

The Digital Groundwork

Beyond construction's productivity gap



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Foreword

Construction remains at the heart of life in the UK. From iconic structures like the award-winning Bloomberg building in London to the new V&A Dundee museum in Scotland, the sector has gifted our landscapes with many world-class projects unveiled in the last twelve months.

Construction also plays a vital role in our national economy, not only as a major employer but an enabler of productivity in other sectors.

Productivity within construction, however, is still a critical challenge.

In 2018, our Digital Foundations report revealed many issues impacting firms across the country – linked to a reluctance to embrace digital technology where work is done, at the project level.

One year on, British construction firms are contending with many uncertainties due to the political climate, from the availability of foreign talent and materials to economic uncertainty.

As businesses face these significant short-term challenges, increasing productivity is more important than ever.

This report will explore how efforts to improve performance have progressed in the last twelve months, including the adoption of technology.

We collaborated with *Construction Manager* to survey over 250 construction professionals from a wide range of businesses in the UK, to explore their biggest productivity challenges and whether technology is helping to address them.

To support the research, we also held a panel discussion with the Institution of Civil Engineers in September 2019, featuring experts from multinational construction and architecture firms, public sector bodies, technology specialists and academic institutes.

This report includes their views on how firms' challenges reflect the position of UK construction right now – and guidance on how firms can use technology.

There is clearly tremendous appetite for positive change in construction, with a greater emphasis on trust, quality, sustainability – and the delivery of advanced, ambitious builds.

But to get there, firms will need to look beyond short-term challenges, and lay the digital groundwork that will prepare them for the great opportunities ahead. Determining and taking purposeful action towards digital delivery can ensure that the UK Construction Industry improves productivity and remains competitive.

We hope you enjoy the report.

Matt Keen

Construction Industry Strategist

London, UK

Autodesk Construction Solutions (ACS)

Chapter One:

The importance of people

At its simplest level, the performance of every construction firm comes down to one thing: its people. But unfortunately, people are a scarce resource, as talent shortages are a long-standing industry challenge.

The construction sector loses around 140,000 workers a year¹ due to retirement and natural turnover. As a result, firms struggle to recruit for one in three roles,² giving construction the most acute worker shortage of any industry – and professionals in the UK say that the skills shortfall is directly impacting productivity on the ground.

When considering the main barrier to productivity in their own business, industry professionals most commonly point to a lack of skills amongst employees (40%) and talent shortages (39%). This mirrors the 2018 results, when a lack of resources – including people – was also the most widespread barrier to productivity (48%).

A people problem

It's not only a lack of people, but a lack of skills, holding construction businesses back. In their open answers, construction professionals point to an "inexperienced and untrained workforce" and "a lack of technical competence amongst employees" as taking up significant amounts of time in their organisation.

Unfortunately, this skills shortfall may increase further, depending on the impact of Brexit. Migrant labour currently accounts for 8% of the total workforce, rising to 40% in London,³ and restrictions on immigration could further limit this important pool of skilled labour.

Poor engagement

When talent is in short supply, getting the most out of workers through strong employee engagement becomes even more important. However, many businesses are struggling to ensure that staff feel motivated and invested in the success of the firm – and there are clear signs of worker frustration.

Respondents say that their businesses' productivity is being hampered by a "lack of professionalism", "lack of interest" and issues with "attention to detail and ownership of work." Some professionals link this to the model of agency employment, which has created a "pick up and drop culture" where workers don't feel valued or invested.



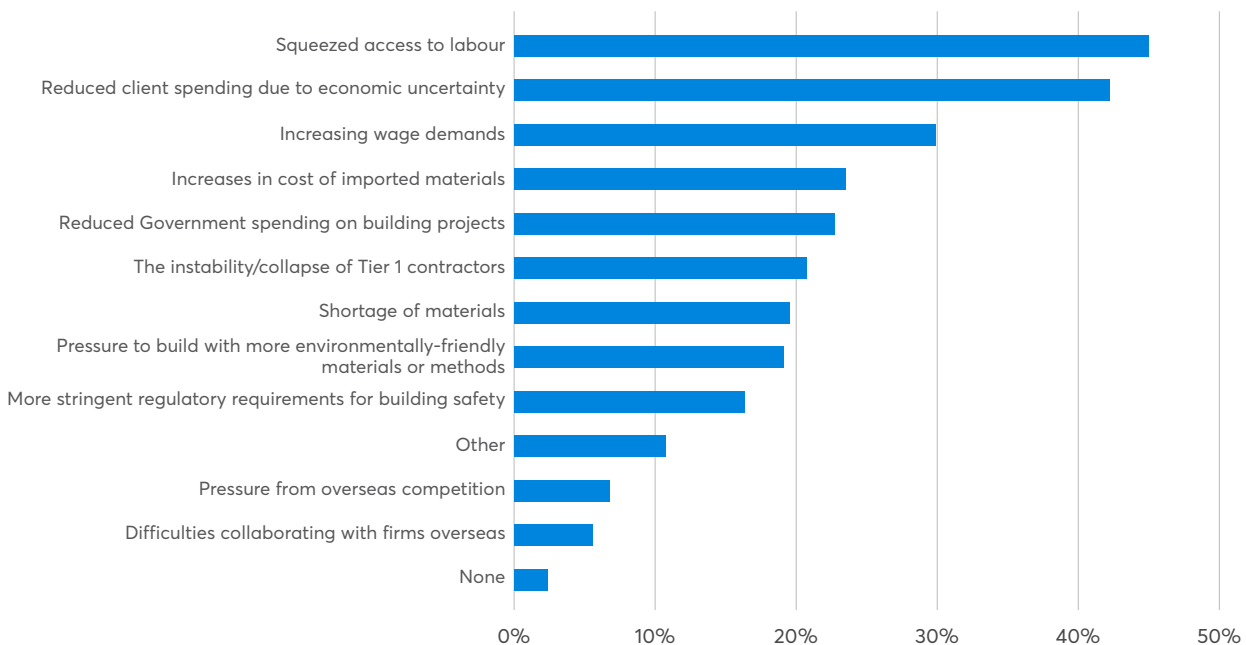
Poor engagement can even lead to staff absenteeism. One in ten firms say absenteeism is an ongoing management headache (10%), while a third experience it sporadically (33%). The number of firms routinely missing workers has dropped slightly from 13% in 2018 – but remains too high at a time when talent is at a premium.

