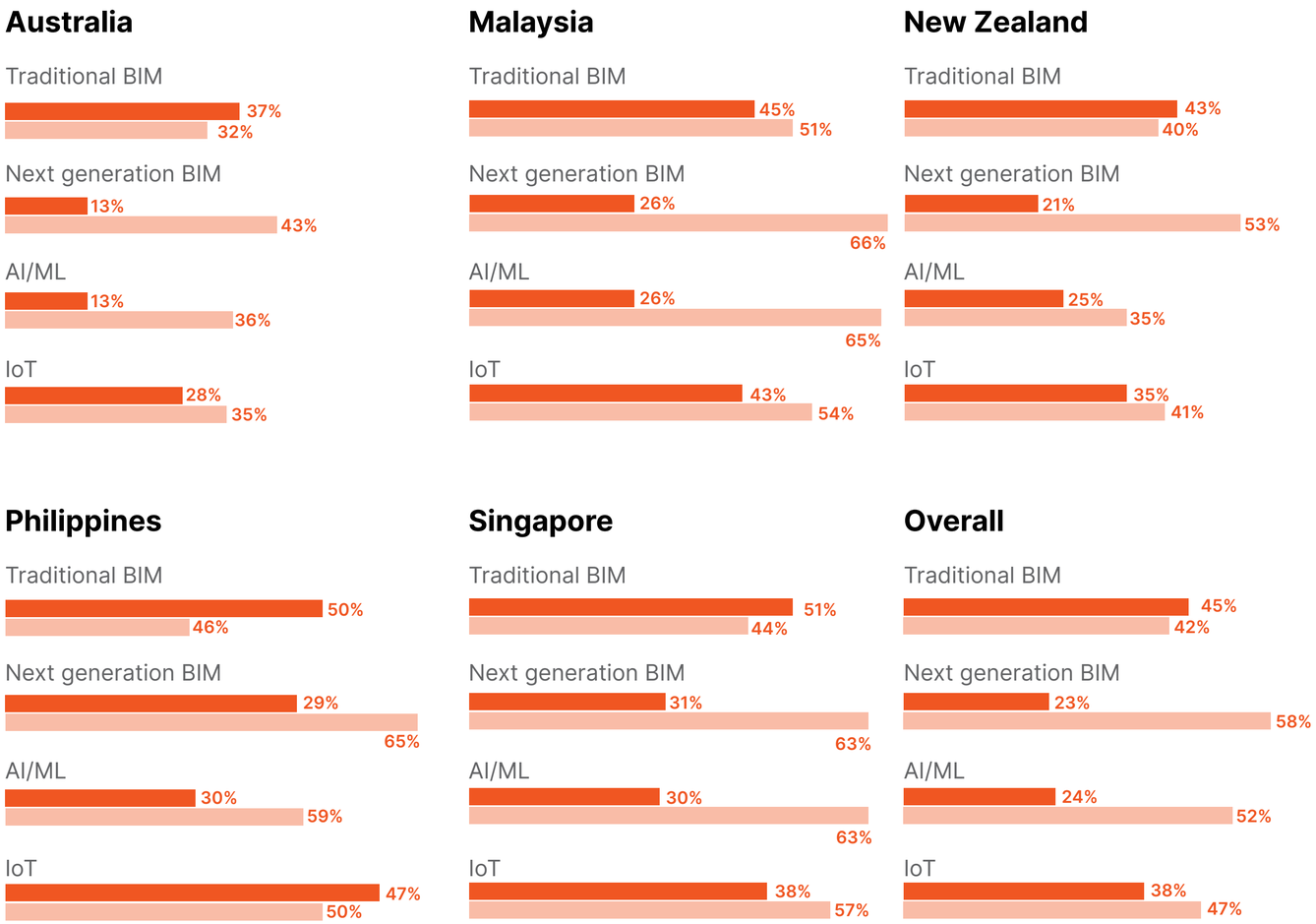
To increase profitability (42%)

Regional Leaders and Laggards

Of all 5 markets surveyed, the Philippines stands out for its optimism and rapid technology adoption – and this could be a winning formula for future success.

Our research reveals a clear and consistent pattern of technology adoption across the regions.

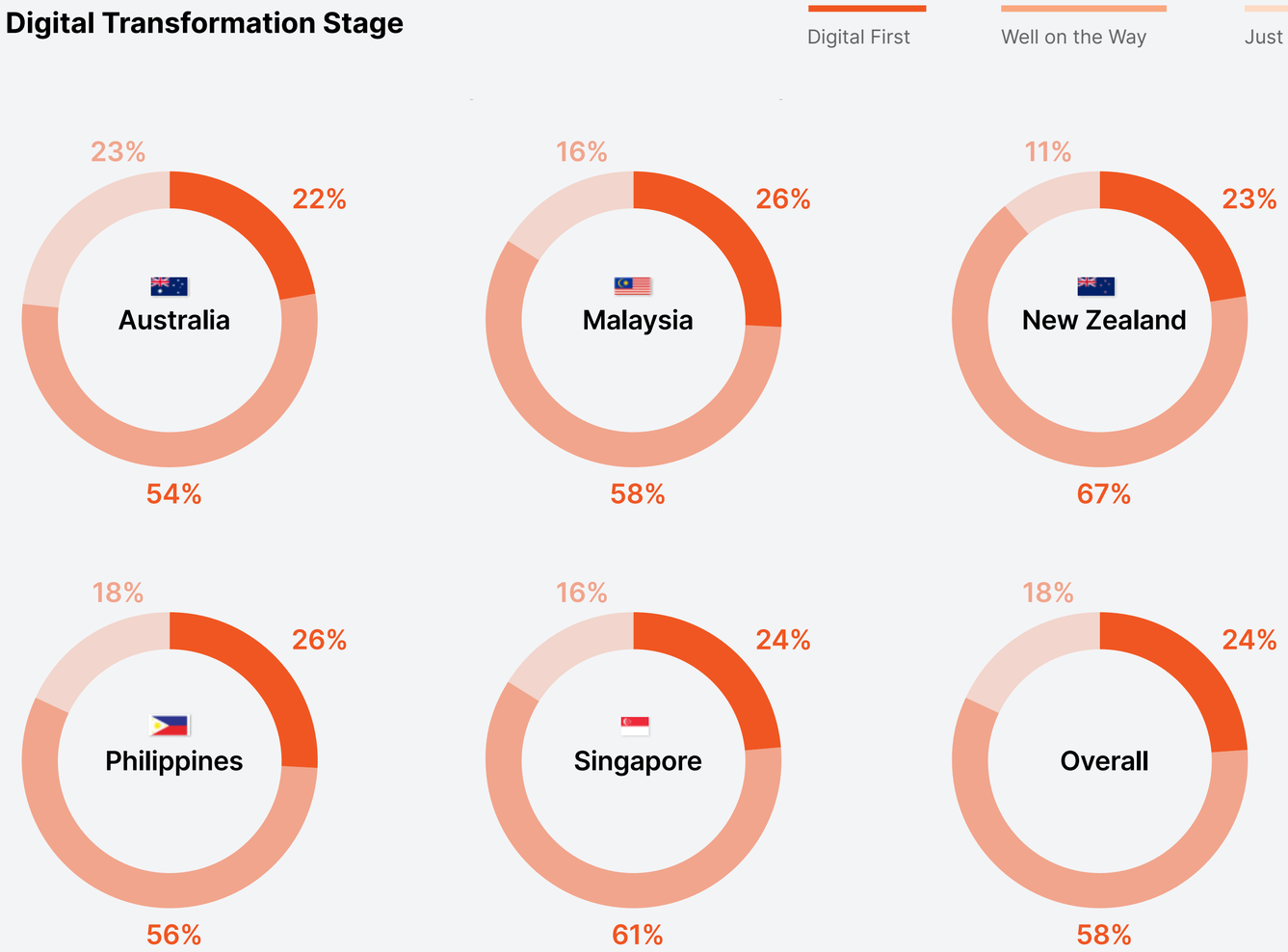
Australia appears to be behind on the digital maturity curve—with lower adoption rates of everything from BIM to big data, pre-fabrication to robotics. This carries over into future intentions, with Australia also behind in every area of technology investment.



Despite Australian businesses lagging their regional peers, 1 in 5 say they are “digital first”—a response rate consistent with other markets.

Australia’s construction industry invested early in basic digital capability and “technology placeholders” like spreadsheets. Though, this may have stifled innovation and delayed investment in future-focused technology strategies.

The Philippines, on the other hand, is enjoying a period of rapid economic growth, buoyed by large-scale government investment in nation-building infrastructure, and appears to be investing in technology at speed and could potentially “leapfrog” more mature markets.



