Why the time is now for transformation in construction – and how to achieve it
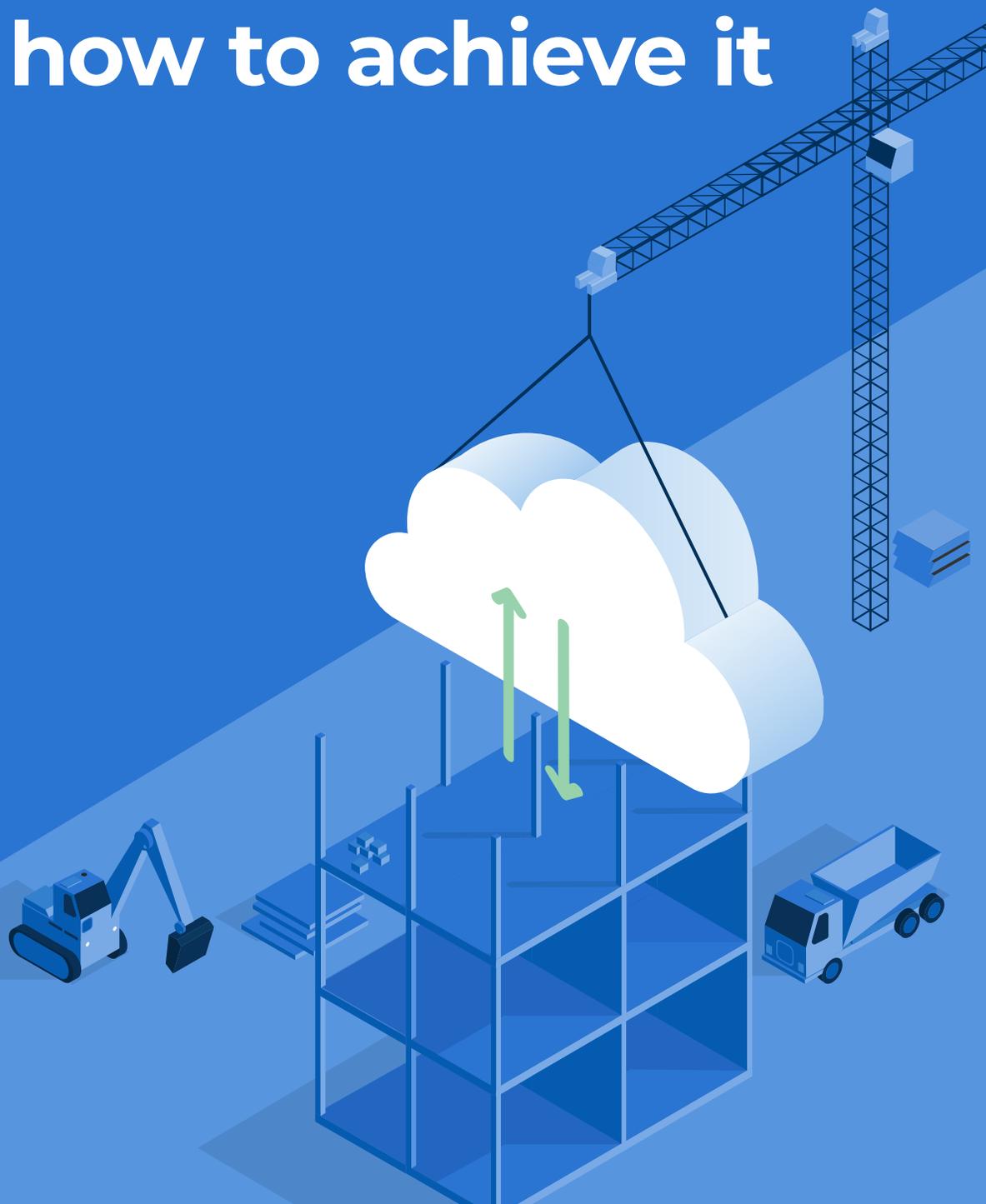
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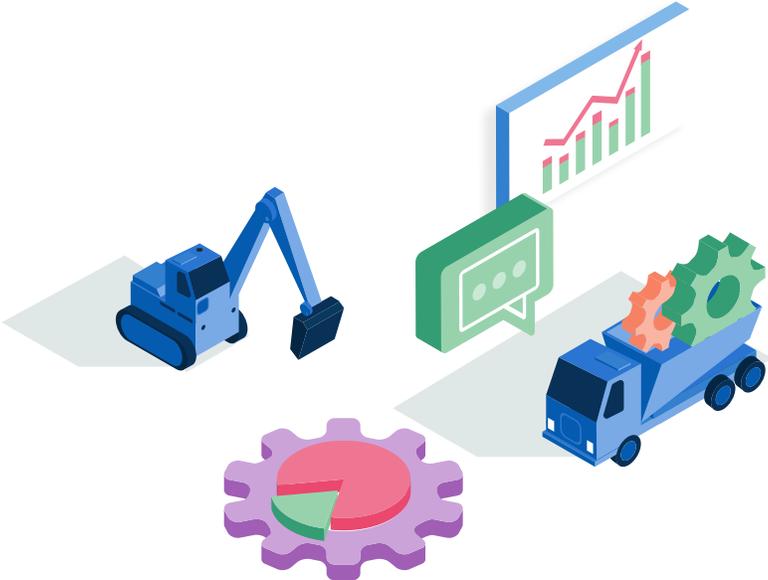
Introduction

