



The True Cost of Disconnected Material Tracking





The True Cost of the Status Quo

Procurement is one of the most complex aspects of construction projects. Long-standing industry insights suggest that procurement-related issues such as late submittal approvals, late material deliveries, fabrication delays, and supply chain disruptions are responsible for roughly half of all schedule overruns on commercial projects.

In its 2026 Engineering and Construction Industry Outlook, Deloitte noted that procurement delays are acutely felt in an industry already operating on narrow margins and schedule sensitivity.¹

Yet despite managing complicated, high-stakes projects such as hospitals, stadiums, and data centers, the industry largely relies on a mix of disconnected spreadsheets that quickly go stale and basic tracking software that fails to model the actual nuances of a construction supply chain.

This guide explores why traditional tracking methods and simplistic solutions fall short, and how general contractors can adopt proactive, connected planning built for real-world complexity.

YOU'LL ALSO DISCOVER:

- ▶ What's at stake when project teams have limited visibility into their actual procurement risk.
- ▶ The escalating costs of constant schedule changes and the added pressure of reactive crisis management.
- ▶ How complex, real-world, large-scale project scenarios can derail traditional procurement and material tracking systems.
- ▶ When systems are disconnected, collaboration among project stakeholders can break down.
- ▶ How proactive tracking and detection of risk patterns can help to mitigate schedule risk.

Finally, this guide will discuss how moving away from static, disconnected tracking systems towards connected planning systems enables effective, proactive management of procurement risk across every project.

¹ 2026 Engineering and Construction Industry Outlook. Deloitte Research Center for Energy & Industrials. Published November 13, 2025. <https://www.deloitte.com/us/en/insights/industry/engineering-and-construction/engineering-and-construction-industry-outlook.html>



What's at Stake? Financial and Schedule Risks

Risk has always been an inherent element of construction. But the current macro-economic environment and longstanding industry challenges are elevating risks to new levels. In its 2026 Outlook, Deloitte noted that firms continue to struggle with “persistent inflation, elevated interest rates, tariff uncertainty, acute labor shortages, supply chain disruptions, and material price spikes...” which “contribute to already tightened margins and stretched schedules.”²

Meanwhile, KPMG's Global Construction Survey 2025–2026 showed that 75 percent of construction executives report “increasing risk aversion, giving rise to a widening ‘risk delta’ where elevated risks coexist with heightened caution ... reshaping strategies across regions and throughout the value chain.”³



Firms face additional risks stemming from various internal process failures that often compound quietly until they can no longer be ignored. Procurement issues are the root cause of about half of all construction schedule overruns. The procurement lifecycle is inherently complex, with multiple phases, numerous stakeholders, and often constant changes and revisions. Yet most project teams manage their procurement and materials tracking using simplistic tools such as spreadsheets or other basic software tools that are not built for real-world complexities.

For example, when a submittal stalls or a delivery window shifts, the impact rarely surfaces immediately. By the time a delay registers in a status update or manual log, the window for meaningful mitigation has often already closed. This makes it nearly impossible to accurately forecast procurement risk. Without an early warning system, project teams have limited visibility into their actual procurement risk and cannot proactively mitigate issues before they impact the critical path.

² 2026 Engineering and Construction Industry Outlook. Deloitte Research Center for Energy & Industrials Published November 13, 2025. <https://www.deloitte.com/us/en/insights/industry/engineering-and-construction/engineering-and-construction-industry-outlook.html>

³ KPMG <https://kpmg.com/cn/en/insights/2026/03/global-construction-survey-2025-2026.html>



The Cost of Late Discovery

When procurement issues go undetected until they reach the field, the financial consequences are severe and well-documented. Crews mobilize only to find critical materials have not arrived. Work halts. Emergency measures such as expedited freight, premium sourcing, or last-minute substitutions are initiated under pressure, typically at higher costs than would occur with proactive procurement planning. On projects where margins are already compressed, even a few such events can convert a profitable build into a financial liability.