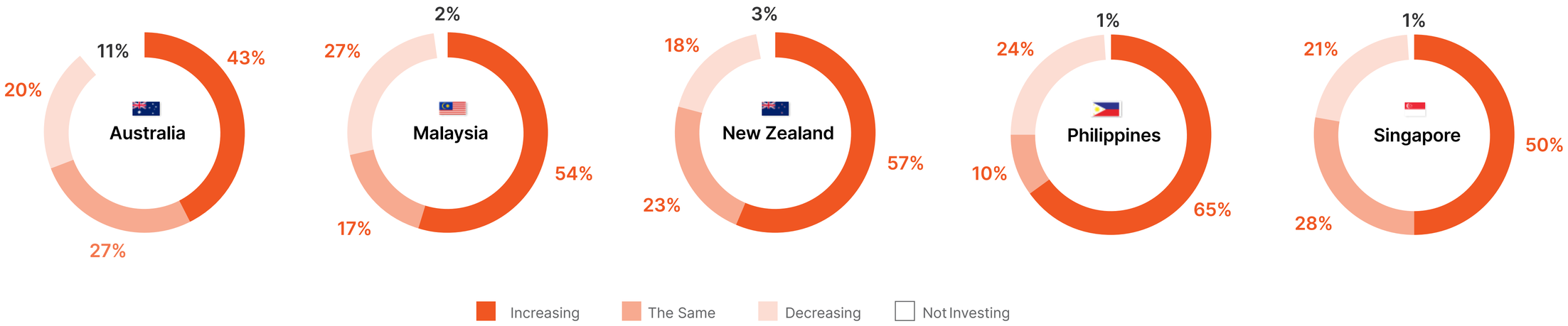
Covid as a Catalyst

Overall, more than half (53%) of businesses surveyed say the global pandemic has accelerated their investment in digital transformation over the past 24 months.

Around 1 in 5 have maintained or decreased their investment over this period (21% and 22% respectively).

While 4% of businesses, overall, are not investing in digital transformation, this jumps to 11% of Australian businesses. In comparison, just 1% of Singaporean or Filipino businesses are choosing not to invest. Australia's market is dominated by smaller players, and this suggests smaller businesses may need more support to take further steps on their digital transformation journeys.

Impact of Covid-19 on Digital Transformation Investment



Transformation Strategies

Quality and Sustainability are Synonymous

Emerging industry priorities of quality and sustainability are two sides of the same coin. A commitment to quality creates a ‘domino effect’ that delivers more sustainable outcomes.

Construction decision makers told us that better use of technology and data would do more than boost bottom lines: it would also help them achieve sustainability targets.

Less rework can eliminate waste, while higher build quality can enhance energy efficiency. But 42% of respondents also see that more efficient data management would also enhance decision making.

92%

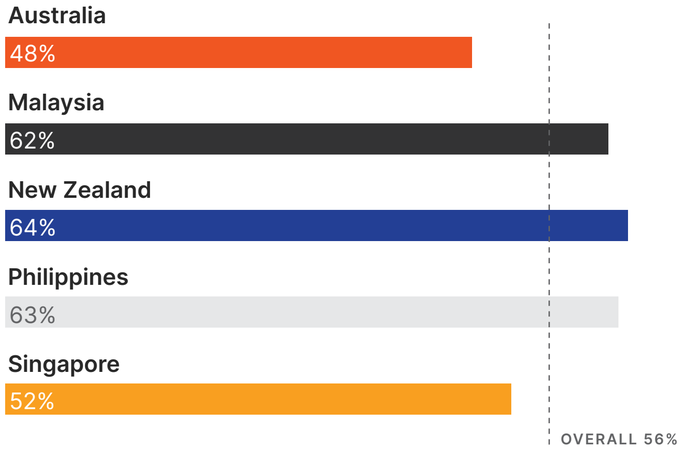
of respondents believe that quality is a competitive advantage

53%

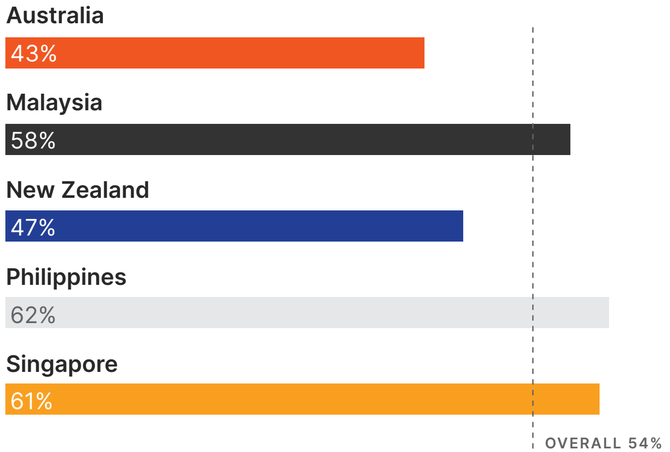
see a focus on quality as a strategy to reduce waste and enhance sustainability

Sustainability in the Industry's Line of Sight

The construction industry should do more to adopt more environmentally friendly/sustainable building practices
(% of respondents that agree)



Decreasing the energy consumption/improving the energy efficiency of builds need to be a greater consideration in projects
(% of respondents that agree)



Australian firms are the least likely to see quality as a competitive advantage or to want greater adoption of green building practices.

Spotlight on Sustainability

The region's largest asset owners and developers are moving towards sustainability at speed. The global real estate sustainability benchmark, GRESB, assessed 117,000 global assets worth an estimated US$5.7 trillion in 2021. GRESB ranked Oceania—Australia and New Zealand—first in the world, with portfolios of existing assets achieving a score of 79 and projects currently under construction posting 84. In comparison, the global average was 73 and 79; Asia achieved scores of 75 and 80.

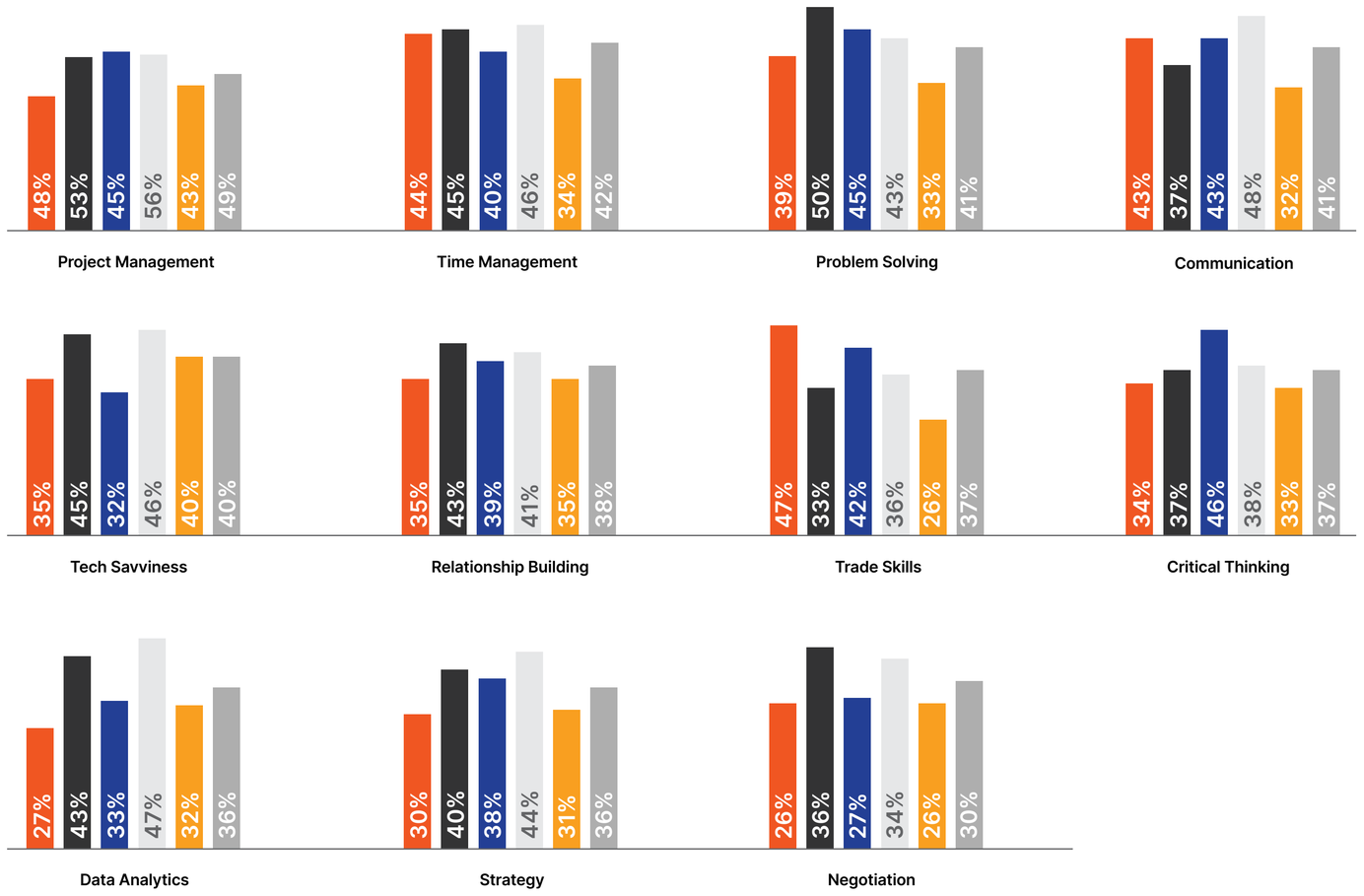
Soft Skills Deliver Hard Results

The top talent boasts both technical and soft skills—with both in great demand over the next 12 months.

Technology is changing the construction game. In fact, 47% of respondents expect some future construction functions won't require human labour and 36% think builders will need a broader skill set.

While technology does not solve all labour challenges, it does ease the pressure by delivering efficiency dividends.