COVID-19 and Brexit have forced the construction industry into a period of rapid digital transformation. Having an impact on everything from workforce numbers to profit margins, technology has had to be embraced to operate efficiently and remain competitive.

Incredibly, many projects are still planned on paper, creating a disconnect between the office and the field that has only been amplified by COVID-19. According to the JLL 2020 Construction Tech Report, 67 percent of construction companies have now enabled remote working, splitting teams on and off site. According to their June Worker Preference Barometer, 63% of construction employees would like to maintain this workplace flexibility.

What's more, a serious shortage of affordable, skilled labour (the number-one problem of 82 percent of building firms, according to the National Association of Home Builders) means that many companies are operating with skeleton teams. This can also have a significant impact on safety, increasing the likelihood of cutting corners to deliver work on time. It's clear that streamlining efficiency is more crucial than ever; and digital transformation is the way to do this.

But as pressures on the construction industry grow, companies are transforming the way projects are planned and executed. The JLL 2020 Construction Tech Report states that most new funding has been concentrated in categories that have grown because of COVID-19 – like technology. The most innovative companies are integrating technology into their daily processes, choosing a partner that provides intuitive tools that every team member can use.

As changes and shifts continue to take place, a number of key industry challenges present opportunities for construction companies to use technology to improve their efficiency.

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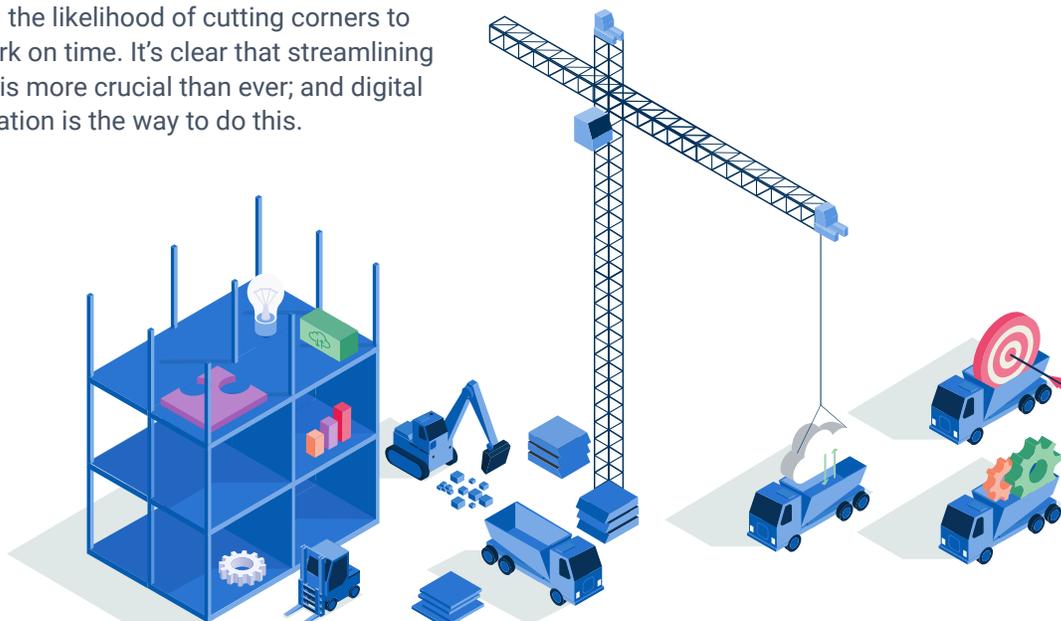
Embrace technology, improve efficiency

By embracing technology, construction companies can respond to increasing demand by completing projects faster, more efficiently, and with greater flexibility.

