BRIDGING
THE DIGITAL DIVIDE:

Unlocking the full potential
of connected construction

ENTER

Trimble.

An enterprise opportunity

In today's rapidly shifting world, construction leaders are navigating a perfect storm of economic, environmental, and technological change. Rising interest rates, disrupted supply chains, and workforce shortages have become common constants, not anomalies.

Regulatory change, in the form of new requirements under the Building Safety Act and tighter energy performance standards, is placing greater demands on builders. Skills gaps in key technical and digital roles continue to be cited as a constraint for many UK firms, making connected data environments and standardised workflows even more critical.

This whitepaper explores how large construction firms can overcome entrenched barriers to digital transformation, such as fragmented systems, cloud hesitancy, and cybersecurity challenges, and establish a future-ready foundation through connected construction workflows.

Such a foundation also helps address another growing challenge: environmental accountability. More than ever, pressure from stakeholders around environmental performance is intensifying, as clients, regulators, and investors all push for greener, more accountable practices.

The UK construction industry remains a major part of the economy, contributing around £206 billion in output across the first eleven months of 2025. In Q3 of 2025, the sector employed roughly 2 million people, its lowest level in almost 25 years.

For large contractors, this is both a moment of reckoning and a rare chance to lead. Capital is flowing in the sector. Demand is high. But to deliver effectively, enterprises must resolve a longstanding contradiction: how to drive productivity and performance in one of the least digitised sectors of the global economy.

This challenge is borne out by the data. ONS productivity data continues to show that construction has lagged behind other sectors for sustained periods. And when output declines, it shines a light on the importance of addressing long-standing productivity gaps. Recent ONS figures show UK construction output declined by 1.1% year-on-year in November 2025, reflecting ongoing pressure on new work and repair and maintenance activity.

Taken together, these pressures reinforce the need for more connected, data-driven delivery models.

WHY NOW?

The strategic imperative for change

The case for digital transformation in construction has never been stronger or more urgent. Enterprises that wait for perfect conditions risk falling behind in a sector where competitive advantage is increasingly defined by agility and intelligence.

Clients are already raising the bar. They are increasingly demanding high-quality, whole-life asset data from their design and construction teams, alongside real-time updates on project milestones, integrated sustainability metrics, and digital compliance documentation. Large enterprise stakeholders now expect a higher level of digital maturity from their contractors. Firms that fail to meet these expectations risk being excluded from major bids or may struggle to keep pace with tightening regulatory expectations, such as the UK's growing focus on building safety and whole-life asset data.

Meanwhile, the cost of inaction is quietly compounding. Delays caused by disconnected workflows, rework stemming from poor coordination, and inefficiencies in resource planning continue to drain margins.

According to McKinsey, large-scale capital projects frequently suffer from delays and cost overruns – trends that persist across sectors including construction.

Transformation is no longer optional, it's a strategic imperative. The firms that embrace it today will not only outperform their peers but reshape how value is created across the entire construction ecosystem.

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CONSTRUCTION IN THE UK

The state of enterprise construction in the UK

While the appetite for innovation is growing, the construction sector in the UK still faces persistent obstacles that threaten to limit growth and performance.

UK LABOUR SHORTAGE

-150k

OUTPUT PRICES

+3%

Labour shortages remain the most urgent challenge: the industry needs to recruit about 48,000 additional workers a year until 2029 — or about 239,300 extra workers — jeopardising government plans to deliver 1.5 million new homes by 2029. Rising costs compound the issue, with the ONS Construction Output Price Index showing construction output prices up 3.0% in the 12 months to December 2024.

In short, the UK's construction sector is at an inflection point.
The opportunity is clear, but capturing it will require firms to modernise processes, empower stretched workforces, and unlock new efficiencies.

CHALLENGES

The barriers to digital transformation

While digital technologies like Building Information Modelling (BIM), Computer Aided Design (CAD), Enterprise Resource Planning (ERP), and cloud-based scheduling platforms are now widely used across the UK, the productivity dividend they promised has not fully materialised. This isn't due to lack of investment, but to lack of integration.

Many large contractors operate in fragmented digital environments. Tools don't talk to each other. Teams operate in silos. And critical project data lives across disconnected systems, slowing progress and creating blind spots.

Security and compliance concerns further complicate digital adoption. As construction data moves to the cloud, firms must comply with UK GDPR and implement appropriate security controls, often aligning with recognised standards such as ISO/IEC 27001.

Field conditions pose their own hurdles. Construction sites are highly variable, making consistent connectivity and real-time data access a challenge. Even best-in-class tools lose value when they're inaccessible or unreliable on-site.

Finally, culture plays a significant role. New technology requires new behaviours. But in a fast-paced, margin-sensitive environment, convincing teams to change how they work – especially when the old ways still 'get the job done' – remains a persistent challenge.