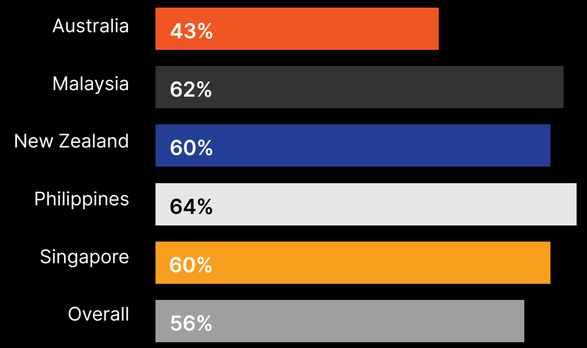
Skills Becoming More in Demand Over the Next 12 Months



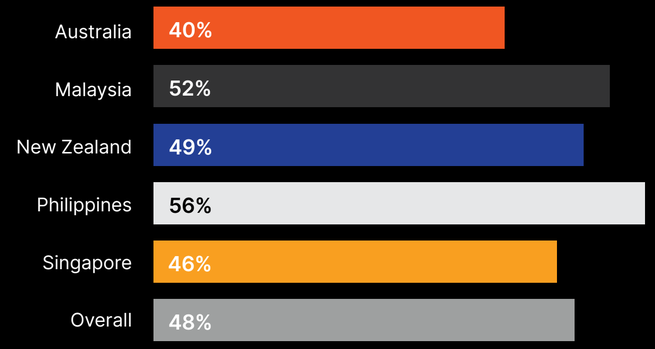
Australia
Malaysia
New Zealand
Philippines
Singapore
Overall

Business Processes and Better Productivity

Digital working practices increase employee productivity by reducing 'lost' time
(% of respondents that agree)



We would be more efficient if we communicated better across our business
(% of respondents that agree)



Gender Diversity Drives Innovation

Diversity of thought drives innovation and unearths new value. Despite the sustained effort from some countries to boost the number of women on construction sites, female participation remains well below desired targets.

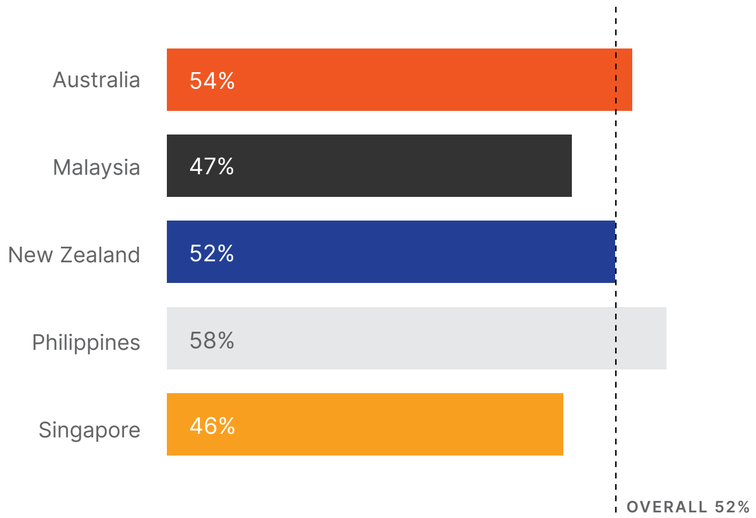
Good intentions are not translating into on-the-ground outcomes. Australia and New Zealand companies had among the highest rates of diversity and inclusion policies across the countries surveyed—and yet on average women hold just 12% of site manager roles in Australia and 17% in New Zealand. In comparison, women hold 28% of site manager roles in the Philippines.

Interestingly, 61% of Australian respondents and 58% of New Zealand respondents saw no need to improve diversity and inclusion in construction workplaces. We see a similar response across the region.

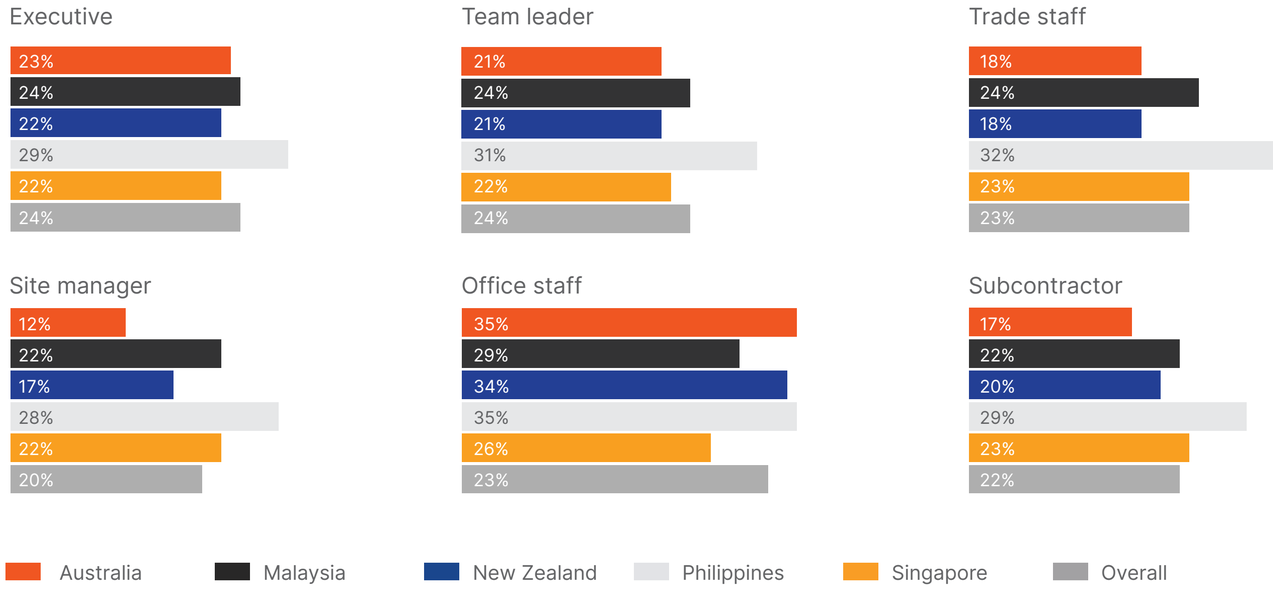
39% of respondents agreed that there should be a mandate requiring a certain proportion of labour hours in construction projects to be performed by women—this figure was higher among Filipino and Singaporean businesses (47% and 45%, respectively) and lower in Australia (24%).

Diversity and Inclusion Policy by Country

(% of respondents who have a D&I policy in place)



Proportion of Women Employed by Role (averages)



Just 39% of construction decision makers believe that women will form a key part of the construction workforce over the next 10 years.

07

Summary

There's no shortage of insights into the construction industry in How We Build Now. But what do construction leaders do next? Here are 5 ways to step up the pace of change.

1. Eliminate Paper-based Processes to Enhance Quality and Transparency

Businesses are still using paper across all stages of the project lifecycle. There are clear connections between systems and processes that enhance visibility and better quality outcomes. For example, 30% of companies still use paper-based systems to track safety, while 36% of respondents acknowledge that more needs to be done to improve safety on worksites. Similarly, 36% of companies use paper to report environmental outcomes, and 56% of respondents believe the industry must adopt more sustainable building practices.

2. Consolidate Data to Drive Better Decision Making

Better data management can deliver significant financial savings. Importantly, 1 in 5 (19%) decision-makers believe they can save 30% or more by more efficiently managing their data. Improved data management can also facilitate greater project visibility, increased productivity and a better employee experience.

3. Adopt Diversity Targets to Enhance Innovative Thinking

Diversity and innovation go hand in hand. Just 52% of businesses have diversity and inclusion policies in place, but 36% are planning to implement policies in the next 12 months. Now is the time to act.

4. Ramp Up Your Digital Investment to Maintain a Competitive Edge

53% of businesses have accelerated their digital transformation investment over the past 24 months. If your company is among the 1 in 5 (22%) who have reduced investment, consider taking a more digital approach.

5. Use Digital as a Transformational Business Tool

A digital transformation program can do more than transform business processes—it can transform business models too. But digital transformation requires the right tools and the right support. Make sure you're partnering with the right people.

08

CHAPTER 08

Country Snapshots

Australia

Australia's construction industry is battening down the hatches to survive a perfect storm of rising commodity prices, materials shortages, labour squeezes and other supply chain risks.

The construction industry Down Under survived the Covid disruptions relatively unscathed. But as the list of high-profile liquidations grows, there are signs that construction leaders are gearing up for restructuring and redundancies to future-proof their businesses.