The right technology also allows business owners who do not necessarily need access to the granular day-to-day operations of a given project the appropriate level of visibility, thanks to real-time dashboards and rollup reports.

"The industry is at a technological tipping point," says Stephanie Viers, construction industry expert at Smartsheet. "We talk to hundreds of our customers in construction, and we hear the same story: evolve or die. The competitive pressures are just too great to forego the advantages that technology can offer."

And with growing pressure to hit ambitious sustainability targets, the construction industry should be looking to streamline processes such as managing delivery routes to reduce carbon footprint.

Make technology work for your organisation

Streamline workflows

Construction projects typically go through a series of phases before completion, with the timing of these phases varying greatly. At any point during a workflow, a bottleneck can occur, presenting a valuable opportunity to use technology to expedite processes and save time. By using Smartsheet, 47 percent of users in the construction industry report saving at least six hours every week.[1]

Provide project visibility

Collaboration between office workers, such as project managers, and field workers, such as foremen, is crucial. When everyone has access to all project documents and up-to-date timelines, construction projects are more likely to be completed on time and on budget. And with teams split between on-site and at home, mobile compatibility ensures all workers have access to project information anywhere, any time.

Improve efficiency

Companies not currently using digital tools must begin integrating technology platforms into their processes in order to remain competitive, while those who have adopted tech to should look for additional ways for it to increase efficiency.

Improve agility

As the industry struggles with a skilled labour shortage, meeting these rising expectations will become increasingly challenging. COVID-19 has taught construction teams that they need to be able to flex and adapt to constantly shifting priorities and changing circumstances.

Streamline scheduling

Even the slightest schedule change can affect multiple people, and they all need to be informed in a timely manner. With a real-time work execution platform such as Smartsheet, schedule changes can be made on a smartphone, and all affected parties can access updated information in real time.

> **I think there's not a better program on the market to be able to streamline processes. In a C-level position in any company, regardless of the industry, you have to have information you can crunch, and you need to know that it's accurate. The nice thing about Smartsheet is, once you get the information in, you can have your dashboards with your KPIs and company benchmarks all preset on one side and actuals on the other half. You can make your projections with numbers, graphs, or whatever works for you, and in five minutes you can get the health of your company.**

John Kenney, *Chief Operating Officer, Sutter Roofing*

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Improved collaboration

Many construction companies have broadened their offerings to include additional aspects of projects for clients, and complete this work using internal teams or subcontractors. To see a project through to completion, construction managers are now dependent on more people, teams, and companies.

But an over-reliance on paper for project planning means field crews don't have the same project visibility as those in the home office, creating time-consuming delays and disconnects. To address these issues, construction companies are changing their processes and mindsets to encompass a much more collaborative approach by replacing spreadsheets, emails, and meetings with cloud-based work execution platforms that keep everyone on the same page.

The 2018 TechValidate survey of Smartsheet users found that before they implemented Smartsheet, 86 percent of respondents experienced poor collaboration across stakeholders, resulting in delays and incorrect decisions.[2]

By choosing a platform that allows everyone access to the most recent documents, data, and work status, all people working on a project – from architects to project managers to builders in the field – can instantly access information about blockers, dependencies, deadlines, and resources.

> " I think one of the biggest wins for Smartsheet was that the client was able to get different groups that were siloed within their own company to start collaborating more effectively, which was having a positive impact on the projects we were executing.
>
> Betsy Solomon, Accounts Operations Lead, JLL

[2] 2018 TechValidate survey of Smartsheet customers and users

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Make technology work for your organisation

Real-time collaboration

By using cloud-based technology, all team members can access real-time project information when and where they need it, including inspection logs, project timelines, budgets, and dependencies.

Punch list and change order management

Instead of using a spreadsheet or handwritten list, move your punch list into an online platform that provides transparency, in addition to real-time information. By sharing statuses in real time, all team members are more accountable for their incomplete tasks.

Quality control

Reduce testing and inspection errors, accelerate close-out time, and improve job satisfaction by maintaining transparency between client and site crews. By choosing a work execution platform with granular sharing permissions, such as Smartsheet, you can easily share only the specific information you want a client or contractor to see, and keep private data private.