This may give firms a critical advantage in the future, as many say that squeezed access to labour (45%) and increasing wage demands (30%) will be the biggest challenges facing the construction industry in the next 12 months.

Empowering the team

Construction businesses see technology as one way to address their talent challenges and make the organisation more attractive to new workers. Half of professionals say that using the latest technology is important for recruiting employees (46%).

What challenges do you see for the UK construction industry in the next 12 months?





Commentary

Given the current climate, it's no surprise that access to talent is the biggest concern amongst respondents. But technology can play a key role in not only attracting but also retaining and engaging employees, enabling firms to maximise the people that they have. Giving workers digital platforms to use on-site can help to alleviate the frustrations that damage motivation, such as difficulties getting and sharing information or time-consuming manual administrative tasks.

Technology can also help to alleviate the issue of workforce churn. Digital solutions, like Autodesk Construction Solutions' (ACS) BIM 360 and PlanGrid can be used to create standards, setting out guidance on the processes and best practice for work on-site. This helps to ensure that key knowledge doesn't leave the business with the more experienced employees and can be used as a tool to guide new workers.





Insight from the Institution of Civil Engineers panel

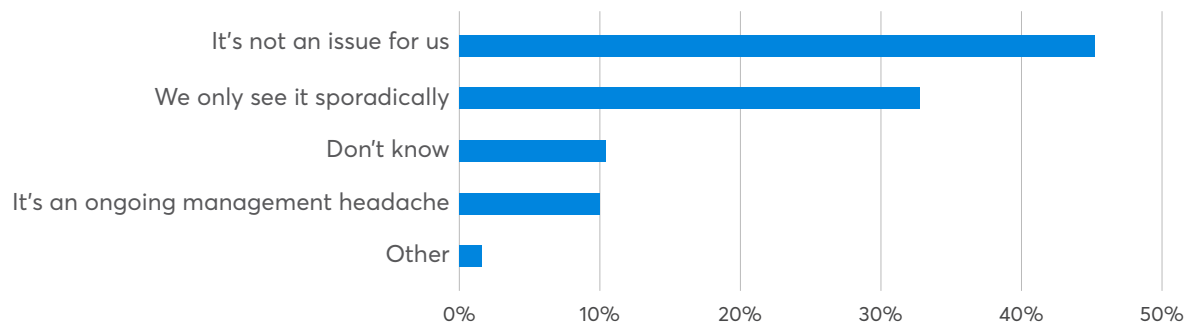
Talent shortages have been experienced by people throughout the industry – and they appear to be getting worse. A manager from a Tier 1 building and civil engineering company notes that current projects are running up against talent shortages: “Our subcontractors for large projects are questioning whether they have the labour to deliver what’s needed. Everyone is in the dark on Brexit, making it really hard to plan.”

For a director at a multinational engineering company, it will be critical to find new sources of talent: “We had relied on civil engineering graduates; now we’re trying to broaden the church and employ people with skills that have nothing to do with construction.”

The consensus is that for young people, “construction is the last choice career rather than a first choice” – and that has to change. The industry needs to communicate with children from primary school up, engaging children with games like Minecraft and educating parents on the opportunities available.

But in the face of talent shortages, it’s also critical to engage with the current workforce. A university professor notes that some people are reluctant to change the way they work and use new tools, because “they have been in companies for 20 or 30 years and can’t see new ways of adding value.” One head of responsible business highlights that it’s vital to communicate with them and share reassurances about new technology, to ensure they aren’t left behind.

How big a problem is staff absenteeism in your company?



Chapter Two:

Information issues

Construction's talent shortages make using time productively critical, so it's important to explore where and how hours are being wasted within businesses. In 2018, the second most common barrier to productivity was lack of information to make confident decisions, and one year later, professionals are still experiencing issues in this area.

Over a quarter of respondents say that lacking the information needed on-site is the biggest factor impacting their productivity (28%); like last year, this is second only to skills and talent shortages in the business.

Problems can come at any point in stakeholder communications, with professionals pointing to "late client information," "inadequate design information upfront" and "poor information from consultants."

This issue can be exacerbated by changes to designs from clients, which often happens during projects; one in four firms say that this alone has a significant impact on their projects (26%). As alterations are made, it can be difficult to ensure that everyone has the most up to date information to work from.

But one thing is clear: information-sharing continues to have an impact across the jobsite, with a lack of information causing delays and damaging profitability.

Ongoing problems with processes

The flow of information on a project depends on processes in the business – another area damaging productivity. When it comes to the tasks that take up the most unnecessary time in the business, the majority of industry professionals highlight inefficient processes (55%).

Likewise, a quarter of respondents say there's too much focus on administrative tasks (26%). Meanwhile, project management alone was pulled out by 15% of professionals as taking up the most unnecessary time. Without streamlined, digitally supported processes, teams are spending too much time looking for, sharing and recording information manually – rather than getting work done.



Getting it wrong

In the worst cases, issues with information sharing can lead to mistakes and even costly rework. This was another common drain on productivity in 2018, and unfortunately little progress has been made since then. Half of industry professionals still say that rework and dealing with mistakes is taking up unnecessary time on the jobsite (50%).