314
construction decision-makers and influencers surveyed

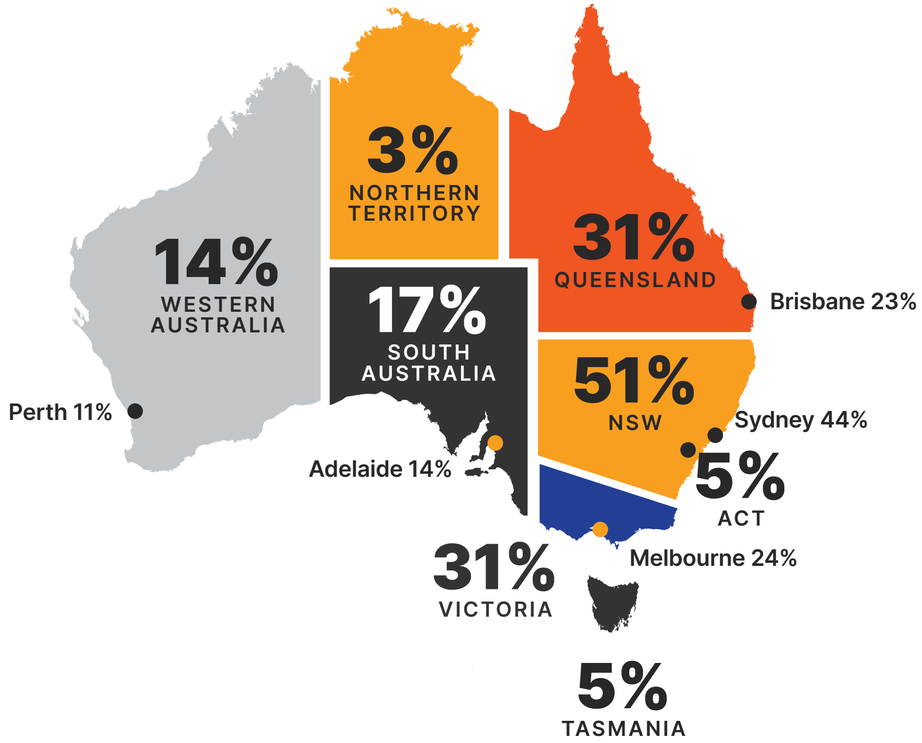
53%
of businesses are less than 10 years old

28%
turn over less than $2 million annually

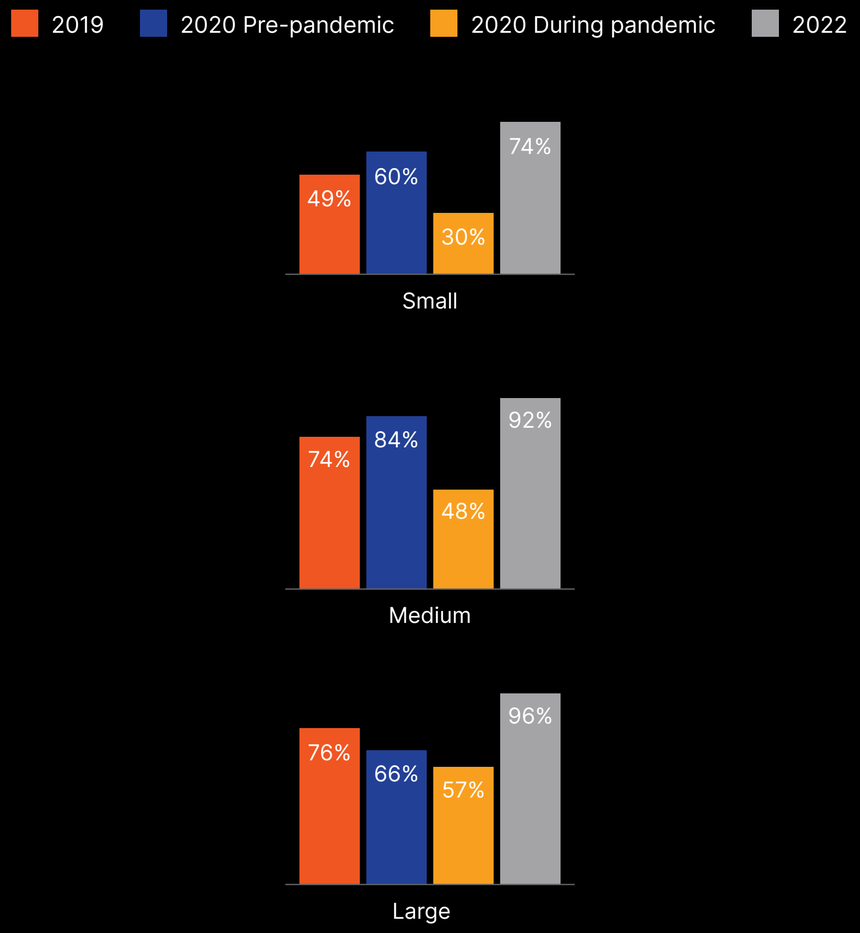
64%
expect to increase the number of projects

62%
expect to increase the value of projects.

Locations of Projects



Construction Industry Sentiment Over the Next 12 Months (% Confident)

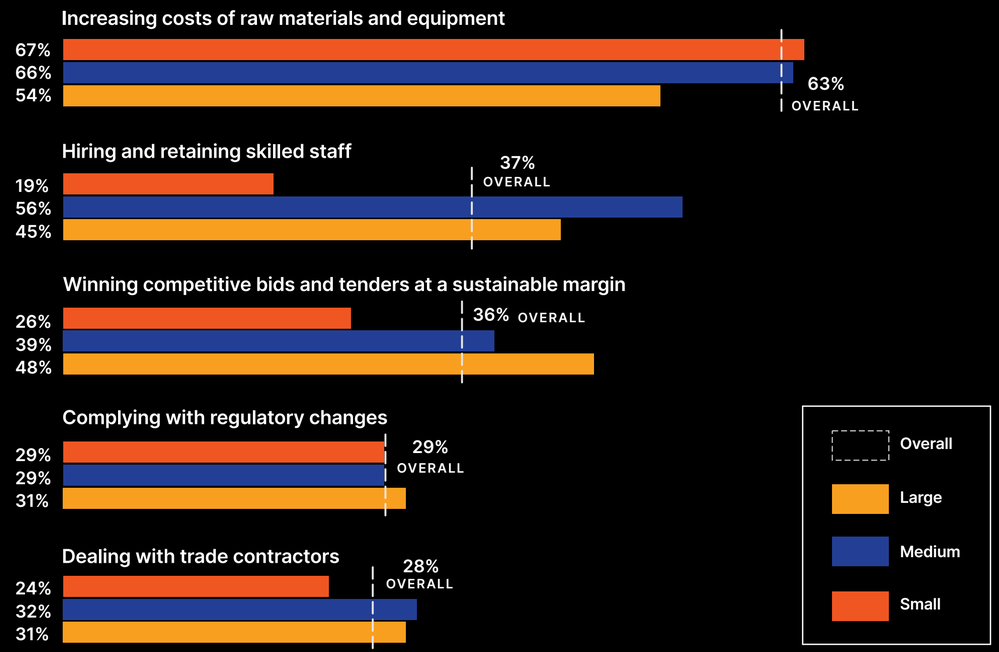


Australia's small construction businesses are less confident than their regional counterparts, while large businesses are more optimistic about the year ahead.

Australia's overall sentiment, below the regional average of 91%, was still significantly higher than the 66% captured in the brief pre-pandemic days of 2020.

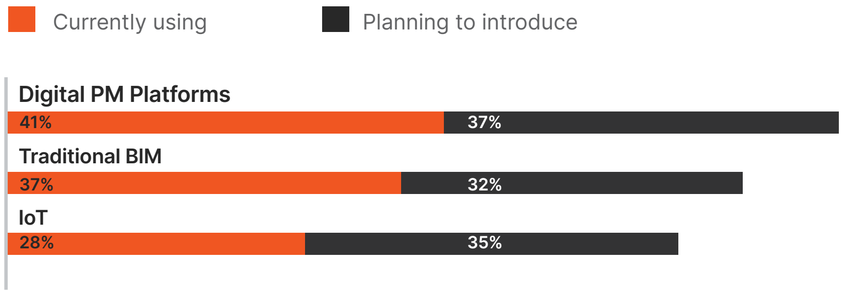
Australian construction decision makers can see challenges on the horizon. What do these challenges look like?

Greatest Challenges Over the Next 12 Months



What strategies are construction businesses embracing in response?

Use of Technologies (Overall)



However, the adoption of technology is significantly behind other Asia Pacific markets. Respondents in other surveyed regions expressed a greater intention to embrace next generation BIM, robotics, artificial intelligence and prefabrication. To stay competitive with their regional counterparts, Australian construction companies will need to ramp up their technology investment.

While 83% of construction decision-makers see obstacles to be overcome on the digital transformation journey, they can also see the opportunities: enhanced build quality, greater resource efficiency, less rework and a better client experience.

Market Insights

According to CoreLogic, national construction costs increased 7.3% over the 2021 calendar year, the highest annual growth rate since 2005.

While cost pressures aren't unique to Australia, the nation does face a perfect storm of:

+ **The tyranny of distance**, where the cost to ship a 40-foot container from Shanghai to Sydney more than doubled in 2021.
+ **Materials shortages**, such as the two-year timber shortage following bushfires and floods, compounded by strong demand from infrastructure projects and record-levels of housing construction.
+ **Labour shortages**, following a two-year pause on skilled migration, with analysts suggesting tradespeople account for around 35% of the nation's total workforce shortages
+ **Questions of quality,** as state building commissioners scrutinise building defects across the nation.
+ **Project pauses,** with some state infrastructure projects slowed to ease pressure on construction pipelines.

Despite the cost escalations and other economic pressures, the Australian Bureau of Statistics' Business Conditions and Sentiments report from March 2022 reconfirms this report's findings, with just 14% of construction businesses predicting difficulty in meeting their financial commitments – down from 23% the same time last year.

Malaysia

After several years of pre-pandemic decline, Malaysia's construction industry has bounced back, posting the highest growth rate since 2012.

As Malaysia's construction industry looks to the future, almost 6 in 10 (58%) businesses have ramped up their digital transformation investment.