Ultimately, these issues all trace back to one core issue: disconnectedness. Disconnected systems. Disconnected workflows. Disconnected decision-making.

Disconnected sys—tems.

Disconn—ected work—flows.
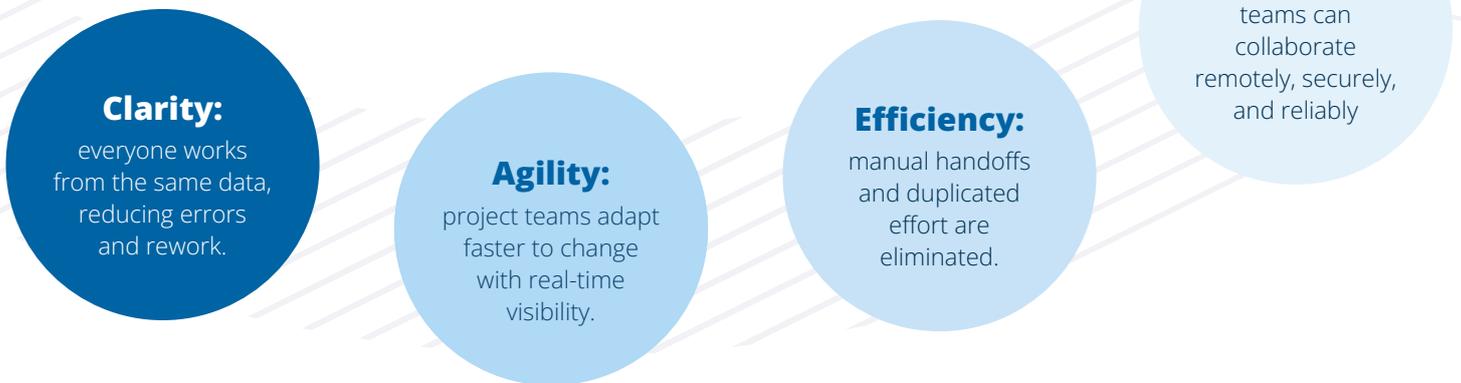
Disconnected decision—making.

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WHAT GOOD LOOKS LIKE:

Connected, secure, scalable workflows

Digital transformation in construction isn't about finding the perfect tool; it's about creating an integrated, interoperable ecosystem that spans the full building lifecycle.

Consider the following scenario. A design begins in SketchUp and that same data flows into Tekla Structures to inform detailed BIM workflows. On-site, contractors interact with up-to-date project plans via Viewpoint. At every stage, Trimble Connect functions as the central nervous system – a cloud-based common data environment (CDE) where information is shared in real time, version control is automatic, and silos are broken down. This integrated approach enables:

Clarity:
everyone works from the same data, reducing errors and rework.

Agility:
project teams adapt faster to change with real-time visibility.

Efficiency:
manual handoffs and duplicated effort are eliminated.

Resilience:
teams can collaborate remotely, securely, and reliably

For enterprise firms, the advantages are even more pronounced. With its open API architecture and enterprise-grade security standards, Trimble Connect integrates seamlessly into existing IT environments and scales to support even the largest and most complex projects.

This is not about adding more software, rather it's about removing friction, improving communication, and enabling people across disciplines. Design, engineering, procurement, and delivery all do their best work when they're working together.

Importantly, the value of this connected approach doesn't end at project completion. Maintaining a robust digital twin allows firms to hand over a live model to owners and operators. This enables smoother transitions into facilities management, improved maintenance oversight, and better-informed decisions about retrofits, renovations, or lifecycle carbon impact.

Collaboration beyond the jobsite

While the primary benefits of digital transformation are often framed around cost savings and productivity, there is a growing appreciation for the role it plays in driving collaboration across the entire construction value chain. From subcontractors to suppliers, clients to compliance officers, digital platforms create shared visibility and accountability.

In a typical large-scale project, miscommunications or delays caused by a single stakeholder can ripple through the entire timeline. A connected construction ecosystem not only reduces these risks – it creates shared visibility. Procurement teams can access the same models as architects, site supervisors can escalate issues to designers in real time, and

sustainability consultants can validate materials or methods digitally before work begins.

This kind of collaboration elevates partnerships. When everyone works from a single source of truth and has access to timely insights, trust improves. So does efficiency. Trimble's customers consistently report higher subcontractor satisfaction and smoother client communications when using integrated workflows anchored by a common data environment.