Collecting signatures

Many documents need signing during a construction project, including subcontractor contracts, invoices, change orders, and client contracts. By using the Smartsheet DocuSign integration, you can collect digital signatures and then automatically update project documentation in Smartsheet.

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Focus on proactive safety

In recent years, the rate of safety violations and worker deaths has risen dramatically in the construction industry, partly due to the increased demand for speed (and in some cases, companies cutting corners to meet mounting competitive costs). According to 2020 Health and Safety Executive government statistics, the construction industry sees 61,000 non-fatal injuries a year, and a further 37 fatal injuries.

Construction companies are now spending more time and money on proactively improving safety conditions for their workers. Because 20 percent of construction worker deaths happen in the first two months on the job, construction companies are improving safety training during the onboarding process.

Companies are also performing self-inspections and encouraging employees to self-report safety issues as they observe them, using technology to more quickly capture and address safety issues.

COVID has raised new challenges for safety. For example, on-site managers now have to track the arrival of every single worker or visitor. Using the customised template from Smartsheet, this can be done quickly and efficiently alongside managing PPE inventory such as hand sanitizer and gloves. While hopefully, the need to track and trace won't be with us forever, there's no denying how valuable it is to have clear records of who is on site – and when.

> **One of the most important requirements for a major construction project is regulatory compliance. We use Smartsheet to capture project details in real time via live dashboards, so health and safety teams can confirm checklist requirements and deal with potential safety issues promptly.**
>
> Stephen Agla, Health, Safety and Security Manager, Mosaic Transit Group

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Make technology work for your organisation

Shorten response time

Workers are often the ones who spot safety issues or violations. However, they may be hesitant to report them, or simply forget to make a report at the end of their shift. By placing QR codes on safety signs in strategic locations, workers simply scan the code with their mobile devices to start the reporting process using Smartsheet.

Keep comprehensive logs for safety and inspection tracking

You can only resolve safety issues that you know about. By keeping digital records, you can increase documentation accuracy during inspections, maintain comprehensive logs without additional steps, and accelerate resolution by connecting the right people at the right time.

> **We have around 50 COVID-related solutions built in Smartsheet. That includes sheets, metrics, reports, dashboards. To be frank, we couldn't do without Smartsheet. It allowed us to build our daily COVID survey in around an hour. There are no special developer inputs. Just a simple, elegant, fit-for-purpose solution.**
>
> Gavin Cheetham, Group Building Information Modelling (BIM) Manager, A.G. Coombs

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Using mobile for integrated project management

Many construction professionals still write notes in the field on paper, or on their phones, and then log into project management software to update status, timelines, and budgets when they have access to a computer. Others use their phones to call in status reports to construction managers. Using these methods means that some decisions must wait until a team member reports in, which can lead to additional costly delays.

More construction professionals are now using mobile technology to provide real-time communication. And more recently, thanks to the flexible working practices COVID-19 has generated, this need has increased even further.

Instead of waiting for people to call in, or spending time trying to solicit updates, team members can complete status updates in seconds on their mobile devices, and quickly get back to work. This increases productivity dramatically, and is a major reason that construction professionals will continue to increase the level and sophistication of mobile technology used in their organisations.

Make technology work for your organisation

Receive updates from field workers

Instead of waiting for phone calls, use platforms with mobile components to empower workers to instantly provide project updates. With Smartsheet, workers can provide updates by submitting a simple form or uploading a photo, which directly updates the project sheet, eliminating errors and speeding up the process.

Track data and financials

Instead of data being stored in various tools, on paper notes, and within diverse documents, you can improve efficiency by using a work execution platform to create a single, centralised source of truth for sharing important company and project information.

Integrate other tech

The construction industry has recently begun to make use of technology such as drones and wearables. Any data collected via these devices can be integrated into a Smartsheet dashboard, providing your team with real-time information to gain the necessary insights.

