Building for the future of construction

How digitisation is enabling industry-wide modernisation



Introduction

A cornerstone of the UK economy, the construction industry has grown since 2009, reaching a GVA of £113.2 billion in 2018. In terms of economic output, the sector contributed £413bn or 8.6% of GDP – nearly 4x the annual output of the aerospace and automotive industries combined.

Pre-COVID employment within the construction sector was over 3.1m – and although the market has 300 large contractors, 41% of the workforce (approximately 943,000) was classed as self-employed.

Yet the effects brought about by COVID-19 saw projects cancelled, put on hold (including megaprojects like Birmingham Airport), or delayed dramatically due to new safety measures. In the first quarter, 90 construction companies fell into administration, while March 2020 saw the industry shrink by a record 5.9%, according to the Office for National Statistics.

But the sector fought back with swift and innovative measures. Remote meetings and virtual site visits enabled homeworking. Bigger fleets and increased parking helped employees avoid public transport. And staggered operating hours plus one-way systems kept people safe on-site. Thanks to this quick and committed action, the industry returned to growth in September 2020.

The challenge now is keeping that upward trajectory going. Fortunately, many of the measures put in place during 2020 should support further growth. Productivity concerns, for example, are being tackled by improvements in planning, and increased regulation informing safer site redesigns. Innovation through technology and digitisation, meanwhile, is already off to a running start with new virtual site visits. Naturally, these trends will also have a bearing on fleets. Spencer Ward, Head of Fleet at multi-disciplinary contractor VolkerWessels UK, says that fleet safety is regularly on the agenda at board report meetings. "It's driven from the very top," he says. "The information we provide gets challenged, it gets questioned." And with the prospect of megaprojects like Northern Powerhouse Rail and the Midlands Rail Hub, fleets of over 500 are expected to grow even larger – meaning sustainability, safety and productivity tracking will become even more important.

It's unsurprising then, that smart businesses are already looking at app-based solutions to future-proof their sites and their fleets, saving costs in the process. This includes cashless payments to keep drivers safe, automatic expenses tracking to free up resources for more critical regulatory work, and plenty more.

- >>>> The Office for National Statistics reported construction activity fell by 2.6% in Q1 2020, and by 5.9% in March 2020.
- IHS Markit/CIPS UK Construction PMI registered 8.2 in April 2020, compared with 39.3 in March.
- >>>> Constructionline reported that in a survey of 4,500 firms in April 2020, 47% had reduced their activity by 80% or more.
- >>>> The Construction Products Association estimates that construction output will fall by 25% in 2020, with the largest activity reductions in private housing (-42%), commercial construction (-36%), and private repair maintenance & improvement (-35%).
- The Federation of Master Builders reported 68% of builders had stopped 91% of projects in April 2020.

The COVID catalyst

2020's measures are certainly an important first step in the construction industry's journey to recovery. And there are further glimmers of hope thanks to £100bn of infrastructure investment pledged over the next five years and a steady demand for new housing.

But aside from COVID-19, emerging challenges like sustainability targets and future EU trading relationships highlight that the industry is in a tough spot. And yet, among the many challenges and changes to come, there lay opportunities. And the firms that succeed will be those that use the pandemic as a spur to accelerate the digitisation that was arguably needed long before COVID-19.

The Construction Leadership Council has published its <u>Roadmap to Recovery</u> – a three phase, two year plan for the sector. The strategy aims to increase the level of activity across the construction ecosystem, accelerating the process of industry adjustment to the new normal, and building capacity in the industry to deliver strategic priorities (increasing prosperity across the UK; decarbonisation; modernisation through digital and manufacturing technologies; and delivering better, safer buildings).



Problems with hidden promise

Perhaps the biggest 'thorn in the side' of the UK construction industry, as a <u>2016 CIOB report</u> put it, is the question of productivity. It has been estimated that productivity in UK construction has dropped <u>20%</u> since the last global financial crisis, while a <u>recent report from McKinsey</u> <u>& Co</u>. found that the US industry's productivity has been declining consistently since the 1960s.

The chief causes are inadequate planning and scheduling, an uncollaborative industry culture, and low-tech, siloed solutions – particularly those with endless paper trails. When Adam Gamlin, Fleet Manger of AD Bly Construction, re-vamped his fleet operations, he found that "Most systems for managing vehicles were manual and paper-based, and there was not a clear understanding of how much was being spent on the fleet or what was costing money."

Firms are also having to meet new sustainability targets – both within their own ranks and by scrutinising the eco-credentials of their contractors and supply chains. A large part of this will involve modernising their fleets. But they will also need to reconsider how their employees use their vehicles. And crucially, the pandemic has had a drastic impact on companies' financial positions and cashflows. According to the <u>Construction</u> <u>Products Association</u>, construction output in the UK was expected to fall by at least 25% in 2020. So, it's vital that businesses assess the finances of all of their contracted projects and find easy ways to track and reduce costs.

The answer to all of these challenges and more is, of course, digitisation. And it seems the world is ready. A <u>report</u> from Jones Lang LaSalle found that venture capital firms invested \$1.05 billion in global construction-technology start-ups during the first half of 2018. And in 2020, <u>the CITB</u> predicted that the current trend towards greater use of integrated information systems to improve productivity would only accelerate. The most agile firms are already evolving, improving productivity and staff planning with building information modelling (BIM) and scheduling software. Fleet management and sustainability are getting a boost from app-based solutions that track the extra miles employees drive when looking for parking, and the costs of that parking. They're also improving productivity by making parking easier and quicker.