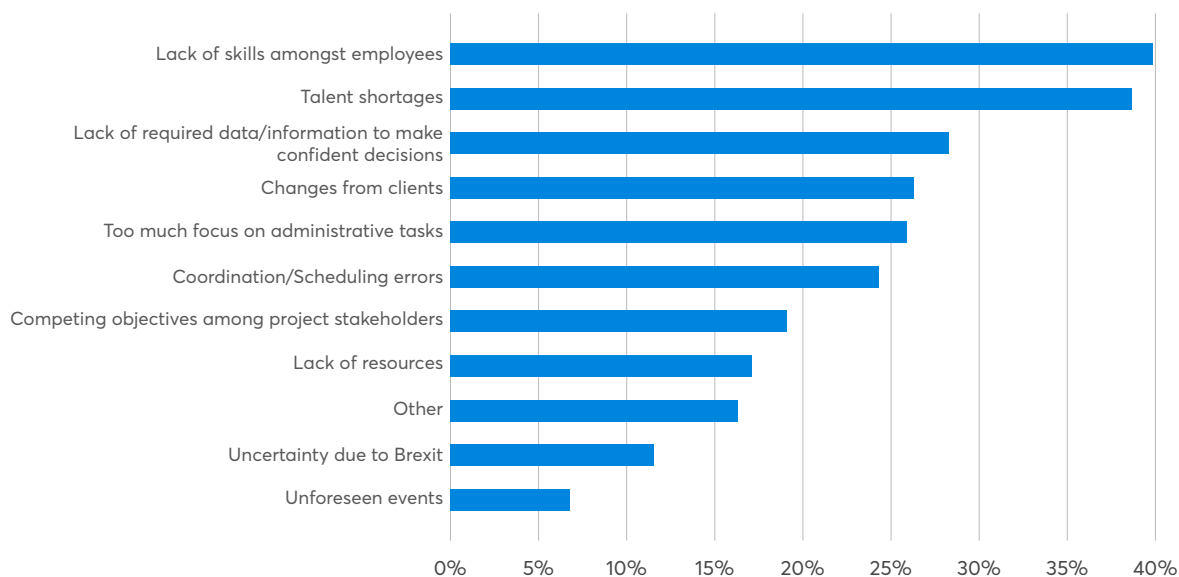
Rework is a major issue for construction globally; the US industry spent \$31.3 bn in 2018 correcting mistakes caused by miscommunication and poor project data,⁴ and the issue is likely to be similarly costly across the UK. Failing to build right the first time can be a serious drain on project quality and profitability.

The golden thread of information

Clearly issues with the flow of information on projects are holding workers and businesses back. There will be a renewed focus on collecting and sharing accurate information during the build, with the recommendations of the *Building A Safer Future* report set to come into UK law over the coming year.

The new legislation will require a 'golden thread of information' during multiple occupancy housing projects, to create a comprehensive digital handover – which will ensure the safety and quality of the building for the future. By beginning to improve information sharing and wider business processes now, firms can not only improve their productivity but be ready to meet the new legal requirements.

What do you believe are the biggest factors affecting productivity in your business?





Commentary

Ensuring that teams have accurate information on hand is vital to building right first time – but without the right technology in place, it can take up hours and even days of project managers' time to keep everyone on track.

But cloud-based platforms can empower everyone on the jobsite with the latest data, while also streamlining key processes and ensuring that team members focus their time on the most valuable activities. Improving the flow of information in a business can improve productivity, and help firms to better collaborate with other partners on a project, from designers to the eventual facilities managers.

Equally, improving the collection and use of data now will present construction businesses with new opportunities going forward, whether that's using new technology, offering new services or supporting a more informed business strategy. By focusing on information sharing, construction businesses can quickly improve their performance – and productivity.



Insight from the Institution of Civil Engineers panel

Our panel agrees that information-sharing is a key issue, particularly as "so many people make confident decisions without the information." This contributes directly to mistakes, which the Get It Right Initiative (GIRI) found can cost up to 5% of the project's total value – often more than the firm's profit. GIRI comprises industry experts, organisations and businesses dedicated in eliminating error and improving the UK Construction Industry. A university professor asks, "Why can we always find enough money to do it right the second time, but not enough to do it right the first time?"

Accurate digital records are key, according to a director at a multinational building firm: "When we implemented digital on-site, it looked like we had a huge spike in reported issues during quality assurance, but it was actually because it was being reported accurately the first time. Now with data, we can identify the biggest issues and address them."

Similarly, another Tier 1 firm kept running into issues with concrete. By looking at the data, they realised that the root cause was recent graduates not knowing how to set out or perform a slump test properly. As a result, they could implement a new starter training programme, and "change both knowledge and behaviour at the source." But to record all this data, the panel notes that it's critical to put the right tools in the hands of people actually on the site.

Chapter Three:

Working together

Productivity isn't only about the work completed within your own business. Performance on a job is of course determined by how well stakeholders can collaborate – whether you're a general contractor, sub, specialist or even the client.

In 2018, collaboration was a major issue for construction firms – and problems working together continue to limit productivity today. Firstly, firms report that working together is unnecessarily time-consuming. Scheduling communications (29%) and jobsite coordination (24%) are singled out as key time drains.

It's also easy for mistakes to happen when collaborating. A quarter of firms say that coordination and scheduling errors are a key drain on productivity (24%). Everyone's performance could be improved by more streamlined communications, with tools like digital platforms where everyone can access a single source of truth for the project.

Conflict on the jobsite

Collaboration isn't just time-consuming: critically, it often goes wrong, damaging performance on the project and straining relationships. At a time when margins are tight and pressure is high, tension often rise from firms pursuing their own priorities.

A fifth of firms report that competing objectives amongst project stakeholders significantly impact their productivity (19%). Unfortunately, these tensions often lead to confrontations between organisations. One third of professionals say that conflict resolution is a key time drain in the business (33%).

Problems between businesses

The level of conflict across the industry is supported by several of the open answers from respondents; every kind of construction firm was singled out for criticism by another. Professionals blamed projects' poor productivity on issues including "contractors' ignorance", "poor information from consultants", a "lack of technical competence amongst site management" and "subbies who don't turn up!"

Working with clients is also a frequent source of challenges; a quarter of professionals say that this alone is the key factor impacting their productivity (26%). Firms point to unrealistic client expectations, sometimes linked to a lack of experience. Two thirds agree that clients are becoming more demanding at the handover stage (66%).



No matter what kind of construction business they work in, most professionals have clearly experienced difficulties working with others. In the words of one respondent, firms suffer from "an internally-facing culture based on internal targets" – a factor that may be further limiting everyone's productivity.