223
construction decision-makers and influencers surveyed

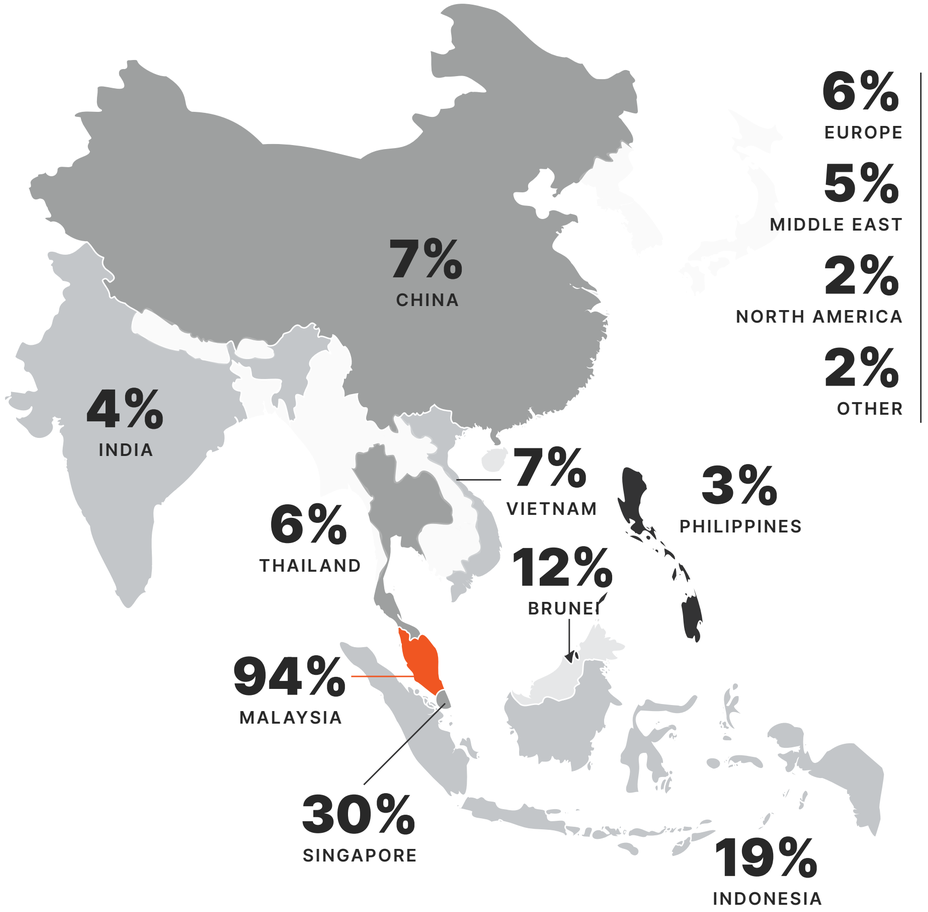
76%
of businesses are less than 10 years old

61%
expect to increase the number of projects

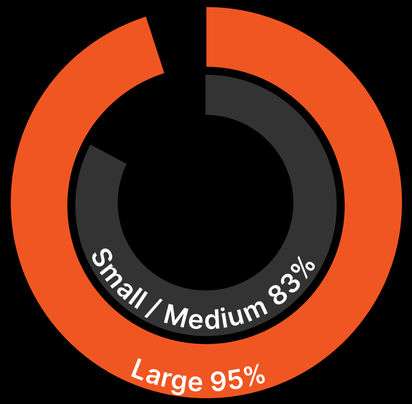
56%
expect to increase the value of projects.

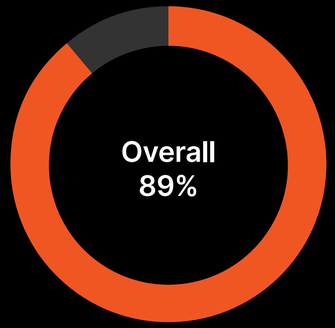
85%
are confident they'll have the skills they need in the next 12 months.

Locations of Projects



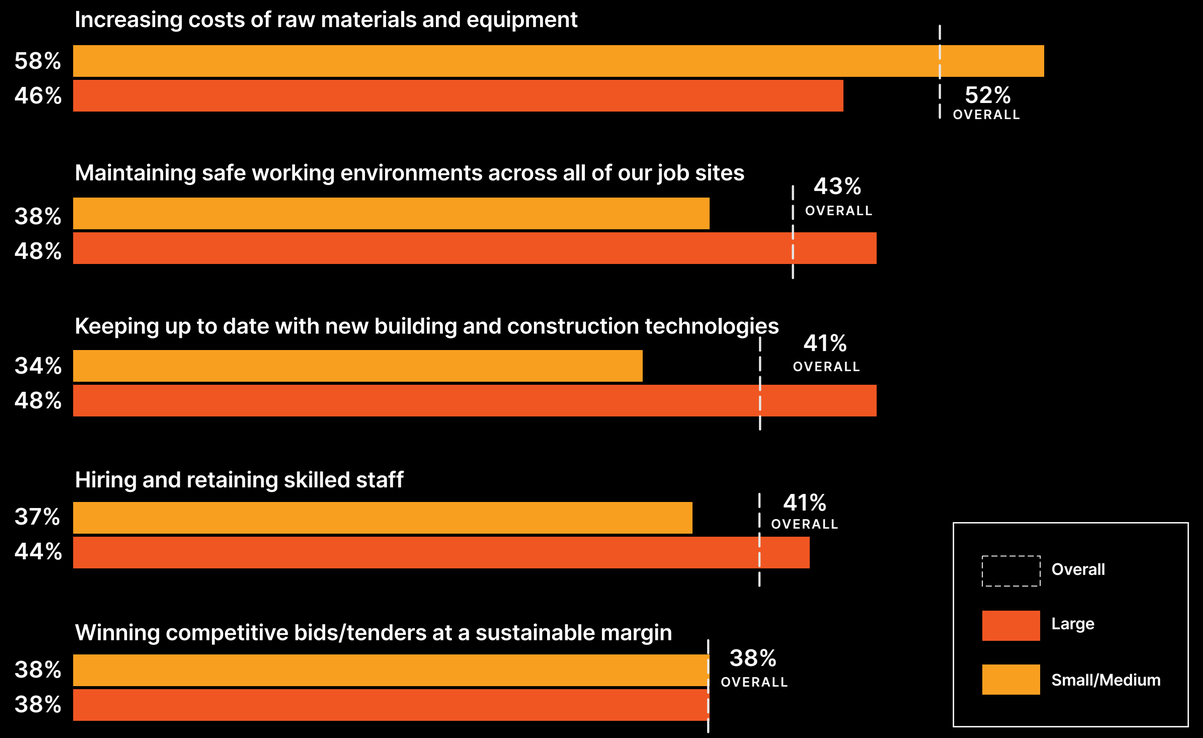
Construction Industry Sentiment Over the Next 12 Months (% Confident)





All construction decision makers surveyed think there are challenges on the horizon. What do these challenges look like?

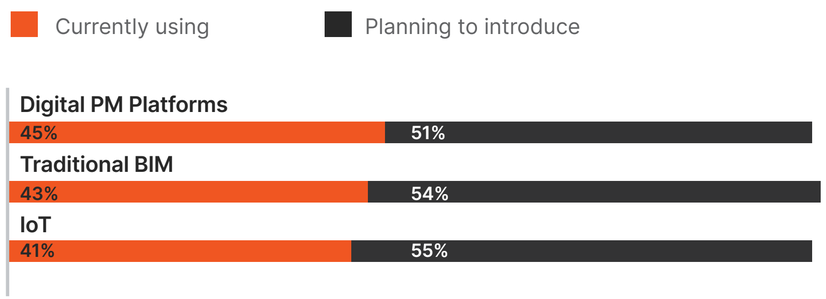
Greatest Challenges Over the Next 12 Months



In response to these challenges, construction businesses are improving access to project information, building employee engagement and upskilling staff on new technologies.

Advanced technologies feature much higher on the Malaysian technology wish list than some of its neighbours, notably Australia and New Zealand. Take robotics, which are in the pipeline for just 34% of Australian respondents, 37% of Kiwi respondents, but 66% of Malaysian businesses. Artificial intelligence (Australia 36%, New Zealand 35% and Malaysia 65%) is another powerful illustration of digital leadership.

Use of Technologies (Overall)



What is stopping even greater investment? Costs are the top challenge, cited by 50% of respondents, followed by changing established behaviours (44%), overcoming data security concerns (41%) and getting senior buy-in (36%).

Market Insights

The Malaysian construction industry is a key economic engine, according to the Construction Industry Development Board, contributing around 4% to the nation's GDP and employing 1.28 million people, or 8% of the workforce

But the industry was in decline before the Malaysian Government issued a movement control order in March 2020. The value of projects awarded had fallen from RM241 billion in 2016, to RM102 billion in 2019, for example.

The pandemic stalled up to 90% of construction projects – an estimated 7,500 projects, according to the CIDB. This delivered a loss of RM11.0 billion each month, with 30% of that unpaid wages, 42% unused materials and 12% idling plants.

Malaysia's construction sector has since bounced back, posting a 42.6% growth in the second quarter of 2021, year on year – the highest growth recorded since 2012.

