Trimble. Construction

Executive Insight Report 2025

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Our insights, for you

Better knowledge powers better construction

As digital transformation in the construction industry gains pace, workflows connecting internal and external stakeholders will prove increasingly important. Forward-thinking organisations in the AEC industry are ideally positioned to identify technology opportunities to support transformation, using it to break industry boundaries and ensure deeper co-operation.

This executive insight report explores ten key market factors that will affect your strategy this year, sourced from ten great reads to ensure you can see what's on the horizon for 2025 and beyond.

On behalf of the entire Trimble Construction team, your Account Management team hopes that you will find the report thought-provoking and that the insights will help fuel your future initiatives.

Once you have read it, we're here to discuss your plans for 2025 in more detail.



Introduction by Benedict Wallbank

Looking ahead to 2025, the UK construction industry seems set for significant changes and growth, primarily driven by substantial public sector commitments to infrastructure projects. While coming out of 2024 might be a bit slow or even see a slight contraction, there is a lot of optimism for 2025, especially with major projects like Sizewell C on the horizon.

Firstly, sustainability and the push towards Net Zero carbon are critical drivers for initiatives such as retrofitting existing buildings and using recycled materials such as steel. Long-term thinking and adopting circular economy principles will reduce waste and environmental impact.

Digital transformation will be vital, with seamless data transfer and AI enhancing risk management, efficiency, and collaboration. However, data security and ownership concerns must be addressed.

Lastly, regulations like the Building Safety Act 2022 will further impact the industry, requiring stringent data management and compliance for high-rise buildings, with an expectation that this will expand beyond solely high-rise.

Despite challenges, there are significant opportunities for growth in 2025. With the right mix of government initiatives, innovative construction methods, and a gear towards digitalisation, we can set a path for sustainable growth in the industry. This report aims to provide valuable insights to help your business adapt and innovate for future demands.





Retrofits, renovations, and projects with existing structures will increase under the influence of the circular economy

Between the need for repairs to ageing structures and the continued focus on decarbonisation supported by the circular economy, there are likely to be an increase in projects using existing structures.

Businesses must simultaneously be prepared for sustainability-focused retrofits and reconstruction projects with 3D scanning, data interpretation, efficient site management, and modelling, often involving an increased number of stakeholders.

"Moving to a circular economy requires rethinking how buildings are designed. From choosing renewable or recycled materials for construction, to designing for disassembly, the choices made early on have the greatest potential to reduce a building's embodied carbon."

Forbes | Cleaning up the Construction Sector is possible says the UN

Recommended Reading World Green Building Council | <u>Circular Built Environment Playbook</u>



Managing project risk will become vital in a challenging market

In a challenging market and against the backdrop of project cancellations like <u>HS2</u>, managing project risk will become a core concern in 2025.

From environmental, financial, reputational and even safety, risks must be mitigated wherever possible – by all project stakeholders.

Businesses must lean into a connected construction approach on projects including collaborative project delivery methods. By sharing and utilising data alongside a collaborative project approach, risk can be the shared concerns of the entire team who can work together to mitigate it for a successful project.

"By fostering greater collaboration, transparency, and data-driven decision-making, these solutions can significantly reduce the negative consequences of uninsured and uninsurable risks, leading to improved project outcomes and increased profitability for all parties."

Marsh | Navigating uninsured and uninsurable risks in the construction industry



Recommended Reading Construction News | <u>Report names tech 'most likely' to stop defects</u>





Project data must be transferable, automated, detailed and specific

The construction technology landscape continues to grow and we are now in possession of more construction data than ever before. As we look to the future, delivering projects with data-led workflows is now the goal of many in the industry.

However, just extracting the data is only half the story. To succeed we must enable the storage and transfer of consumable data, to make it constantly available to the right people at the right time.

Technology must be based in Open Standards/IFC- technology to allow the freeflow of data and processes across multiple platforms. Businesses must also look for a technology partner that works with, and complements, their existing technology stack – a partner that can meet plans and future strategy.

"By enabling access to a wide data pool, and integrating teams throughout all stages of project development and implementation, we will streamline efficiencies and improve productivity."

Construction News | How a data-led construction sector can shape the future

Recommended Reading ENR | <u>Collaboration in the construction industry – why sharing data means shared success</u>





Connected data environments will be key

Common data environments fill the need for a tool that can collate construction data and make it accessible across project teams and throughout the asset lifecycle. While it seems ideal to use a single system for each stakeholder at every stage of a project, it's not realistic. In reality, most projects require multiple CDEs. This brings about its own challenges, including a lack of standardisation from system to system, data ownership, complexity of projects or client/owner specification.

Because of this, we are likely to see a shift in perspective. Instead of prioritising a single common data environment, which will never suit the needs of the many stakeholders involved in a project, connected construction ecosystems offer the opportunity for detailed, large amounts of data to flow quickly, effectively, and at scale, based on interoperability.

Businesses should plan for technologies, teams, and project types that will change over time. A connected CDE should have the ability to scale and adapt to new systems, technologies, workflows and company processes.

"The average project involves more than 100 different suppliers and subcontractors."

McKinsey | From start-up to scale-up: Accelerating growth in construction technology

Recommended Reading

Michael Gaunt writing in PBC Today | The evolution of connected data environments in construction



Al will become more integrated into the construction industry, particularly in project management

Al is poised to significantly reshape project management in the construction industry by 2025, driving improvements in efficiency, safety, cost control, and decision-making.

Alongside addressing the automation of routine tasks, workforce management, and safety, there are significant opportunities to analyse historical data for future success. By using machine learning algorithms to analyse patterns in past projects, Al could help managers predict the most efficient project timelines, identify potential risks, and recommend optimal scheduling.