The collaborative nature of connected workflows also plays a strategic role in joint ventures and cross-border projects – both of which are increasingly common

as construction firms scale operations across Europe. Shared digital infrastructures enable transparent reporting and clearly-defined responsibilities, which are essential for managing distributed risk and maintaining stakeholder confidence.
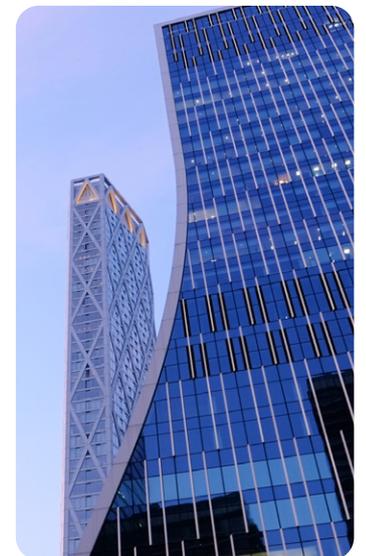
DATA-BASED CONFIDENCE

Building resilience through data-driven decisions

Beyond day-to-day operations, connected construction lays the foundation for long-term resilience. By collecting and analysing data across projects, enterprise firms gain the ability to benchmark performance, predict future risks, and optimise how resources are allocated. Imagine being able to:

+

Spot patterns in project delays and identify them before they escalate.

+

Understand which subcontractors consistently outperform benchmarks across different geographies.

+

Have visibility into material shortages or environmental constraints weeks ahead of procurement.

All of this is possible through integrated platforms that surface not just data but insight. The real value of digitalisation lies in creating a proactive operating model across the organisation. Rather than reacting to issues, teams can anticipate and solve them early.

In an environment defined by uncertainty – whether it's fluctuating energy prices, geopolitical instability, or increasingly volatile weather – this kind of foresight is a competitive differentiator. Mature data gives enterprise firms the confidence to act decisively, backed by real-time data.

THE HUMAN FACTOR

Empowering the workforce

## Technology alone isn't transformative, people are.

For digital transformation to succeed, it must support the humans who make construction happen.

That means giving site managers and engineers tools they actually want to use – tools that make their jobs easier, not harder. When field workers can pull up the latest BIM model on a tablet rather than juggling paper blueprints, they're not just more efficient, they're more engaged.

Trimble has seen clients boost morale and reduce turnover by eliminating friction in day-to-day workflows. Whether it's automating timesheets, improving the clarity of task assignments, or providing easier ways to flag safety issues, connected tools empower employees to take ownership of their work.

And in the race to attract the next generation of construction talent, the level of digital maturity matters. Younger workers increasingly expect modern technology in the workplace. Firms that invest in intuitive, well-integrated platforms signal that they're future-focused and that they care about enabling people to do their best work.

Digital transformation, in other words, is a talent strategy as much as it is a technology one.

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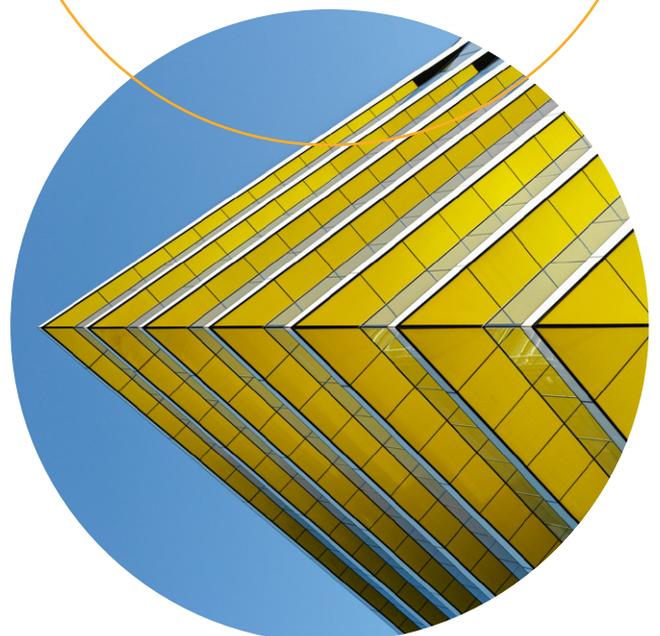
Laying the right foundation

In the wake of tragedies such as Grenfell Tower, alongside updates to Part L, and amendments to the Building Safety Act, the requirement for traceable, digital construction records has become mandatory, even as clients increasingly expect full transparency across an asset's lifecycle.

Construction is changing. Slowly in some places, rapidly in others, but the momentum is undeniable. For enterprise firms in the UK, the coming years will be defined not just by what they build, but by how they build.

That 'how' will be shaped by integration, interoperability, and insight. It will demand secure, cloud-based platforms that unify teams and data across the entire building lifecycle. And it will require bold decisions about technology, culture, and partnership.

Trimble is well positioned to help you make those decisions and deliver them. With our connected, enterprise-grade platform, your firm can overcome fragmentation, future-proof operations, and unlock the full potential of digital construction.

Ready to build smarter?

Contact us to learn how Trimble can support your next step toward truly connected construction.

CONTACT US