The industry is looking forward to an annual average growth rate of 6.5% in real terms between 2022–2025, according to GlobalData. This will be driven by the nation's economic recovery, investments in transport infrastructure, renewable energy, residential, telecommunications and water infrastructure projects

New Zealand

Productivity in New Zealand's construction industry was flatlining pre-pandemic – a challenge exacerbated by Covid-19 and closed international borders. But construction leaders are turning to digital technologies to drive efficiencies and uncover new value.

Sentiment among New Zealand construction decision makers is strong, despite a range of challenges from rising materials costs to finding and keeping top talent.

114
construction decision-makers and influencers surveyed

30%
of businesses are more than 20 years old

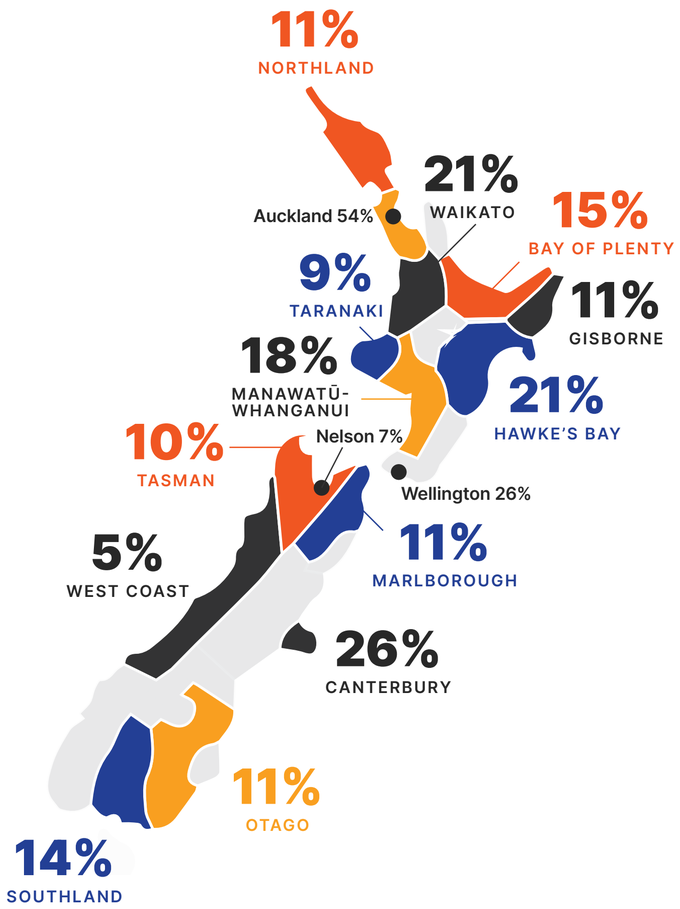
96%
believe quality is a competitive advantage

49%
of businesses are less than 10 years old

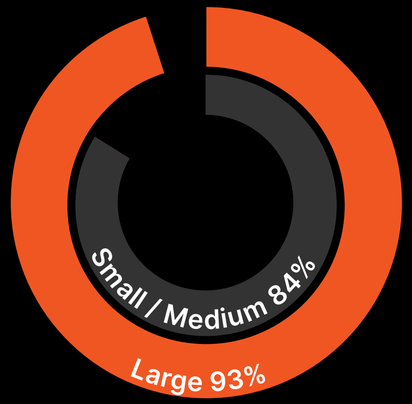
63%
expect to increase the value of projects.

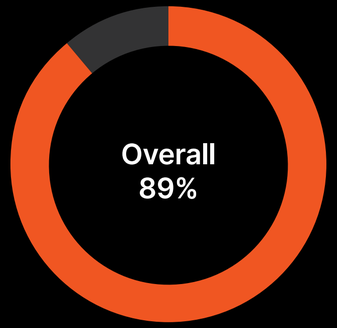
63%
are confident they'll have the skills they need in the next 12 months.

Locations of Projects



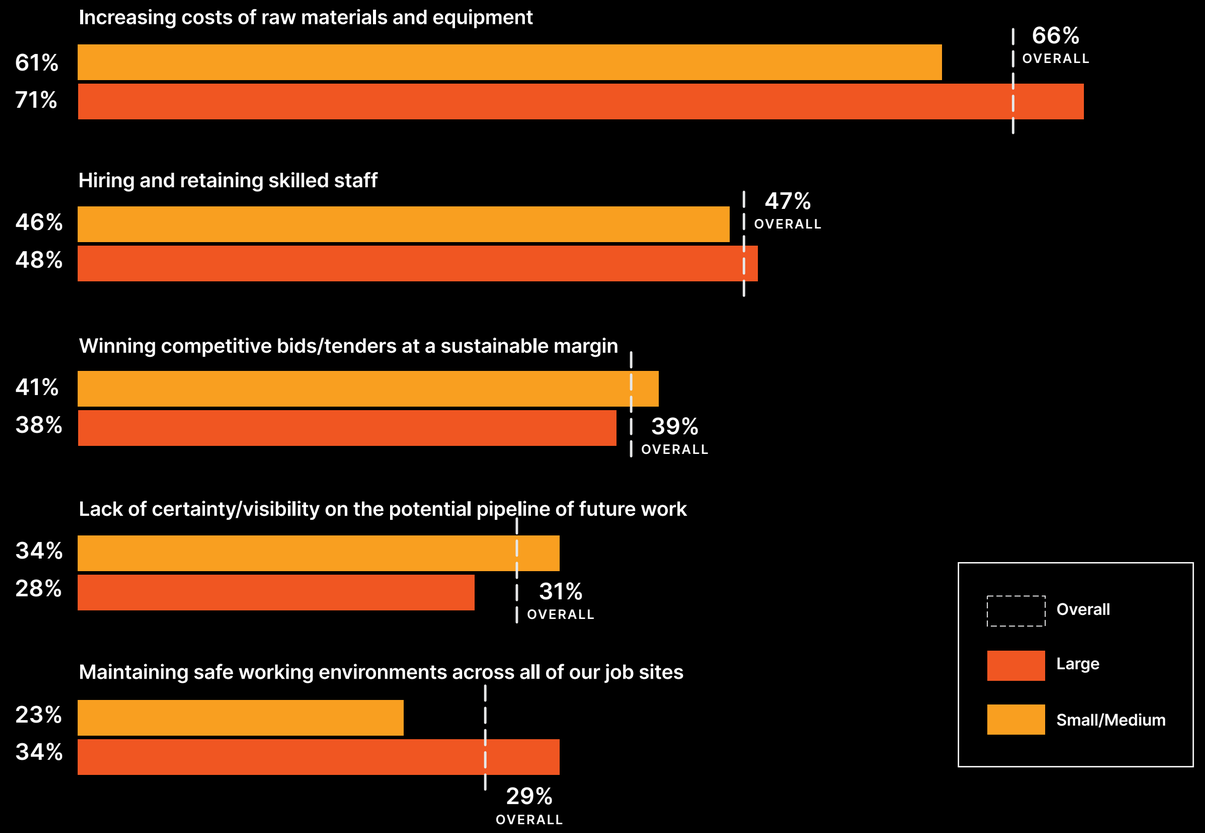
Construction Industry Sentiment Over the Next 12 Months (% Confident)





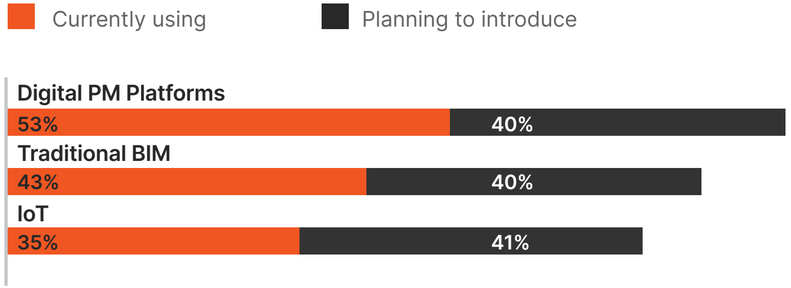
All construction decision makers surveyed think there are challenges on the horizon. What do these challenges look like?

Greatest Challenges Over the Next 12 Months



In response to these challenges, construction businesses are improving access to project information, building employee engagement and upskilling staff on new technologies.

Use of Technologies (Overall)



But 96% of construction decision-makers see obstacles to be overcome on the digital transformation journey. Practices and behaviours (54%), costs (38%), getting employee buy-in (37%) and breaking people out of siloes (36%) are the four biggest.

Despite the obstacles, New Zealand's construction leaders have their eyes firmly fixed on future opportunities, and on the technology that can help enhance build quality and resource efficiency, reduce rework and deliver a better client experience.

Market Insights

The construction industry is New Zealand's fifth largest employer, with comprising around 170,800 people. Construction contributed around NZ$15.82 billion in gross domestic product in the year ended March 2021.

The Construction Sector Accord, launched in April 2019, aims to unlock growth by addressing key challenges: skills and labour shortages, unclear regulations, a lack of coordinated leadership, an uncertain pipeline of work and a culture of shifting risk. This partnership may, in part, explain why 50% of survey respondents want government to provide more support to upskill construction workers.

The industry has recently been hit by several high-profile casualties and some projects have stalled due to lack of materials. Construction costs jumped 2.4% in the three months through March 2022 – the fastest gain since 2013 – reflecting higher wages and material shortages.

Reserve Bank Governor Adrian Orr has flagged several interest rate rises ahead as the central bank seeks to contain inflation expectations.