An industry lacking trust

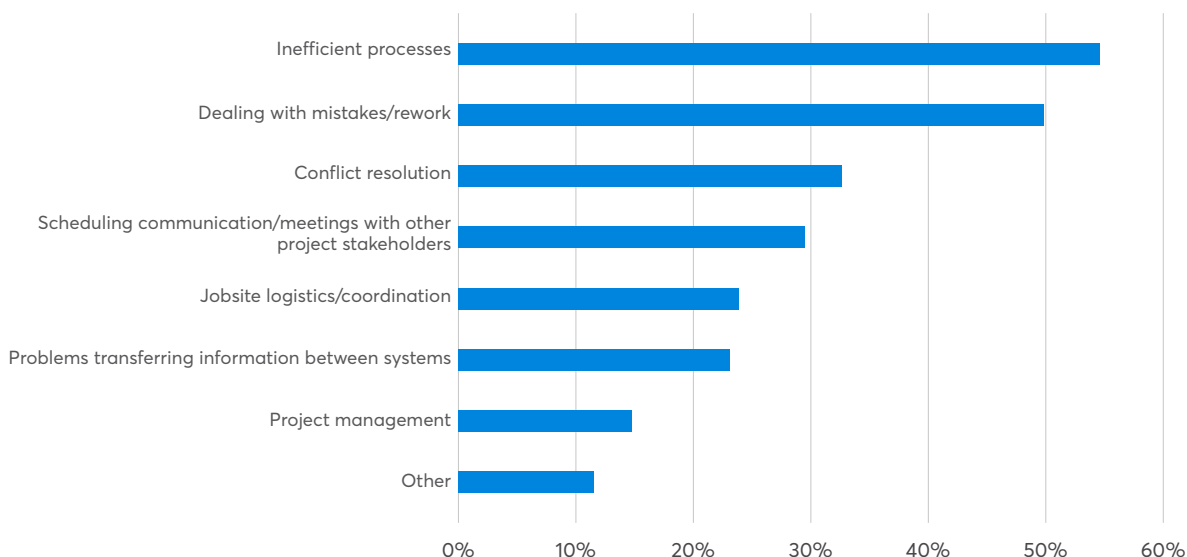
The experiences of professionals on the ground point to wider issues in the construction industry – and above all, mistrust. The majority of construction professionals report that a lack of trust between contractors and subcontractors often impacts performance on projects (60%).

Relationships may be further hindered by poor practices, including late payments. Half of professionals say that late payments are a serious problem for their business (49%). One respondent even singled out "chasing late payments" as the biggest source of wasted time in their organisation.

There are suggestions that this conflict is linked at least in part to the structure of the industry and the dominance of major contractors. Almost half of firms believe that reform to the practices of major contractors would benefit their business (46%).

The experiences of the last two years, including the collapse of Carillion, appear influential; a fifth are concerned about the stability of Tier 1 contractors over the next 12 months (21%), while 17% were impacted directly by the collapse of Carillion.

Which of the following take up most unnecessary time with building projects?





Commentary

Construction is a collaborative sector. Trust and transparency are key to building the strong relationships that will ultimately lead to greater productivity – and profitability – for everyone involved. This has to start with finding better ways of working together, including improving communication and the flow of information between organisations.

Using a common digital platform can help to keep all collaborators informed, avoiding conflict and supporting the timely completion of projects. This also enables each stakeholder to access valuable data that can be used after the build, either to improve processes within the business or to support the building's long-term management. Adoption of digital tools will help to build trusted partnerships between general contractors, subs, clients and beyond, and support a culture change across the industry.





Insight from the Institution of Civil Engineers panel

Cooperation between firms is extremely important. One head of responsible business at a multinational contractor believes that the culture between different stakeholders is a major barrier to industry-wide change: "When clients and contractors really understand each other, then we can bring in technology."

Part of the problem is that large firms tend to push responsibility for improving digital skills down to subcontractors, who have less time and spare resources to act. It would be more productive to take a collaborative approach, "becoming the support at their side." This can be driven by clients on large projects; for example, at a major UK airport where the client has helped to establish a digital skills hub that can be used by the whole supply chain.

Improved information sharing and digital modelling across the building lifecycle is also an opportunity to bring firms together and "give people a voice." One major public sector client decided to bring end users into the design phase of a new development and walk them through the model, to give them an opportunity to review and refine it.

Similarly, another former contractor showed a facilities management team the plans for a new power plant; they were then able to refine the design by pointing out potential issues, such as the challenges the staircase design would cause for maintenance teams. Joining up to think across the building lifecycle can help to deliver benefits for everyone.

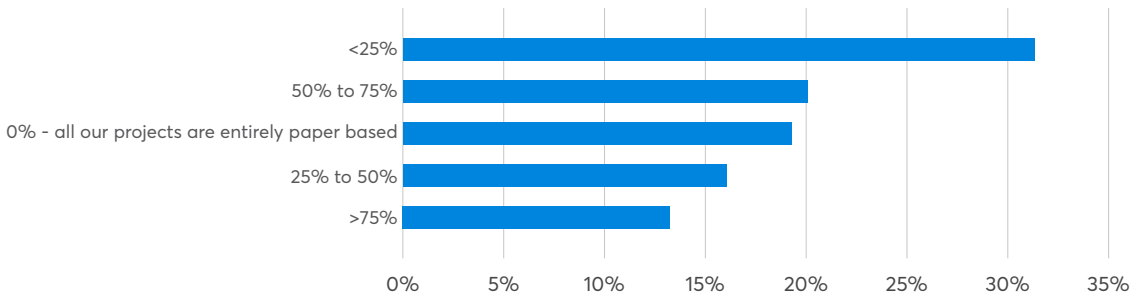
Chapter Four:

Progress with technology

Poor productivity in construction has often been linked to the industry's slow adoption of technology. Construction has been one of the least digitalised industries worldwide, second only to agriculture⁵. Now, as technology becomes more widespread, it's useful to assess how digital tools are impacting productivity on the ground and especially in the area where most work is done, on the jobsite.

