Get Your Construction Data Together

Find out how developers and contractors can build smarter with real-time insights.

PROCORE

In 2022 we saw developers and contractors gathering more data than ever before. The appetite for instant network access, technologies like 5G, BIM, and on-site sensors has transformed the construction industry. How developers and contractors make use of this data will be key to their success - whether they're a small regional operator or a large multinational.

Approximately one-third of the construction industry is still using paper to capture, track, and manage data[1]. This inefficient use of data and disconnect from the right technology, means they are missing out on immense efficiencies and falling behind the global trend of digital transformation.

This issue is a pertinent challenge facing construction today. There is a pressing need to connect stakeholders, information and processes on a single platform.**This ebook identifies the key opportunities to improve the areas in which developers**

and contractors need to focus on, and how platform technologies can support them to build smarter. It also includes case studies from businesses around Asia that are leading the way in making effective use of data.

In short, it finds that robust project data sets, connected platforms, and real-time insights are powering the next wave of digital transformation in our industry. The companies that are able to effectively capture, extract, and analyse project data across a project's life cycle, incorporating both past performance and predictive insights can:

+ Make better real-time decisions faster
+ Differentiate themselves from the competition
+ Attain a higher profit potential
+ Stay ahead of compliance
+ Deliver high-quality, smarter construction

[1] Procore, Report, (2022), How We Build Now, Tracking Technology In Asia-Pacific Construction in 2022.

Contents

Today's Competitive Construction Landscape

The construction industry weathered the Covid storm with optimism and technology and we are now faced with challenges of labour shortages and raw material costs, extreme weather events and geopolitical instability hurting bottom lines. With such uncertainty, there is a drive to use technologies and data that transform day-to-day operations. What does this mean now? Increased competition.

We've seen contractors begin to shift to remote ways of working and rely more on digital collaboration solutions to connect stakeholders, which in turn raises client expectations. Clients not only expect a more rapid turnaround on projects, they expect **a more collaborative approach through the lifecycle of the project and increased visibility into plans.** For their part, both developers and contractors are also looking for ways to integrate predictive analytics and machine learning into their workflows.

As projects become more complex and tenders become more competitive, so too must the approaches to project and performance management. That time should be spent creating more productive, safer projects. Making better use of the available data will be instrumental in **accelerating project timelines, meeting customer demands, building trust and accountability, and accessing predictive insights.**

The Need to Connect Stakeholders, Breakdown Silos and Build Trust

As Asia experiences economic growth, and infrastructure demand increases, there is greater pressure to build faster, on-budget without compromising quality. As a result, margin pressure is stronger, and there is more competition to showcase competitive differences.

It's now essential for businesses to operate more efficiently and with more transparency. When there are too many silos of information and fragmented communications across different stakeholder groups, construction projects are more likely to hit difficulties. These can stem from:

- Poor communication across functions, and within the project supply chain
- Inability to scale operations to meet client demands
- Poor cost/schedule management
- Poor reporting of project performance, leading to variations and scope creep

To mitigate these challenges, businesses are adopting a fully connected ecosystem to get whole data sets and build trust amongst networks of decision makers who can span disparate locations locally or globally.

"Trust is gained when data is accurate, timely, and complete," explains Bruce Wells, Vice President of Asia at Procore. "When all stakeholders are using the same technology, and are looking at the same information, there are going to be far reaching advantages. When the benefits of a common platform are shared (as opposed to just sitting with the account owner) then adoption is greater which leads to higher quality data which in turn drives a higher level of trust," Bruce adds.

Complex and often disconnected approaches to information sharing have hampered access to construction data. Many businesses still make heavy use of manual, siloed solutions like Excel and ERP systems. Trying to resolve and collect information across these different solutions introduces delays and inaccuracies, and generates distrust within project teams, hindering performance.

"Trust is gained when data is accurate, timely, and complete. When all stakeholders are using the same technology, and are looking at the same information, there are going to be far-reaching advantages..."