While New Zealand's economic momentum has slowed in recent months, the construction industry remains strong with dwelling consent numbers hitting a record high of almost 49,800 in the 12 months to February 2022.

Philippines

A fast-moving economy of mobile-first digital natives and high levels of government support for construction prove a winning combination for the Philippines construction industry.

259

construction decision-makers and influencers surveyed

69%

of businesses are less than 10 years old

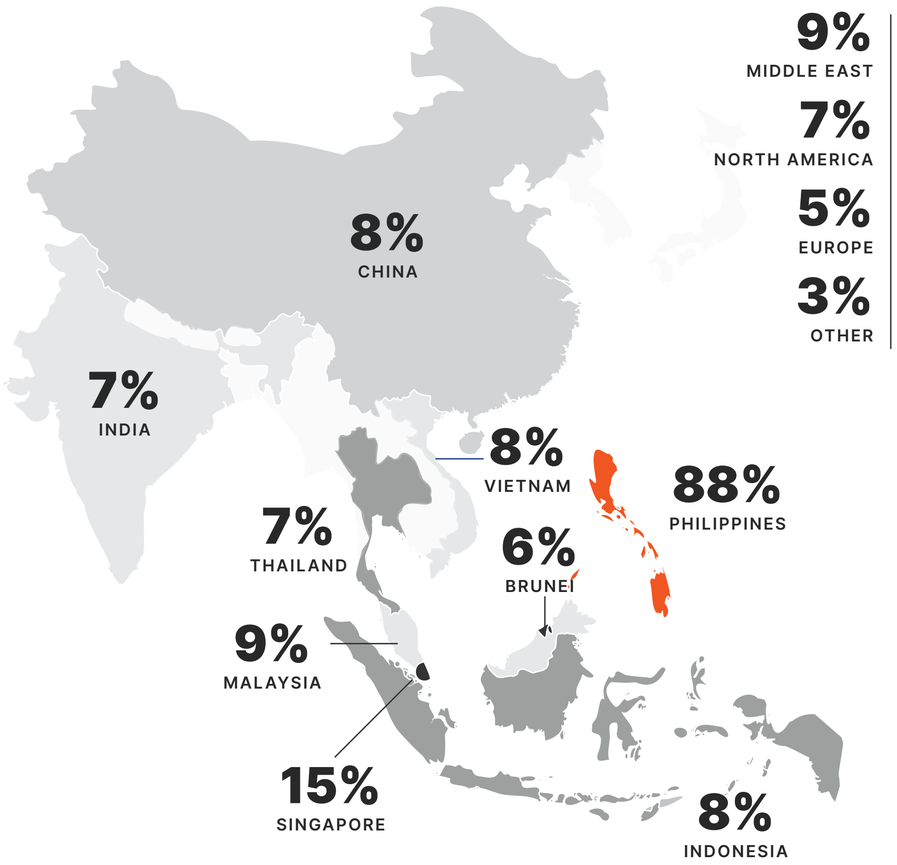
80%

expect to increase the number of projects

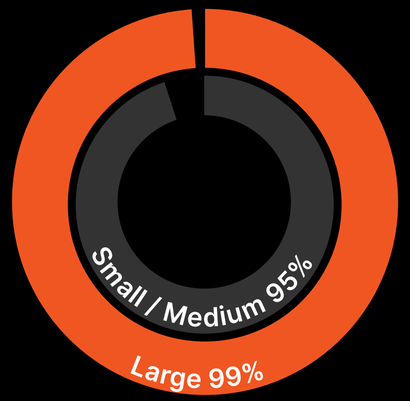
75%

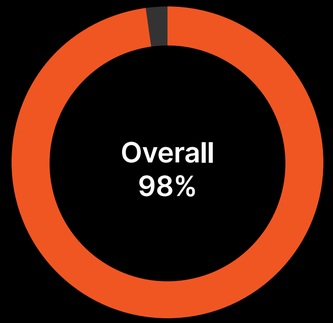
expect to increase the value of projects.

Locations of Projects



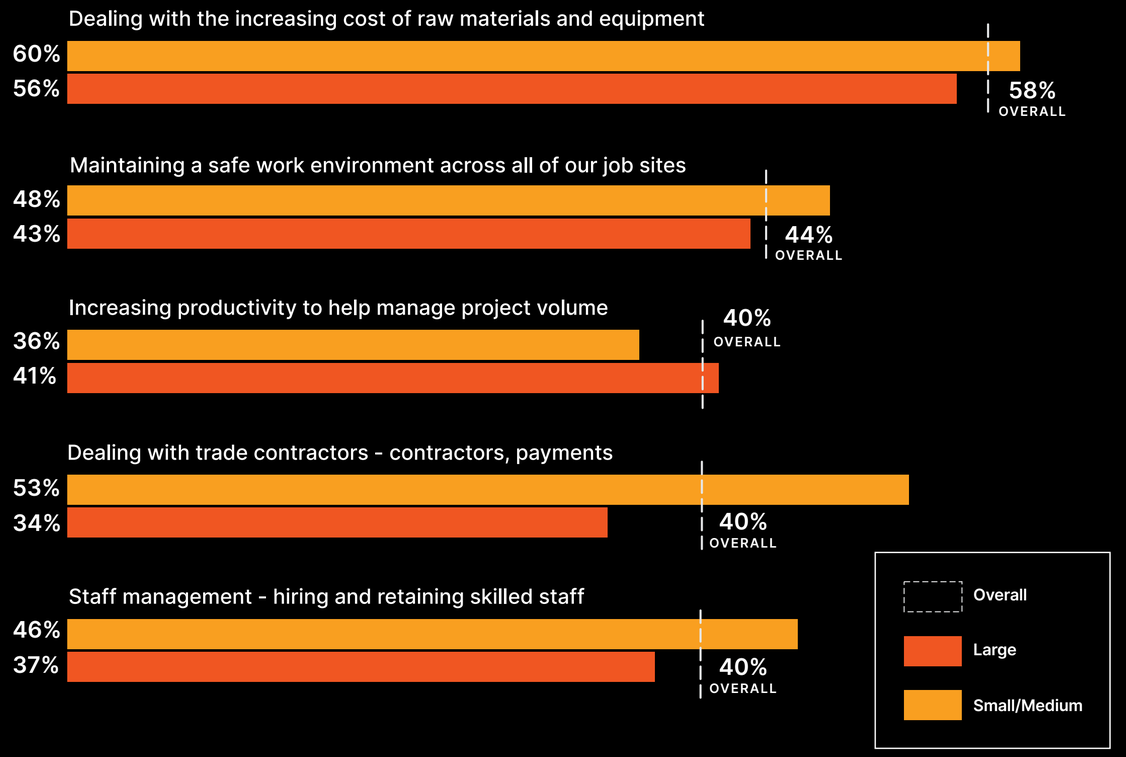
Construction Industry Sentiment Over the Next 12 Months (% Confident)





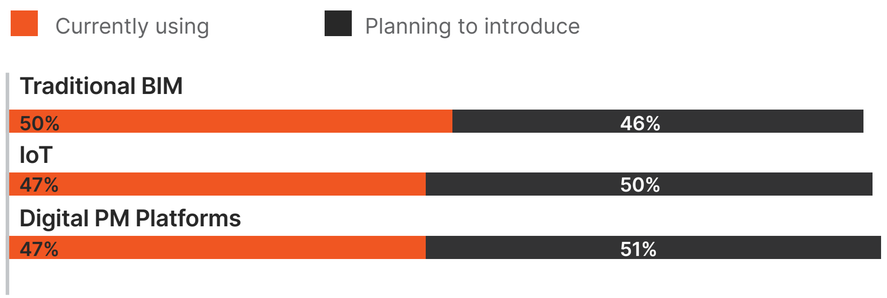
Construction decision makers in the Philippines can see challenges on the horizon. What do these challenges look like?

Greatest Challenges Over the Next 12 Months



In response to these challenges, construction businesses are improving access to project information, upskilling staff and introducing new technology to boost productivity and profitability.

Use of Technologies (Overall)



Changing established behaviours (44%) and data security concerns (43%) are the two most common reasons for resistance to technology investment. This was followed by costs, inadequate software solutions and lack of support from technology vendors (38% each).

With a laser focus on technology, innovation and diversity, emerging markets like the Philippines have the potential to leapfrog established markets, adopting next generation technology while established economies flounder on legacy systems.

Market Insights

The Philippine economy is on a steady growth path, according to the Asian Development Bank.

Philippines construction posted a record high growth rate in 2021, bolstered by public spending on major infrastructure projects.

The Philippine government prioritised construction as a pillar of economic recovery; the 2021 national budget allocation to the Department of Public Works and Highways increased by 61.3%, representing 15.4% of the total budget.

The country's 4.337 million workers represent 9.6% of the national workforce.

GlobalData predicts further record growth of 20.7% in 2022, driven by improved economic conditions, consumer and business confidence and foreign direct investment.

The Department of Trade has created a roadmap to realise the potential of AI and establish the country as an AI hub in the region, according to McKinsey.

Singapore

In a nation of early adopters of digital technology, big data, artificial intelligence and next generation BIM are on the investment horizon.

While Singaporean construction decision-makers are confident about the next 12 months, smaller businesses are far less optimistic than larger companies. What's more, the growth outlook among Singaporean businesses is far more conservative than their regional peers.