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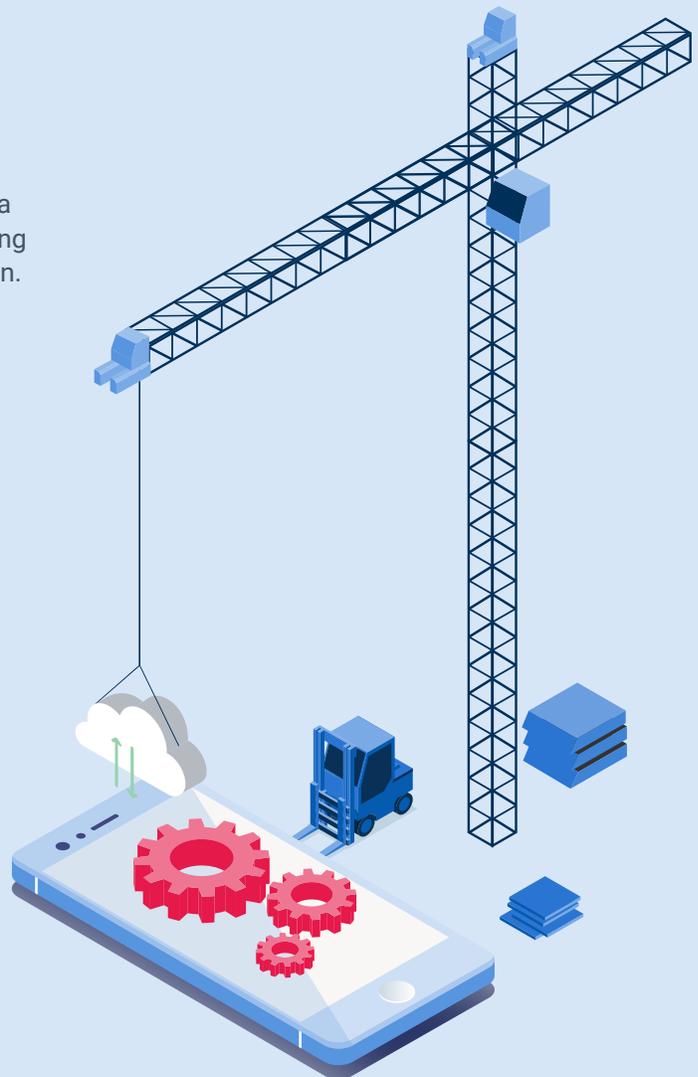
Embracing automation

According to the Institute for Public Policy Research's (IPPR) study, the construction industry is facing a significant skills shortage, with more than 750,000 workers set to retire in the next 15 years. More recently, migration restrictions as a result of both Brexit and COVID-19 mean that number is reduced even further.

Construction companies now must maintain the same speed and efficiency with a smaller labour force. With increased competition in the field, mistakes – which happen more often when teams are stretched thin – are even more costly.

Companies are now turning to automation to improve efficiency and accuracy. By automating repetitive tasks, companies can reduce human error, miss fewer deadlines, enforce processes, and collect the right data from the right people at the right time. Business owners and management can analyse their businesses and processes based on accurate, real-time information.

> **Automation is just going to continue to be increasingly important for construction companies. They need to overcome labour shortages, and other companies are increasingly going to be buying more and more solutions that incorporate automation.**
>
> Jack Crane, CEO of Cyberco
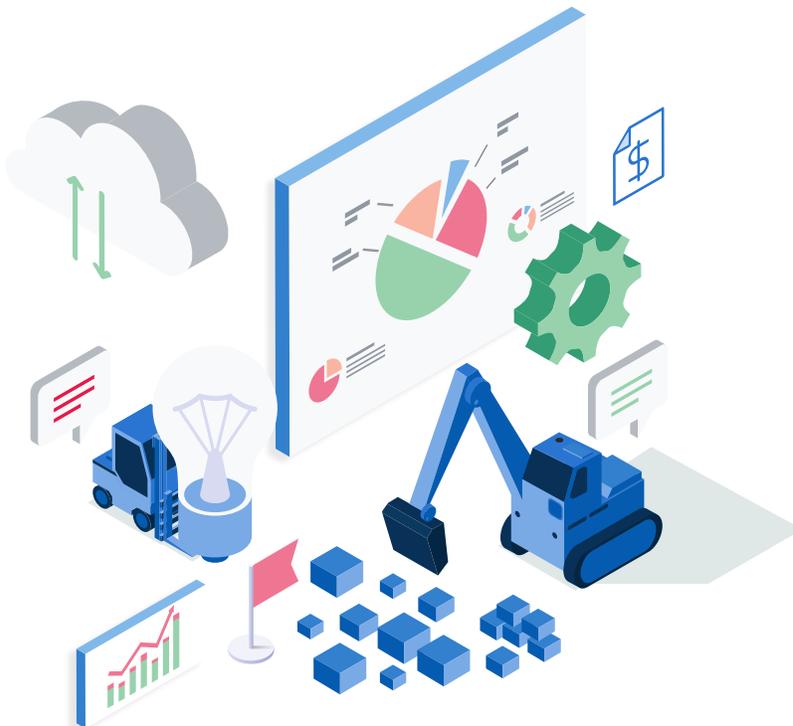
Make technology work for your organisation

Automate repetitive tasks and actions

Waiting for approvals or project updates can cause costly delays. The right software can speed sales discount and procurement approvals, time tracking approvals, status and schedule update requests, hiring approvals, and more. Create automated approval and update requests – without help from IT – that are triggered based on pre-set rules, so your team gets the information they need quickly.