Bruce Wells
**Vice President, Asia**
Procore
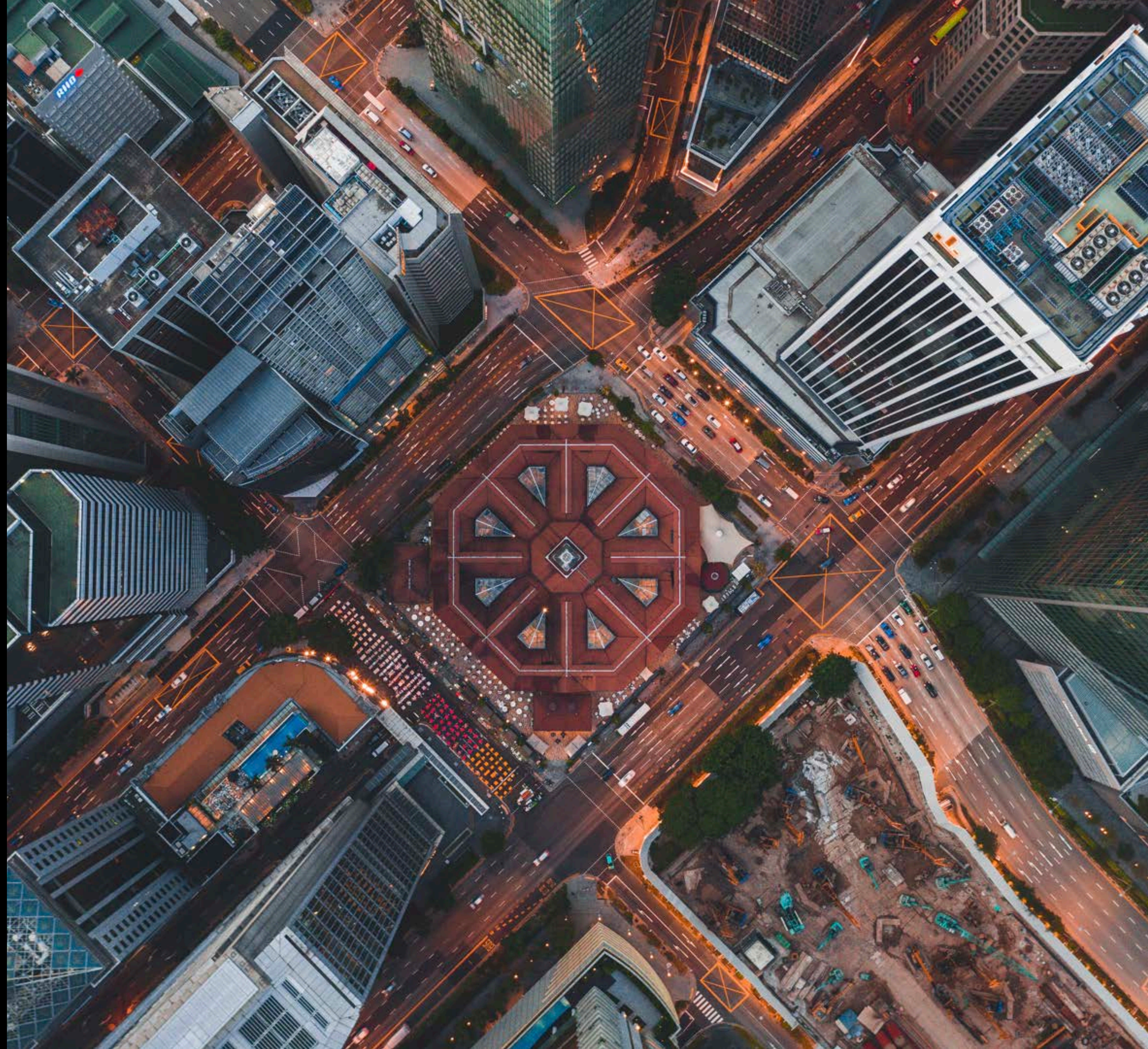
3 Ways Data Helps you Win

Our customers tell us that there are three main areas developers and contractors can maximise their competitive advantage when it comes to information analysis and sharing. These are also the areas where we have seen businesses have the most success in improving construction outcomes by getting projects closed out faster, and winning more repeat business.

01

Data Quality It's critical that businesses are able to trust the data analytics that is coming from the job site. Incomplete data is as useful as no data at all. Creating high-quality data often starts with how it is collected. E.g. a mobile tool that site teams like using, where they buy into the value it adds to the construction process.

02

Data Access Context is critical when analysing data, so it is vital that businesses are able to access all of the information relevant to their projects from a dashboard or a single solution. Information that is spread across multiple solutions introduces the possibility of conflicting or incomplete data across tools.