New world, new solutions

It's clear that transformation is needed if construction is to succeed in a post-COVID-19 world, and that technology and digitisation will be key drivers of the change. The good news is that many of the most impactful technologies are also some of the easiest to set up and manage, as well as being the most familiar to workers.

Smartphone apps, for example, are an inherent part of our everyday life, helping us with everything from buying our groceries to tracking our steps. But they can also have a huge impact at work, particularly around productivity and boosting employee engagement. The right app can make travel between sites easier, for example. Or streamline everyday on-site tasks, like parking. With that time back in their hands, people will be able to focus more on the key elements of their roles, adding value to their businesses when it's most needed.

Meanwhile, the data apps collect can be used to gain greater visibility into company processes. Thereby further optimising operations and cost-savings, and enabling managers to track who is working where, how long their travel takes, and what their parking costs. All of which is important as companies become expected to commit to reducing their employees' drive times, while also helping them avoid public transport.

There may be (more) trouble ahead

Even after the immediate challenges of COVID-19 on the construction industry have subsided, its inevitable ripple effect will see new issues arise. Rising unemployment could slow housing market turnover and private housebuilding activity. And a marked contraction in student accommodation work was expected in 2019, with only a limited recovery during 2021 and 2022.

And sadly, the COVID-19 domino effect isn't the only potential disruption on the horizon. With the UK leaving the Single Market, it's likely that skills shortages (a problem already faced by the industry) will worsen. And as more than 60% of building materials are imported from the EU, any increase in tariffs or limits on imports could lead to higher costs and materials shortages for the UK.

The businesses that flourish, therefore, will be those that innovate, evolve, and modernise now, so that their resulting agility is properly embedded before the inevitable storms break. In April 2020, Microsoft CEO Satya Nadella said that the world saw two years of transformation in two months. Businesses that were already behind will undoubtedly find it harder to catch up.

> In April 2020, Microsoft CEO Satya Nadella said that the world saw two years of transformation in two months



Is COVID-19 a catalyst for the fourth industrial revolution?

When the WHO declared a pandemic in early 2020, many governments enforced social distancing and urged families to stay home from work and school. More than ever, we all began counting on digital solutions to work, study, and have leisure time, increasing the demand for video conferences, remote working, e-learning, e-commerce, SVOD services, and gaming.

This essentially accelerated what the World Economic Forum calls the fourth industrial revolution; merging the physical, digital and biological worlds. In its scale, scope and complexity, the transformation will be truly unprecedented.

Yet understandably the pandemic saw public transport usage plummet. In late August 2020, buses in London were running with just over half the number of travellers typical for that time of year, and the Tube carried only a third.

People want to feel safe when they travel. It's why commuting by train has reduced massively compared to pre-Covid levels, while commuting by car to work or meetings has increased in the pandemic's aftermath. Technology should be an enabler for this change – supporting both employees and companies. Apps should increase productivity and enable employees to work, faster, smarter and more effectively.

Get ready to ride the change

As challenging as this pandemic has been for the construction sector, it has also provided a real opportunity for change and growth. And those opportunities will only increase as the new working world reveals itself and future needs arise.

Without doubt, the businesses that flourish will be those that recognise and embrace the transformative possibilities of digitisation. By investing in new technologies and app-based solutions, they will create a business agile and resilient enough to succeed, whether working practices solidify into a new normal, or the only constant in this world becomes its unwavering volatility.

The new world of work is emerging, as different companies implement solutions and stick to them. Travel and transport will be at the heart of many concerns from both businesses and their people; and as we return to some sense of normalcy, we face a common challenge of improving the commuting experience for everyone. For some, working from home was an opportunity to realise just how much of their valuable time and energy was previously spent on daily travel. For others, the need for safe, reliable transport became even more obvious as they commuted during the crisis to provide essential services such as healthcare, cleaning, waste collection and repair work.

Employers and public partners need to cooperate to enable safe, convenient and accessible journeys. Lasting policies will require flexible commuter benefits that allow for daily changes in plans and schedules, and encourage sustainable choices. Mobility as a Service (MaaS) is starting to define the future – offering interconnected solutions to make it easier for people to choose the best mode of transport, with smart technology solutions making it easier and simpler for employees to 'pay and forget' – removing paperwork, expenses and time, and leading to increased productivity and employee happiness. Those that can recognise the need for app-based solutions, and make the right moves towards them, will be well positioned to streamline processes, create a smarter working environment, and show their people that they have their best interests at heart.

Driving flexible fleet innovation with RingGo

Driving a digital-first approach to parking, <u>RingGo's</u> innovative solutions place power in the hands of its users through user-friendly, intuitive mobility apps. With more parking locations than anyone else in the UK and over 18 million users across 450+ cities, forward-thinking tools that empower employees to work in the most productive way are at the centre of RingGo's proposition.

Discover how our urban mobility solutions will change your journey as you know it.

To find out more about how RingGo can help you transform the way you manage transport, visit <u>corporate.myringgo.co.uk</u> or call us at 01256 318300.

RingGo

Maplewood Chineham Business Park Basingstoke, Hampshire RG24 8YB

<u>www.ringgo.co.uk</u> 01256 318300