These outcomes are not the result of poor execution. They are predictable consequences of applying tools that were never designed for the complexity of modern construction procurement — a mismatch that conventional process improvements alone cannot resolve. Chapter 2 examines why that gap proves so resistant to the solutions most teams reach for first.





The Real-World Complexity That Breaks Current Systems

Recognizing that procurement risk is poorly managed is only the first step. The harder question is why so many attempts to fix it fall short. The honest answer is that construction material tracking is far more complex than most tracking tools — or the processes built around them — can handle.



The Simplistic Software Trap

KPMG's research notes that although the industry recognizes a strong need for implementing technology solutions aimed at driving greater efficiency, profitability and resilience, adoption of these tools remains uneven, with many firms still relying on siloed systems and underutilized digital tools that limit scale and return on investment.⁴

Spreadsheets fail because they are static and disconnected, requiring manual updates that go stale the moment a schedule shifts. But other tracking tools fail because they are too simplistic.

Moving from isolated point solutions to genuinely integrated platforms is necessary, but integration alone is not sufficient if the platform does not reflect how procurement actually unfolds on a complex project.

These platforms may successfully connect submittal data and material plans to schedule activities, creating the appearance of integration. What they cannot do is model the nuanced, real-world scenarios that generate the most damaging delays. A tool that links one submittal to one material to one schedule line works cleanly in a demo. It breaks down the moment it meets an actual construction project.

⁴ KPMG. <https://kpmg.com/cn/en/insights/2026/03/global-construction-survey-2025-2026.html>



Where Simplistic Models Break Down

Several recurring scenarios illustrate the gap between how tracking tools are typically designed and how procurement actually works in the field.

Embedded materials must be planned for differently than standard procurement workflows assume. Materials installed within concrete, behind finished walls, or beneath slabs require their related submittals to be approved far earlier than the broader project schedule would suggest. Some common examples include conduit, sleeves, and in-slab electrical components. But a tracking system built around simple workflow dependency assumptions will miss this entirely.

Field-measured materials impose a constraint that standard procurement logic does not account for: fabrication cannot begin until site conditions are built and physically measured, meaning the procurement timeline depends on construction progress rather than the other way around.

Skids and prefabricated assemblies, such as the electrical and mechanical skids common on data center projects, are often tracked as a single line item, even though they comprise dozens of individually sourced components. A delay in one component can stall the entire assembly, but a system that only tracks the skid has no way to identify that risk until it is too late.

Owner-furnished, contractor-installed (OFCI) equipment introduces a different kind of blind spot. The general contractor is responsible for the installation schedule but does not control the purchasing timeline, creating a dependency the contractor cannot directly manage yet remains accountable for.

Each of the scenarios above reflects a structural reality of construction procurement, not an edge case. Tools that cannot represent this complexity will continue to leave teams exposed to the same risks outlined in Chapter 1 — only with the false confidence that comes from having "a system" in place.



The Human Toll and Collaboration Breakdown

Procurement risk is not only a financial and scheduling problem. It is also a human one. The same disconnected tracking systems discussed earlier place an understated yet significant burden on the people responsible for managing them, with consequences for retention, decision quality, and team performance.

Junior project engineers, for example, commonly spend about four to eight hours per week manually cross-referencing spreadsheets, reconciling conflicting data, and chasing down status updates rather than high-value project management work.

The cost is not simply lost time. It is a missed opportunity to develop project engineers into proactive risk managers rather than reactive data clerks, slowing the very career progression the industry depends on to build its next generation of project managers.



Further Disconnections and Pressures

The problem deepens once subcontractors enter the picture. Most crucial procurement status tracking does not originate with the general contractor. It resides with the trade partners, who independently track their own fabrication and delivery timelines. Getting that information into a usable, up-to-date format can often mean seemingly endless emails and phone calls, each one consuming time without guaranteeing an accurate answer.