Importantly, despite investments in technology elsewhere in the business, many firms remain heavily reliant on paper documentation. Most firms run a quarter or less of their projects without paper (31%). In fact, a fifth of professionals say that all of their projects are entirely paper-based (19%). This figure has barely fallen since 2018, when it was 22%. Only a small proportion of firms use paperless technology for at least three quarters of their projects (13%). Since sharing information through paper can create challenges like delays when reprinting documents, mistakes caused by building off outdated versions or even the loss of paper copies, this might be partly to blame for many of the productivity challenges being felt on the ground.

What percentage of your building projects do you currently run with paperless technology?



The growth of technology

Elsewhere, the use of technology in UK construction firms seems to be increasing quickly. File-sharing tools like Dropbox are by far the most popular choice, with 74% of firms using these platforms to access drawings. This has risen significantly since 2018, when just 52% of respondents reported using the platforms.

Other tools used to support business processes include:

- Scheduling software (44%)
- Estimation software (40%)
- BIM technology for 3D modelling (40%)



Emerging technology is also starting to reach many jobsites, as 22% of firms report using drone technology and 15% collision detection software. But with digital tools still generally in the hands of those in the office, rather than on the jobsite, construction businesses could make significant gains by changing the way that information is shared where the work is done.

Integration issues

It also appears that construction businesses could stand to benefit more from their technology investments by better integrating new technology into the existing business infrastructure.

Software systems often “don’t talk to one another.” As a result, many professionals say transferring information between systems is one of the biggest time wasters in the whole business (23%). One respondent said that “poor digital coordination” is a drain on productivity.

Incompatible data formatting and file types can create serious issues, particularly when information is passing between stakeholders. One respondent described a key productivity challenge as getting conflicting versions of the same designs, due to contractors and consultants using different types of BIM modelling systems.

Unfortunately, new technology doesn’t necessarily lead to improvements in processes. In some cases, IT actually makes life harder and leads to staff wasting time, adopting “workarounds” or even failing to use the system entirely. Currently only 7% of businesses use a single software system to manage the whole construction process. By choosing software systems that work well together, construction firms can maximise the productivity gains from their technology investments.

Experience on the ground

At SAM Drylining, a specialist subcontractor in Wales, the company’s reliance on paper for its on-site documentation was causing significant communication challenges between the head office and jobsites.

“We were constantly running into difficulties where issues on sites were reported too late or not at all,” Director Kyle Spiller recalled. “It could take days, weeks or even months to pass the necessary information between individual sites and the head office, which could create a real divide between project teams and the head office.”

Moving to a digital platform in June 2018 immediately improved productivity on-site. “Previously our project managers complained that they were constantly bombarded with paperwork. Now that information can be shared instantly, no matter where they are in the country,” noted Kyle. “The transparency that PlanGrid has brought to the business is absolutely priceless.”

How much SAM Drylining gained from using a digital platform was underlined by a recent project, when a client requested that the team use their own management system – and go back to paper. “Once you’re used to an iPad, you really don’t want to go back to carrying a pen around and making notes by hand. Having to go back to paper served as a real reminder that there are much better ways of doing things.”



Commentary

Although it's a positive step that construction firms have implemented more technology over the last year, UK firms still remain reliant on paper – particularly when it comes to where the work is carried out, on the jobsite. Firms' slow progress in this area is one reason why many are still experiencing the same productivity challenges as twelve months ago.

Equally, failing to use digital tools on the site means that it's harder for businesses to collect the information that they need for the handover – or that could be used to improve processes in the future – hindering performance not only today, but in the long-term.

But as the findings show, it's not just about implementing any technology. Platforms should reflect and streamline existing processes, rather than simply adding new stages – or adoption will be poor. Choosing technology that's designed for the jobsite and the office, which is easy to use and readily integrates into other platforms will deliver meaningful benefits.





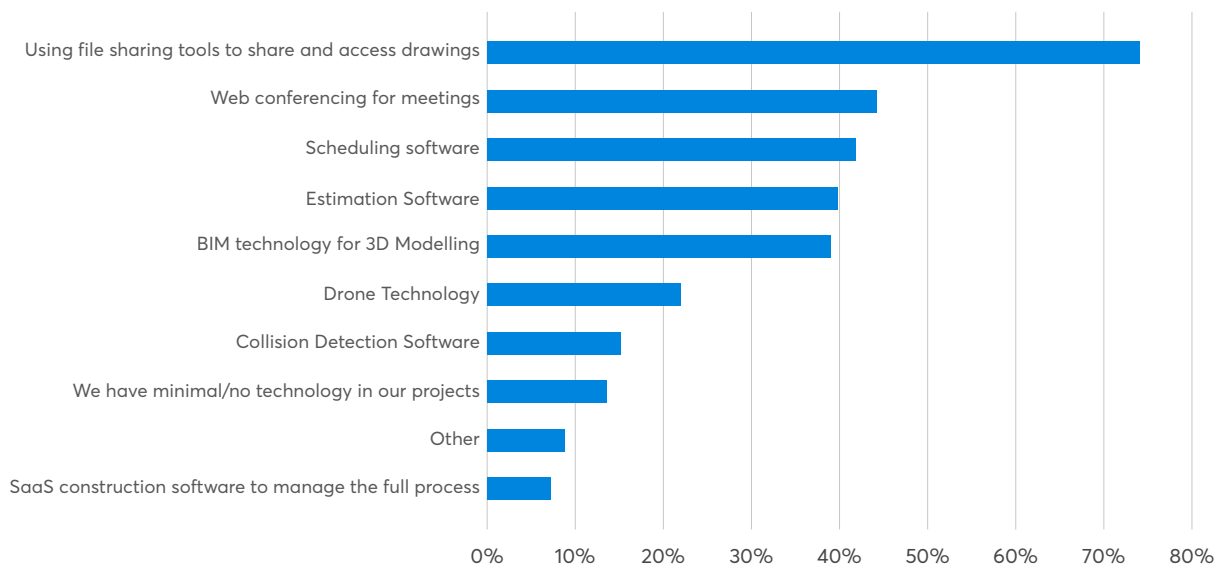
Insight from the Institution of Civil Engineers panel

The experiences of the panel show that issues with different IT systems impact businesses of every size, wasting valuable time and money. One public sector client notes, "There's a whole industry of programme managers processing data, because their systems were not set up right to begin with."