Collect error-free information

A work execution platform with automation features enables you to collect error-free, consistent, and organised data from anyone via easy-to-configure forms.

Eliminate bottlenecks

With easily configured alerts, you can set up your projects to automatically notify you when a task or process is running behind schedule or over budget, speeding up the pace of important decisions – and the overall work.

> **After seeing how much time has been taken off their plate, [teams are] pushing for more automation through Smartsheet... The time it took for all this data to get to our main headquarters — it's all gone. It's phenomenal.**
>
> Raylene Dufresne, Director of IT, Miller & Long

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Before You Buy

Look for a connected platform, not a single tool

Construction projects involve many different people and processes. When companies select a single tool for a single task, they create a silo, which makes it impossible to share information across the entire project. Using functionalities such as Smartsheet's 10,000ft, and integrations with existing technologies, construction companies can see a complete picture of the project from one place.

Consider how your team will use the platform

Different viewing options will ensure that teams feel comfortable and in control, whatever their tech skills and language preference. With Smartsheet, you can choose from four views: grid, card, Gantt, and calendar. Grid offers the classic spreadsheet layout, while card – inspired by Kanban boards – provides a clear, visual way for your team to collaborate. With comprehensive admin controls, you can also make sure you're sharing the right level of information with the right people.

### Find a platform that delivers real-time information

On job sites, the project status changes constantly. Leveraging the power of the cloud is critical; but because job sites often don't have wireless internet access, you should also choose technology that is accessible on mobile devices over internet hotspots or that offers a mobile app. By purchasing technology with a strong mobile component, employees can report issues or access training information from the job site, the office, or even a client's office.

Get buy-in from the team

Construction professionals can be resistant to digitisation. Involve them in the process of evaluating your workflows and selecting the appropriate technology to reflect how your team actually works. Focus discussions on how new technology will make their jobs easier by reducing errors and improving productivity.
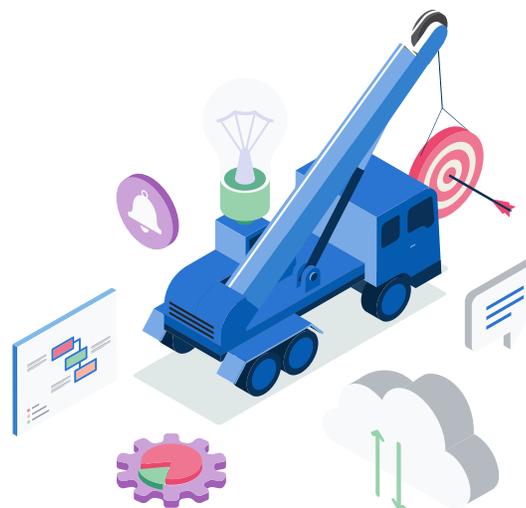
Conclusion

Building your business for tomorrow

The construction industry is ripe for disruption, and technology is spurring this revolution, with new and emerging cloud-based platforms becoming a cornerstone.

For an industry as traditional as construction, this change represents a big shift, both in technology and mindset. But by taking the time to invest in digital processes and new ways of working now, construction businesses can enjoy benefits including:

- Greater efficiency and agility
- Enhanced safety standards across sites
- Better collaboration between teams
- More effective use of mobile tools
- Productivity gains, with more automation

All of these benefits are well worth pursuing, particularly as the industry prepares to tackle a hugely busy few years amidst labour and supply chain issues. And with the right technology in place, the process of digital transformation doesn't have to be a strain. Instead, it should leave construction businesses free to focus on what they do best: building the future.

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In the construction industry, efficiency is critical to staying competitive. Smartsheet is the work execution platform that leading construction companies rely on to increase productivity and performance, enable collaboration, and track every step of every project — so they can make better decisions, faster, and say yes to more customers and more revenue.

For additional information on how Smartsheet can help your construction business improve efficiency and productivity, visit www.smartsheet.com/industries/construction