While there is an instinct to solve this issue with new tools or platforms, this introduces its own friction: subcontractors are reluctant to adopt yet another new platform for every general contractor they work with. The more durable solution is to establish a single, frictionless source of truth that provides all parties with shared visibility without placing a technology burden on the subcontractor.

Coordination challenges are compounded on complex projects involving joint ventures or significant owner participation. When multiple companies each maintain their own spreadsheets and systems, no single version of the truth exists. Misalignment, duplicated effort, and delayed decisions become



structural features of the project rather than occasional setbacks. Information exchanged across organizational boundaries is especially vulnerable to version control breakdowns, since no party has full visibility into what the others are working from.

These dynamics put additional pressure on teams and operational efficiency. The people best positioned to manage procurement risk are instead spending much of their time managing spreadsheets, and the collaboration structures meant to support multi-party projects are instead becoming sources of friction.



The Executive Blind Spot (Losing Portfolio Intelligence)

The risks examined so far play out at the level of a single project. But disconnected procurement tracking carries a cost that compounds at the portfolio level as well, and it is one that executives are often slowest to notice, because the damage accumulates quietly across many projects rather than announcing itself in any one of them.

When a project closes out, any procurement intelligence generated over its lifetime — including actual lead times, supplier reliability, and recurring risk patterns — typically disappears with archived spreadsheets. Although this data is critical, it rarely becomes available in a usable format for the next project. As a result, each new project effectively starts from zero, without the benefit of what the organization has already learned. Over hundreds of projects, this rep-

resents a substantial and recurring loss of institutional knowledge.

There are additional missed opportunities. Without portfolio-wide visibility into material usage, supplier performance, and lead time accuracy, organizations cannot identify clear opportunities such as bulk purchasing across concurrent projects or negotiating better terms with suppliers based on aggregate volume.

Decisions continue to be made on a project-by-project basis, using assumptions rather than evidence. For a business operating on already slim margins, even modest improvements through better data can be financially meaningful. And missing them repeatedly, across an entire portfolio, adds up.



Competitive Advantage

There is also a competitive dimension. Owners are increasingly attentive to a contractor's demonstrated track record, not just its proposed scheduling. A contractor who can provide consistent, data-backed evidence of on-time delivery and effective procurement can hold a stronger position when bidding for new work.

Project-level procurement risk, left unmanaged, eventually becomes a portfolio-level growth constraint. The organizations best positioned to win future work and protect margins are those already treating procurement data as an enduring asset rather than a disposable byproduct of each project.



The Path Forward: Moving to Connected Planning

Consequences such as schedule overruns, blown budgets, idle labor, eroded margins, and lost institutional knowledge are not inevitable. They are the predictable result of tracking systems that were never designed to handle the complexity of modern construction procurement. However, the industry is finally realizing the severe limitations of its current solutions for procurement planning, and the approach is beginning to change as a result.

Leading general contractors are shifting away from static, manual project-level tracking and onto purpose-built systems that support real-world scenarios. For instance, DPR Construction's experience shows what becomes possible after moving onto an integrated procurement planning platform. DPR has shifted the nature of the work itself, from reactive firefighting on individual projects to proactive, enterprise-wide supply chain intelligence. Procurement risk that once surfaced too late to address is now identified weeks in advance. Schedule changes that once triggered days of manual recalculation are absorbed in real time. And the institutional knowledge that once disappeared at the end of each project is now carried forward, informing better decisions on every project that follows.

The question for the rest of the industry is not whether this shift is possible. It is how long organizations can afford to wait.

Read the [DPR Construction](#) case study for details on how a leading general contractor has deployed and scaled ConstructivIQ to 250+ projects and then contact us to schedule your demo of ConstructivIQ.





ABOUT



ConstructivIQ is the leading provider of AI-driven procurement planning and material tracking for construction. Our platform helps construction teams get the right material to the project site at the right time by integrating procurement workflows with construction schedules and existing project management systems. Today, ConstructivIQ manages procurement on more than \$15 billion in active projects.

Ready to see ConstructivIQ in action? [Watch the demo](#)