Similarly, IT platforms can lead to additional time-consuming activities, that don't add any value. Our technology expert recalls that his team "assessed one system on a project where more was being uploaded than was being read, for no reason." All too often, companies tack on an IT system to part of the business, rather than reassessing whether the process could be improved – or removed altogether.

It can be difficult for businesses to bring in new technology solutions, if they have used one IT system for some time. Organisations report being locked into lengthy IT contracts, with a system that makes it hard to move data or use other platforms. But as our technology specialist highlights, businesses can start by "providing simple technology to digitalise the construction industry side, then focus on overcoming the challenge within the organisation."

What technology has your company implemented to improve digital efficiency within teams across projects?



Chapter Five:

The digital divide

The development of technology designed specifically for the construction industry is presenting UK businesses with an opportunity to change how things are done. Every construction business is unique and at a different stage in their technology journey. However, there are early signs of a digital divide opening up in the UK, between construction firms considering their technology investments strategically – and those buying ad hoc, if at all.

Firstly, it's clear that firms mean very different things when discussing their technology strategy. Some organisations might still be introducing or perfecting how they use simple tools. For example, considering the technology that they've implemented to improve their digital efficiency, some professionals listed that policies are in place to manage cameras, email and social media use for employees.

At other firms, technology strategies involve more advanced tools or IT infrastructure, such as "data collection with tablets on-site," "using virtual reality for site visits" or "creating a common data environment." This suggests that digital tools and even emerging technologies are much more embedded into the business, giving technology a very different role in the organisation.

Two approaches to technology

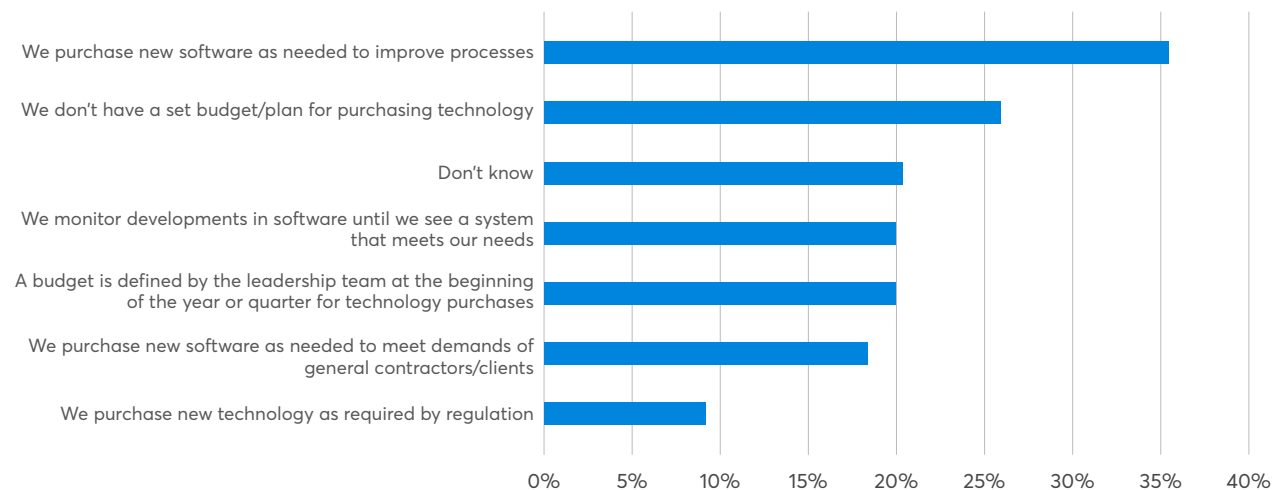
While it's understandable that businesses are in different stages of their digital development, what's more concerning are signs of completely different attitudes to digital transformation. When it comes to buying new technologies, there's a clear split between UK firms taking a long-term view of technology and those only thinking about it in the short term – potentially failing to realise its full benefits.

A quarter of businesses admit they have no technology strategy at all (26%), while most businesses simply buy tools ad hoc to improve their processes (36%). One respondent explained that investments that could improve productivity aren't made because of the "perceived short-term financial gain" of putting them off: in other words, "long term project benefits don't occur in a convenient reporting period." In these businesses, technology is seen as a cost, rather than a key part of the development of the firm.

By contrast, other firms appear to be taking a more strategic approach. The leadership team might set a defined budget at the start of the year to invest in the best new tools (20%) – or better yet, the business monitors software developments until they find a tool that

meets their needs (20%). It's more likely that these organisations will be able to identify the investments and tools most suited to the firm's future development – ensuring that technology isn't approached in isolation, but as part of the overall strategy.

How does your business approach technology purchases?



The future of the business

Digital strategies don't just come down to the tools in organisations. Ensuring that people are ready to adopt new technology is essential – and it's in approaches to improving digital skills that the split between businesses is again clear.

Just half of professionals say that improving digital skills will be a focus for the business over the next three years (50%) – leaving half not considering how to equip staff to use the tools that will become available. This may leave workforces struggling to keep up with new developments – or firms unable

to attract digitally skilled, younger workers, by failing to offer the digital tools that 46% of professionals believe are important for recruiting new employees to help drive the industry forward.

Technology is evolving quickly and keeping pace can be daunting. In fact, a third of professionals are worried that their firm won't be able to keep up with new technology (36%). But by taking a long-term view, firms can ensure they are ready to adopt the new tools that will support the organisation and seize the digital opportunity.



Commentary

It's important that firms accelerate their technology adoption now.

Businesses standing by might not only be missing opportunities to improve their operations today – they could be limiting their prospects for the future. There's a risk that slower moving firms, without a clear focus on skills, their digital infrastructure and the role of technology in their future strategy, could fall behind and lose competitive ground.