03

Real Time Businesses can't effectively improve forecasting accuracy, enhance risk analysis or benchmark against industry competition if they are working from data that is outdated. Access to real-time data enables users to spot trends in the live data and provide feedback and insight to teams immediately.

Whether you are satisfied with a Red Amber Green view of how projects are progressing, or you are looking to implement forward-looking metrics to improve processes - the fundamental tenets remain the same.
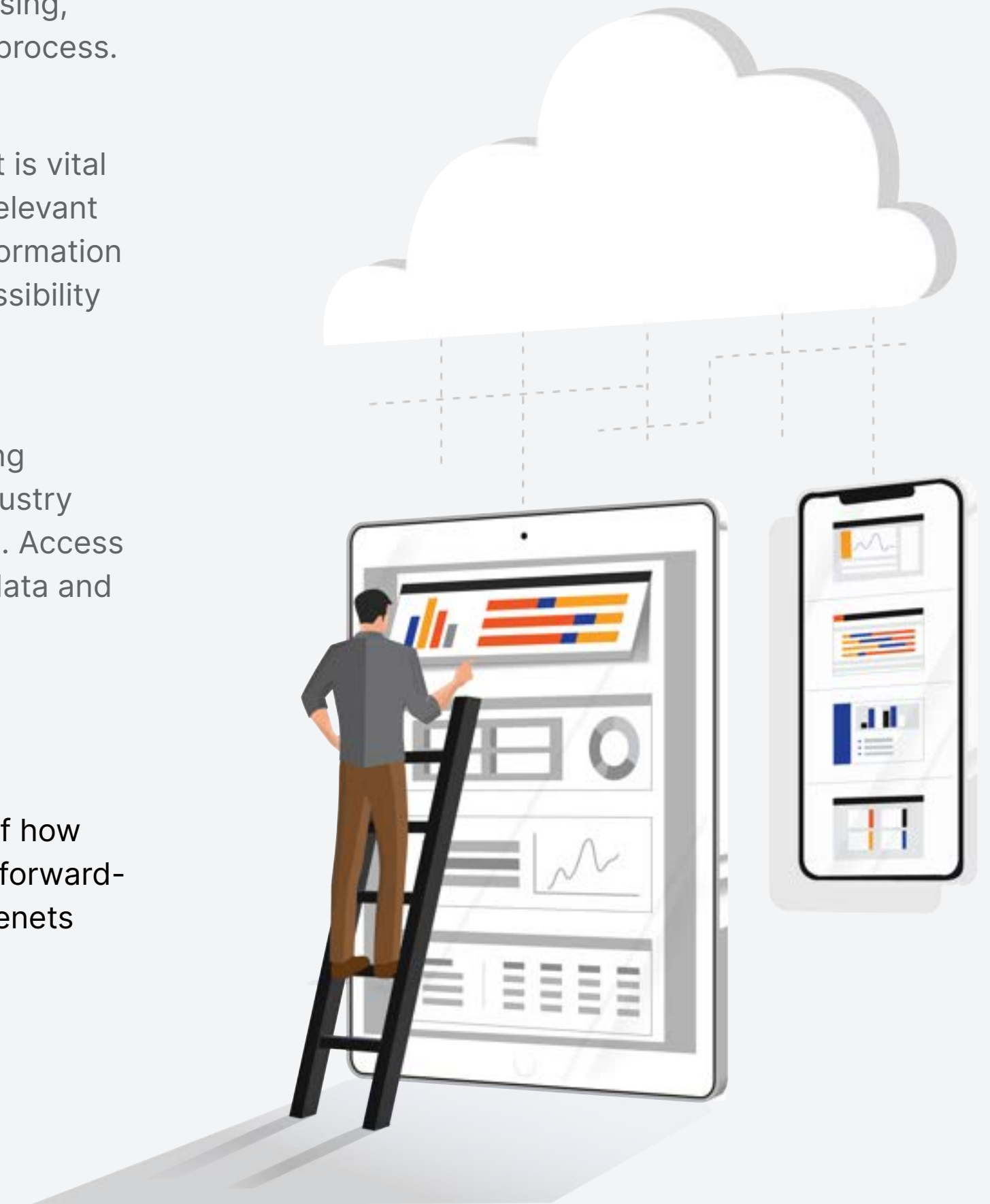
Maintaining a Competitive Advantage:
The Platform Investment

What is a platform? "... technologies that enable visibility into management of business or operations processes through native capabilities and seamless integration with other technologies to aggregate data and process control in a single place." **McKinsey & Co,**

Market demands will inevitably force manual and siloed solutions out of play. This is partly the result of regulation and compliance requirements, but even more so being driven by client demand. Clients are driving aggressive project timelines, with fewer (or no) defects, and demanding to be involved throughout the supply chain.