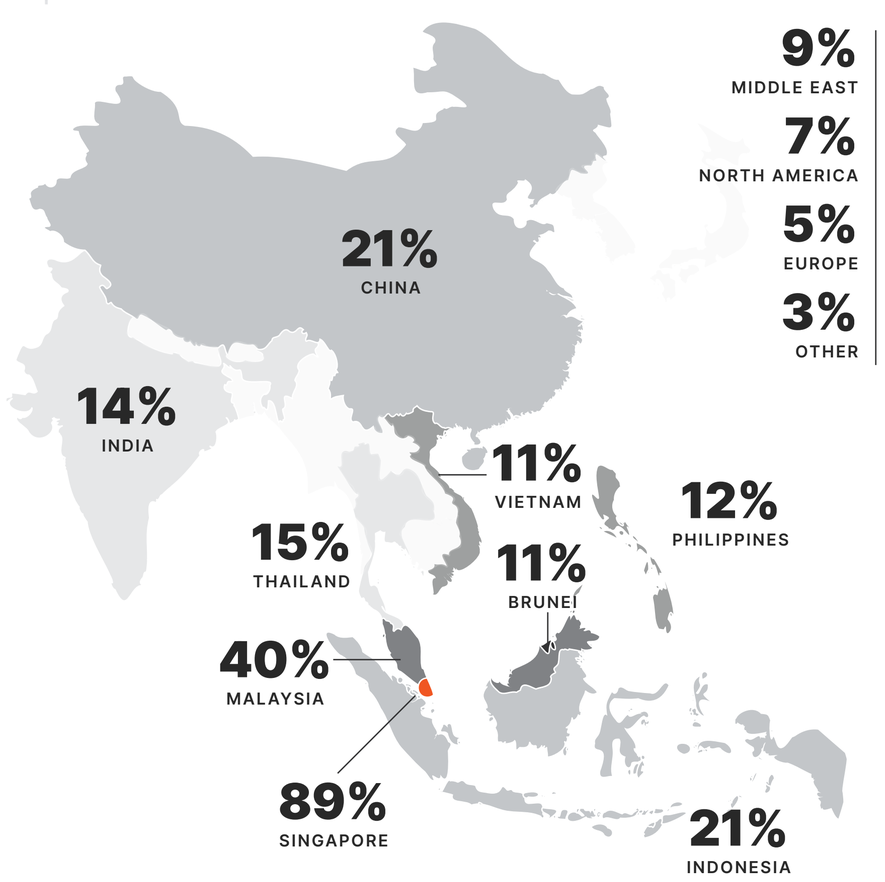
228
construction decision-makers and influencers surveyed

39%
of businesses are more than 10 years old

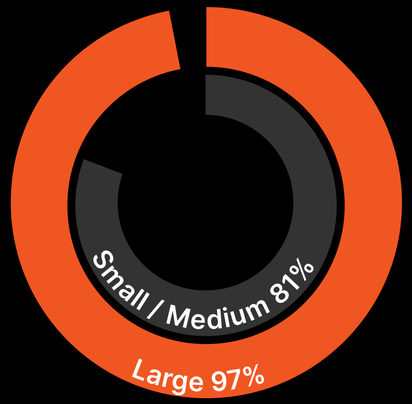
49%
expect to increase the number of projects

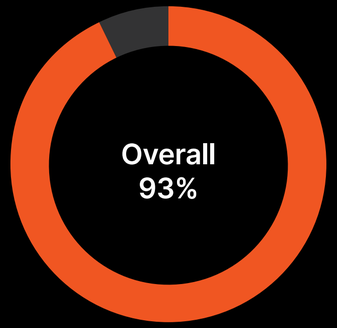
50%
expect to increase the value of projects.

Locations of Projects



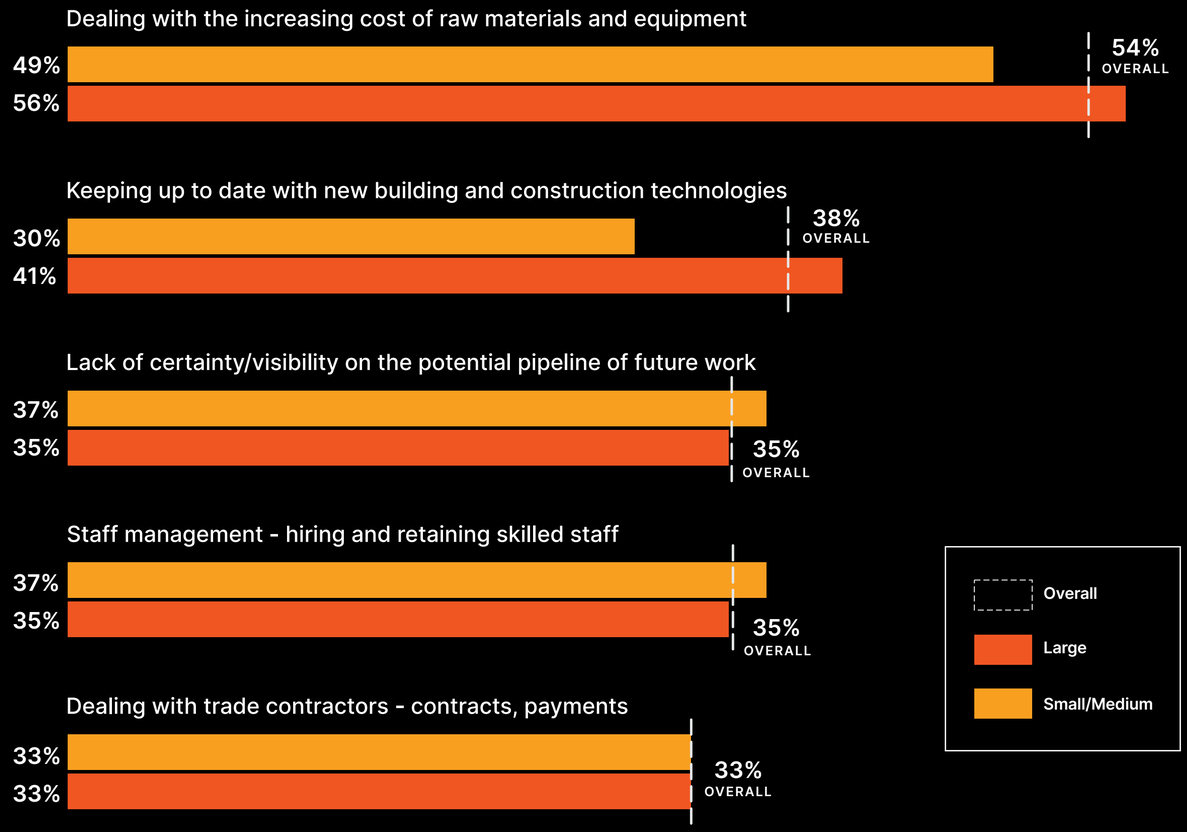
Construction Industry Sentiment Over the Next 12 Months (% Confident)





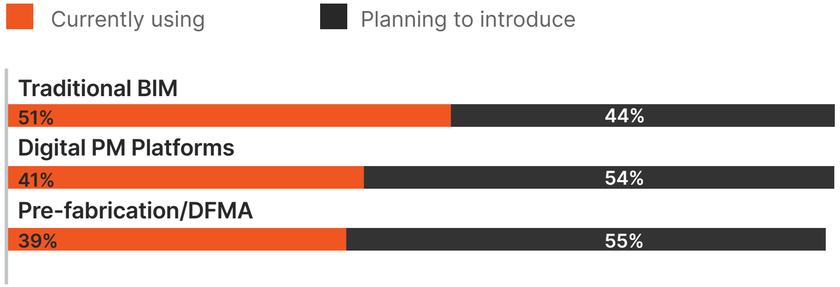
All construction decision makers surveyed think there are challenges on the horizon. What do these challenges look like?

Greatest Challenges Over the Next 12 Months



In response to these challenges, Singaporean construction businesses are looking for strategies to improve stakeholder engagement in project planning, improving access to project information, upskilling staff on new technologies, and better managing their supply chains.

Use of Technologies (Overall)



But 99% of construction decision-makers see obstacles to be overcome on the digital transformation journey. Lack of support from technology vendors (39%), changing established practices and behaviours (38%) and data security concerns (37%) were the nominated as the top three reasons for resistance.

Despite the obstacles, Singapore's construction leaders have their eyes firmly fixed on future opportunities, and on the technology that can help enhance build quality and resource efficiency, reduce rework and deliver a better client experience.

Market Insights

Singapore's construction sector was hit hard by the pandemic, especially during the "circuit breaker" period in 2020 when firms had to suspend work.

The sector has since seen positive signs of recovery. In January, the BCA estimated that contracts worth up to $32 billion were likely to be awarded in 2022 – the same level as 2019.

The public sector is expected to contribute about 60% of total construction demand in 2022, supported by a strong pipeline of public housing projects, as well as healthcare developments and infrastructure work such as the Cross Island MRT Line.

The Singaporean Government was embracing digital technology at speed in the years before Covid-19 hit. In 2016, the Building and Construction Authority launched a construction productivity R&D roadmap, with 35 key technologies to drive productivity improvements. These include design for manufacturing and assembly, automation and robotics, building information modelling and more.

The Singaporean Government continues to provide financial support to help small-to-medium enterprises adopt advanced manufacturing and digital delivery.

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