Firms don't need enormous budgets to pursue a smart digital approach. It's about embedding technology into the overall business strategy, making considered and adaptable investments that will support the organisation for years to come, as well as delivering productivity improvements – and significant return on investment – in the short-term. With an eye to the future, organisations of every size can serve to close the digital divide and realise the opportunities that technology brings.





Insight from the Institution of Civil Engineers panel

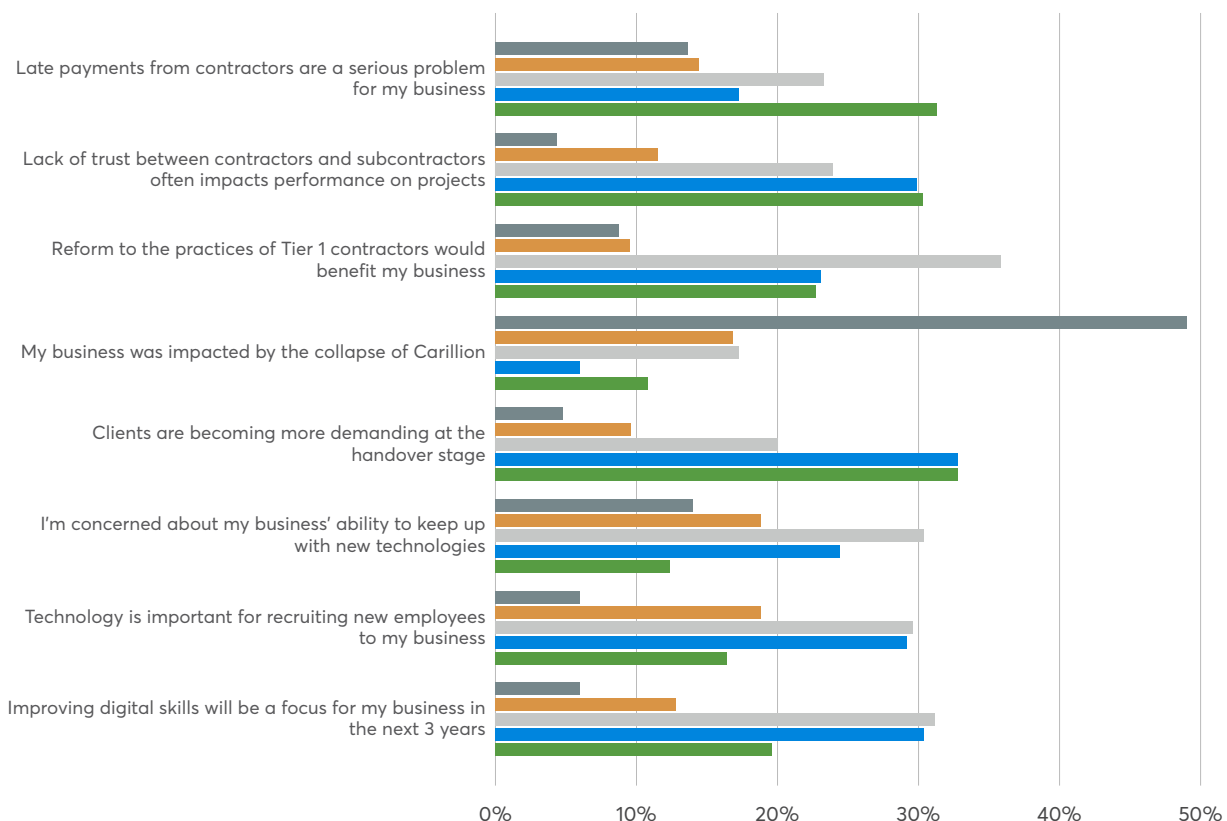
Digital transformation is a challenge in every organisation, especially when it comes to budgeting. When trying to refine the digital strategy at a major contractor, one manager recalls facing the issue that every project assigned a small amount of budget for IT – which meant that the organisation didn't have enough funding for the wider strategic investments needed for the future.

To solve this, "We increased the amount set aside by a small margin, then used the extra revenue to invest in key bits of software. It wasn't costing project managers any more on individual projects, but it meant we got what we needed." The IT team got the added benefit of "consistency in the tools used between projects, to ensure effective sharing of data across the business."

Equally, the panel agrees that digital upskilling will be key for the future – but that depends on creating a culture where people are willing to learn and take on new technology. The head of responsible business at a multinational firm notes that workers who are less familiar with technology "are very experienced, with knowledge and know-how. We have to keep reiterating that it's fine not to know how to use technology yet and make employees feel comfortable with learning."

Please indicate how much you agree with each of the following statements

Strongly Disagree Disagree Neutral Agree Strongly Agree



Conclusion:

Laying the digital groundwork

Understandably, construction firms foresee many challenges in the months ahead. There's no easy solution to current talent shortages in sight, and with the possibility of restrictions on inward migration, there are signs that things could get worse.

Considering the next twelve months, most construction professionals believe that one of the biggest challenges for their industry will be squeezed access to labour (45%) – with a further 30% pointing to increasing wage demands.

There are certainly challenges for construction firms to face over the coming year. But that makes it an even more beneficial time for businesses to improve their productivity – making every job more profitable and enabling the team to do more with less.

Digital technology, particularly on the jobsite, will be vital to address the most common blockers to productivity – inaccurate or late information, mistakes and rework, tension between collaborators – and improve firms' performance in these tough times.

That means resisting the temptation to delay strategic investments in technologies: otherwise, firms risk falling behind their competitors – and becoming the victim of a digital divide.



Importantly, amidst this short-term upheaval, there are also signs of much more positive, long-term changes in the industry – where technology can help businesses to gain a competitive advantage.

Sustainability is one example. One fifth of professionals anticipate pressure to build with more environmentally-friendly materials in the next twelve months (19%). With clients placing more emphasis on sustainable construction, digital platforms can enable firms to track the materials and methods used on a build and create sustainability reports.

Some businesses also foresee more stringent regulatory requirements for safety (16%). As regulation changes to ensure greater quality and safety, technology can be used to record the quality assurance stage of the build and create robust digital records for the safe management of the building in the future.