Although the construction industry has historically lagged in productivity, businesses that have improved insights through the adoption of a construction management platform can thrive even in this competitive environment. **A platform helps deliver stronger data quality.** Project insights you generate are dependent on the standardisation of how you input and gather the data from the beginning. Data needs to be accurate. It needs to be captured in real-time and it needs to be complete — meaning not siloed in multiple spreadsheets or stuck in disparate technology solutions that don't talk to each other. And the advantage to the bottom line? **Businesses across the Asia Pacific region report potential savings of 20%, on average, on total project spend, just by managing data more efficiently.[4]**

[4]McKinsey & Co, Rise of the platform era: The next chapter in construction technology, 30 October 2020.

A More Connected Construction Experience

The future of construction project management is about connecting construction to real-time data captured during the construction process. It will be less about hanging onto thin margins and more about leveraging data, and adopting the right technology, to make the best decisions on project pursuits, business partners, design plans, and preparing accurate estimates. Capturing consistent and accurate data is also integral to leveraging key enhancements in artificial intelligence and machine learning. These advancements in technology are only as smart as the data and direction they are given.

It is critical that data is accurate, complete, and comprehensive so that the insights these engines can provide are accurate and action-oriented. **Without an integrated platform that bridges the data connections across life cycles and provides solutions your teams are willing to adopt, you'll never be able to**

leverage the power of real-time, data-driven decision-making. Our research shows that 42% of construction leaders predict that digital project management platforms will drive the most change for builders over the next three years[5]. This means that simply running lean and efficient will no longer make construction businesses competitive alongside companies operating on platforms with data-driven insights.

There is a clear and consistent pattern of technology adoption across the region and Asia is faring well. Our survey data shows that 47% of Filipino businesses, report they are adopting IoT, and 31% of Singaporeans touting the use of next-generation BIM, compared to 13% in Australia[6]. The drive to adopt technology, and capabilities are there, but it's also about investing in the solutions that will be the most lucrative to your business.

[5]–[6]Procore, Report, (2022), How We Build Now, Tracking Technology In Asia-Pacific Construction in 2022.

Why You Need to Look at Data Through the Eyes of a Platform

The future of design, planning and preconstruction is enabling the unlocking of a project's complete data journey, with actual data driving inputs for future pursuits. Real-time insights and robust data sets will sit at the forefront of all decision-making, and drive new profit potential as companies put emphasis on future-proofing their projects before the construction phase has even begun.

These values are inherently tied to the foundation of what a platform can offer, and the companies that are able to connect these data silos will thrive in their construction process and the next wave of digital transformation.

Ananda maintains 40% annual efficiency gains with Procore

The Challenge

Before Procore, Ananda's construction teams struggled to find critical information. It was scattered between multiple software applications and platforms – lacking integration. Ananda prioritised its three key concerns – centralised access to data, teamwide collaboration and quality and safety. It turned to Procore and successfully trialled the platform on six projects over eight weeks in 2018. The result was starkly different with end users loving the 25% power improvements of Procore Project Management and openly embracing the new technology.

The Solution

Procore is delivering on its promise as a true all-in-one platform capable of connecting information and multiple teams. It was its Ashton Asoke-Rama 9 twin towers development in the centre of Bangkok that delivered a turning point for contractor buy-in. The launch of the Procore Correspondence tool meant for the first time, its contractor network could create their own forms and collect data.

Productivity levels improved and soon the contractor network could see and forecast performance and cost improvements.

"Ananda is well advanced in its digitisation journey. Procore has been a foundational platform for us. Our end-users understand our goal in building with Procore is to achieve better performance outcomes now, into the future."

Thanit Thanadirek,
Business Digitisation Manager,
Ananda Development PCL

The Results

40% ↑
INCREASE

efficiency gain
maintained year on year

100%

Real-time Transparency
supporting the supply chain

20x
EFFICIENCY

User Adoption increase in 12 months

Read Full Case Study

Sime Darby Property centralises data intelligence with Procore to future-proof its development business .