Businesses exploring AI implementation must look at the most suitable applications, balancing the potential benefits with concerns around data privacy, security and reliability. This new technology will also bring with it standardisation across data and inputs and a need to upskill the workforce to take advantage of this opportunity.

"Al algorithms can analyse vast amounts of data from past projects to predict potential delays, identify risks, and recommend efficient scheduling."

Construction Today | The Rise of Artificial Intelligence in Construction

Recommended Reading Chartered Institute of Building | <u>Artificial Intelligence (AI) Playbook 2024</u>



Collaborative workforces will be key to increased efficiency

As technology, collaboration tools, and project management systems continue to improve, more roles within the design, planning, and administrative work in AEC can be done remotely. Faster decision making, global time zone advantages and project resilience are all key factors that can support effective project completion.

Whilst some roles can only be done onsite, agile teams in other roles can facilitate more efficiency onsite, particularly for organisations with strong field to office and office to field workflows.

Businesses looking to explore this option must put digital collaboration at the heart of their projects, allowing teams from multiple stakeholders to collaborate in real time. This new global team approach also makes data security and document management essential for projects looking to utilise this approach.

"The upshot is that teams and individuals that know each other well produce better project outcomes, with enhanced cooperation between team members fostering greater innovation and efficiency."

Tony Gates of Sir Robert McAlpine writing in New Civil Engineer | The key to delivering better project outcomes



Building | Collaboration in construction: a necessary evolution, not an option



Infrastructure projects will provide new challenges and opportunities

With the economic pressures continuing, businesses may find an increase in infrastructure projects, as public spending increases in the short term.

The <u>UK government's Construction 2025 strategy</u> construction strategies force both a focus on cost management and environment impact. Public sector project owners will also be looking for strong collaboration between stakeholders, thorough records of works, and for increased value throughout the life of their assets.

Businesses must look to be able to successfully engage in complex and high value infrastructure projects, working with a range of stakeholders both operationally and technologically.

"British schemes cost £262mn per mile, compared with £145mn per mile for Japan's bullet train network, £92mn in Sweden, £74mn in Italy, £42mn in France, and £34mn in Germany."

Financial Times | The Nimby tax on Britain and America

Recommended Reading New Civil Engineer | <u>Government must decide what role it plays in infrastructure</u>



Data management and security will become paramount

As technology continues to evolve and surprise, we often find ourselves playing catch-up when it comes to keeping business data and infrastructure protected. In addition, since 2020, the percentage of employees working at home in some capacity continues to be significant. Add to this the global nature of many organisations and it's clear the cloud based data is here to stay.

Businesses must look for technology partners that have <u>data safety and</u> <u>compliance</u> top of mind and work to safeguard your investment in the cloud and keep your project data secure. For maximum efficiency, businesses need to assess security requirements on a project by project basis and react to those needs accordingly.

"The adoption of Building Information Modelling (BIM) and digital twins will require special attention to ensure integrity and availability of data."

Deloitte | Building cybersecurity in the construction industry



Recommended Reading National Cyber Security Centre | <u>Information Security: best practice for the construction sector</u>



People will be your biggest digital transformation asset

The UK construction sector is experiencing the most acute labour shortage in decades, resulting in a battle to attract and retain talent needed to maintain a competitive edge. Meanwhile, as the industry evolves, there is an increasing imperative to upskill existing teams with skills for working on more sustainable projects, new developments in technology and ever more collaborative ways of working. These are not abstract challenges — they are real-world barriers.

Businesses will need to act quickly to capture the enthusiasm of employees to support digital transformation and to identify potential skills gaps, whilst facilitating knowledge sharing across the organisation, across the lifecycle of a project, and from one project to the next.

"In order to take full advantage of the benefits of digital transformation, construction managers need to enable the workforce to 'connect' with new technology implementations."

Construction Digital | How digital transformation is modernising construction





Expect further changes to building safety regulations

During 2024, there were a number of changes to building safety, accountability, and remediation. From the conclusion of the <u>Grenfell inquiry</u> to the introduction of the <u>three gateways</u>, the key takeaways were the need for the capture of a vast amount of accessible data and a shared accountability amongst teams during a project's lifecycle.

Moving into 2025, this is expected to further accelerate. Whether remediation works or net new builds, there will be an emphasis on collecting and maintaining data that not only adheres to current regulations, but with a nod to the future. There is also an expected extension of the Health and Safety Act 2022 that will include buildings beyond high-rise.

Businesses that focus on quality data showing the golden thread of information will be able to mitigate major disruption from further regulatory changes.

"Forward-thinking developers and their designers may start including these [changes] sooner rather than later, to take into account the future value of the asset being built."

Michael Lewis & Michelle Essen | Construction Management



Recommended Reading Build UK | <u>Building Safety Regime</u>

Meeting your challenges

Now is the time to build on our relationship to develop your existing capabilities with software and hardware technologies to deliver quality results on time and on budget.

Maximise existing tech investments, gain increased visibility across every stage of your projects, and rapidly access live data to support intelligent decision-making.

General Contractors like you use a range of our solutions to get complete visibility on project data, protect against evolving cyber risks and maximise the value of existing tech investments.

See how we can help you deliver even complex projects on-time, with reduced risk, and to the highest possible standards.



Explore solutions

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About Trimble Construction

Keep clients happy with models that have the insight to get the job done right the first time. Constructible-level BIM data and collaborative tools combine to improve coordination, ensure that nothing goes unnoticed, and end ambiguous or faulty design work that introduces doubt and uncertainty.

Discover more

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