And of course, over the longer-term, technology will continue to bring new innovations to construction – and enable firms to offer entirely new approaches, whether that's off-site manufacturing or smart building management tools.

The panel at the Institution of Civil Engineers offered an optimistic view on the future of UK construction. While it's true that there are many daunting immediate challenges, from regulatory reform to talent shortages, in fact this may be a brilliant driver of innovation.

UK firms have the opportunity to use technology to change how we work, addressing our difficulties to become world-leaders in construction and innovation. But to capitalise on that future, firms will need to lay the digital groundwork in their business, to move beyond the productivity gap and prepare for the great opportunities to come.



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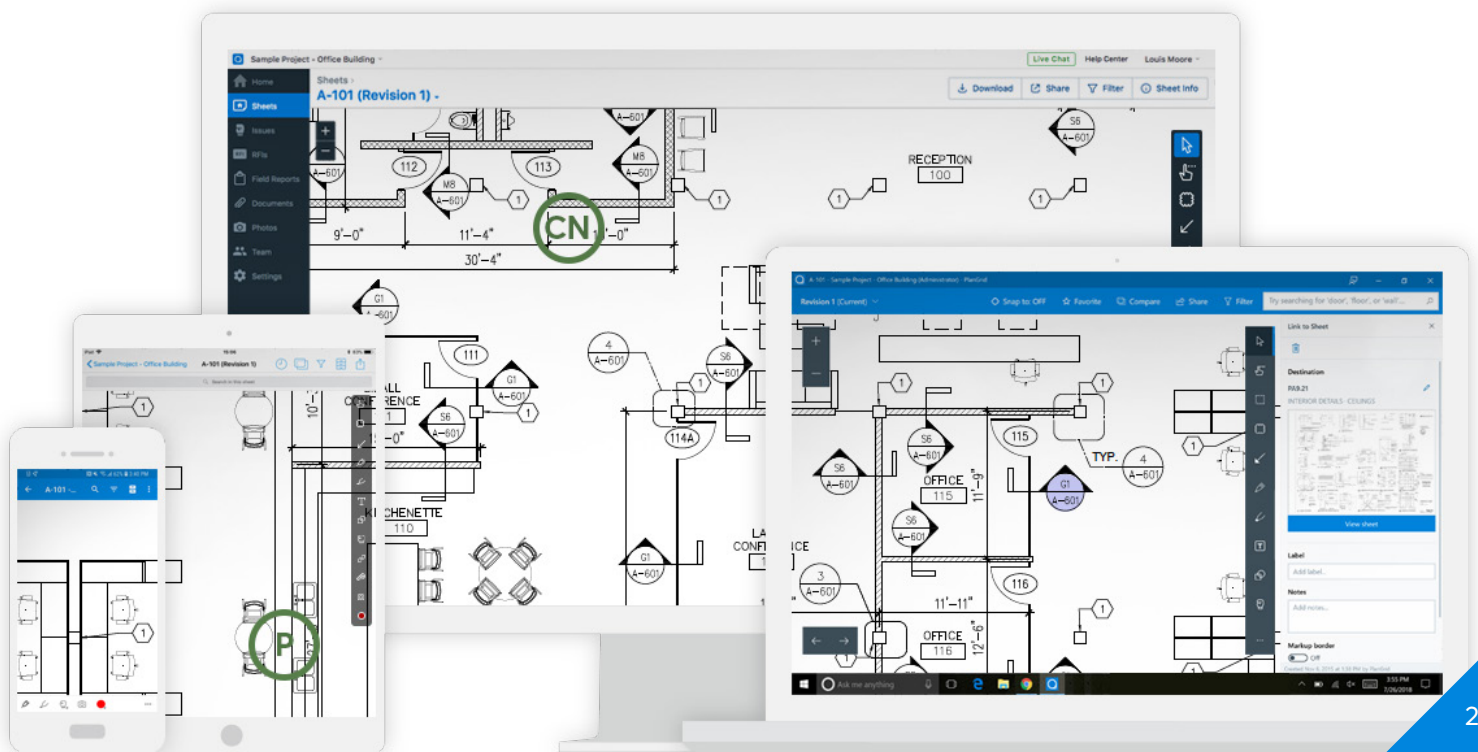
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PlanGrid's Construction Productivity Software is the easiest and most cost-effective way to get substantial return on your investment in construction mobile apps. By using PlanGrid you will:

- **Complete projects faster:** 90% of project costs occur in the field and not in the office. This includes wasted time and project delays. With PlanGrid, you can reduce wasteful trips to the trailer and time delays, while eliminating costly rework. PlanGrid also allows for faster collaboration and communication.
- **Reduce costs:** PlanGrid allows you to optimize productivity in the field, which eliminates time waste that causes project overruns. By completing projects early or on time with PlanGrid, contractors will benefit from reduced costs.
- **Win more bids:** The best way to bid more competitively is not just to track costs so you can provide more accurate estimates — it's to improve your overall productivity. PlanGrid's Construction Productivity Software will allow you to increase productivity so you can reduce costs and win more bids.

PlanGrid is construction productivity software used across more than 1.5 million projects in over 100 countries. Our software helps teams collaborate more efficiently with access to an intelligent record set on any device.





Used on more than 1,500,000 projects around the world, PlanGrid is the first construction productivity software that allows contractors and owners in commercial, heavy civil, and other industries to collaborate, collect, and share project information from any desktop or mobile device through the entire project lifecycle.

PlanGrid increases project efficiency by streamlining document management, providing construction teams with easy access to all project information from any device, and enabling seamless collaboration within teams.

Connect with PlanGrid



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United Kingdom
+44 (0) 20 3695 0292
www.plangrid.com/gb
emea@plangrid.com

Australia
AUS 1800 316 406
www.plangrid.com/au
apac@plangrid.com

United States
+1 (415) 963-4088
www.plangrid.com

Canada
(800) 646-0796
www.plangrid.com/ca-en
www.plangrid.com/ca-fr

Hong Kong
+852 5808 3598
www.plangrid.com/zh
apac@plangrid.com