The Challenge

With its existing software evaluated as inadequate in storing historical & analytical data, it turned to Procore to help drive greater efficiencies and future-proof the business. Following an evaluation process, Sime Darby Property implemented Procore. Sime Darby Property aimed for better collaboration between its design and contracting teams. Procore was a crucial step in its innovation goal to harness the Metaverse to review design, quality issues and progress; virtually.

The Solution

By implementing Procore and centrally recording all variation orders, Sime Darby Property for the first time can now analyse, predict and cost potential variation orders. It plans to incorporate the Metaverse and create a 3D visualisation of elements of its future developments. It plans to overlay this with potential defect analytics to visualise the design, and its progress, identify quality assurance challenges and examine how collaboration can be improved.

The result for the Malaysian property developer? Mandating the use of Procore across all of its projects to build smarter and deliver a better product for the end customer.

The Results

100%
DEFECT DATA COLLECTION
 to better manage risk

2 Year
MANDATED ROLLOUT
of the Procore platform

100%
API INTEGRATION
of Procore internally

"As part of our digital transformation strategy, Sime Darby Property aims to create a best-of-breed software environment to digitalise our core businesses. For a construction management platform, based on research and the advice from our consultants, the recommended platform was Procore."

Stevensan Innasimuthu
Digital Transformation and Information Technology

Read Full Case Study

Unispace builds new global safety assurance benchmarks with Procore

The Challenge

The Unispace DNA is to excel in everything it does. A few years ago, when the organisation reviewed its commitment to quality and safety systems and processes, it realised it wanted to move beyond accreditation standards. Unispace wanted to build a reputation as an outstanding quality and safety assurance leader. With data-siloed administration systems in operation worldwide, it turned to Procore to deliver the visibility, transparency and connectedness it was looking for in a core construction management platform.

The Solution

Following a global review of potential construction management platforms, Unispace rolled out Procore worldwide. It selected Procore Project Management, Quality & Safety and Workforce Planning. The platform integrates with SignOnSite and OpenSpace for greater digital transformation benefits. Up to 700 staff rely on Procore for all business components - from the design phase to procurement, delivery and feedback management.

The Results

20%
INCREASE

in staff productivity

100%
PROCORE INTEGRATION

 linking offices, staff and all projects

100%
** INCREASED VISIBILITY**

to support its Zero Harm target

> "With Procore, we have a real-time view of our safety, linking incidents to corrective measures for the benefit of the global team. It's helped us establish and maintain a new standard in best practice."
>
> **Kevin McCabe,
> ANZ Commercial Director**

Read Full Case Study

Makati Development Corporation Enriches Biz Intel with Procore four decades and they have over 400 projects nationwide.

Based in the Philippines, Makati Development Corporation (MDC) are builders across Residential Buildings, Commercial Construction, Industrial, Manufacturing, Energy and Public sectors. Their excellence spans over four decades and they have over 400 projects nationwide.

The Challenge

MDC relied on a manual system for drawings, project reports and communication. With hundreds of projects underway at any one time, this meant managing a vast number of paper-based plans and drawings while constantly tracking version control and project updates.

MDC digitised a portion of its construction management network for scheduling and workflows. However, they needed a construction-focused, cloud-based platform that would support mobile app requirements and third-party software integration and would have a strong innovation roadmap.

The Solution

MDC screened market offerings and selected Procore for Project Management, Quality & Safety, Project Financials, and Correspondence Management tool.

"MDC is more efficient in data gathering and decision making with Procore," said Marty Martin, Head of Operations Digital Transformation at MDC. "We can complete our projects faster and maintain our quality benchmarks."

The Results

75%
TIME REDUCTION

vs target for supply transactions

11.52
DAYS

turnaround time in processing subcontractor accomplishments

100k
VENDOR BILLING TRANSACTIONS

since Procore implementation

"Procore was the ideal construction platform for MDC, both from a technical and financial standpoint. We needed a user interface that would suit our 8,000-strong team, plus it would have an open approach to connectivity with an array of solutions to support crucial business decisions and quality builds."

Marty Martin,
Head of operations digital transformation

Read Full Case Study

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If you have any questions,
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Talk with an Expert

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