

## Exploring the Importance of End-To-End Construction Tech Solutions

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Construction companies have been faced with escalating demands over the last few years that have compelled them to search for viable solutions. They're now tasked with managing capital projects that have become more complicated – a compromised supply chain, an ongoing skilled labor shortage, increased regulatory scrutiny, and more technology incorporated into built structures.

Project owners, weary of estimates constantly being eclipsed, have also become more tech-aware and are expecting increased transparency of project data and of the risks in the bids and estimates they receive. That means companies also need to develop the agility to effectively pivot and course-correct when risks surface – whether they were anticipated or not.

The key difference between those struggling with their technology and those whose journeys are smoother is the ability to connect information across departments and functions – from planning through execution and handover.

That level of connection comes with an end-to-end construction technology solution; in other words, an integrated platform. Let's take a closer look at some of the benefits such a platform can provide.



structures, it forces project teams to navigate an ocean of disparate project information that becomes difficult to access, share, and manage. Questions loom over whether data is up-to-date, complete, correct, and accurate. Same goes for project documentation such as drawings, contracts, and commissioning checklists.

Corralling those project data and documents in a single source of truth provides access to them through one consistent interface, without the need to maneuver through multiple systems, applications, and processes. It's quicker and easier to find and share project information and therefore be aware of what's happening at every stage in the build, from planning to completion.

### Centralizes Siloed Sets Of Data

When data is stored in fragmented islands or complex file

### Ensures Data Integrity and Structural Consistency

Capital project success is dependent on connected data, and for good reason; it shows how well a project is performing and progressing against established estimates and how risks are impacting the project. Especially as data's role as a primary driver of plans, decisions and actions continues to grow, there should be confidence in its accuracy and usefulness.

This is where the capabilities of end-to-end construction technology become even more relevant. Let's go back to the integrated platform's centralized database. Housing everything in one repository eliminates the costly and time-consuming redundancies – labor-intensive data entry and re-entry and their associated risk for errors – that stem from working with disconnected systems. The result is far more accuracy and integrity that in turn builds trust in what the data is showing.

One more thing is necessary for construction companies to be able to use project data to its fullest advantage: standardization. As incoming data from the field and back office is captured, the platform translates it into a uniform structure that all business functions can understand and work from. This “common language” makes it possible to analyze and leverage the construction data intelligence gained not only from current performance metrics that track cost and schedule adherence but also from past project details that, when combined with the metrics, can improve ongoing project planning.

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## **Brings Real-Time Data Out Into The Open With More Equalized Access**

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In a word, it's about transparency. These days, real-time information is the new currency, and construction businesses are surfacing this by using end-to-end construction technology to bring transparency and accountability to their systems and operations. And yet, too many companies are still managing their projects on paper or in siloed computer programs, with no visibility into the status and progress of the work. This makes it difficult to see where problems are developing, or if there is an opportunity to improve efficiency or productivity. There hasn't been an easy way for stakeholders and project team members to gain access to this without getting bogged down in logistical issues. With an integrated platform, however, they

can easily view project data via online dashboards that can help them make better decisions faster and course-correct to avoid the unexpected risks that can snowball into something much worse.

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## **Better Mitigates Unanticipated Risk**

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When there is an unanticipated event that risks causing delays and adding costs to a project, affected parties need to know about it as soon as possible. If they don't have visibility into what's going on, however, it becomes impossible to make informed decisions about how to respond. Plus, when using multiple systems, it's harder to find needed information quickly, especially if they're related to several business functions or parts of the company.

When an integrated platform is in place, these risks are better managed through real-time data collection and analysis of things like performance metrics and risk-adjusted forecasts. This means being able to predict when delays might occur and act before they happen. It also enables faster response when changes are needed due to unforeseen circumstances or other factors outside anyone's control.

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## **Fosters Better-Informed Collaboration**

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Of course, construction isn't just about connecting data; it's also about connecting people, whether they're on the jobsite or a remote office.

All the above benefits of an integrated platform combine to form the basis for substantive interaction. A single source of truth not only supports sharing of the latest data among project teams and departments but serves as a collaborative hub where they can share their feedback and experience. Data integrity and standardization ensures everyone is basing discussions and actions on accurate details.

Real-time information means data can be shared at the right time with the right people. Transparency into the unbiased reality of what the project data is showing – the good, the bad, and the ever-changing – not only promotes accountability but also trust among the teams and stakeholders, including

owners, who depend on such details to keep the project moving forward.

In the end, there is one key word for why end-to-end construction technology platform matters – efficiency. Tracking a project end-to-end means that everything you'd need to manage a project is right there, accessible in one place. As the saying goes, time is money, and that's particularly true in construction. The potential to save time and money through automation is what makes integrated platforms so important. 



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