

The New Currency of Construction Projects: Understanding Data in 2024

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In today's digital-first market, data has quickly become more important than even dollars. Data informs decisions, helps us be more productive and efficient, and shapes how we spend our money. Without good data, stakeholders are grasping in the dark – and in an increasingly complex and demanding environment, that's not just frustrating, but dangerous.

Imagine an enterprise with no financial literacy - no CFO, no budgets, no accounting. They have capital but continue to toss those resources around with zero regard for fiscal health or sustainability. They just aimlessly spend until the coffers run dry. Maybe they can earn enough to keep ahead of the costs, but in all likelihood, an organization with no awareness of its financial well-being cannot sustain itself for long.

Currently, organizations worldwide have positioned themselves for a similar burnout. Only, it is not dollars they are failing to manage, but data. According to InEight's Global Capital Projects Outlook, 2023 Edition, 41% of organizations are concerned about their data collection and analytic skills - a 7% increase since 2022. The drive is there, but how can we make the most of our data resources?

It starts with data literacy.

Why Data Literacy Matters

What is literacy? Literacy is how we interpret and understand something. In the case of financial literacy, it's the skills,



knowledge, and behaviors necessary to make sound fiscal decisions. Similarly, data literacy means understanding the skills, knowledge, and behaviors required to make data-driven decisions.

Any construction or engineering project relies on one critical decision after the next – decisions that are often made quickly, with a wide breadth of consequences. We can make those decisions in one of two ways: through experience or analysis.

Experience relies on an abstract understanding based on personal involvement. Experience has its preferences and biases that shape that decision-making process. We earn experience, but that knowledge is difficult to pass on to new talent.

Analysis is experience at scale. Analysis consolidates the learnings of an entire organization into a scalable, actionable resource that removes bias and promotes objectivity. Perhaps

most importantly, you do not need 30 years on the job to leverage those insights - quality analytics can drive better decisions from day one.

Data Literacy in Action

The availability of data is not the issue. Rather, ironically, an abundance of data can present challenges of its own. Think of that as accumulating the right financial currency, and then knowing how to manage and invest it wisely.

Project performance data can help us better understand the task ahead of us, leading to tighter timelines, safer worksites, and greater project certainty. Data literacy can help us understand three common obstacles:

1. What are the pros and cons of a specific course of action?
2. How often do particular risks occur?
3. What conditions typically signal future risk?

It's been said that projects don't fail in delivery, but in planning. The application of data can significantly reduce risks, and, coupled with machine learning, can offer suggestions on schedule scenarios that might otherwise have been overlooked. The value is particularly high with megaprojects that contain an unfathomable number of variables. This is just one use case; the identification of typical risk factors as new processes, suppliers, and materials are introduced is another.

Whether we are making better decisions about our materials or improving our approach to risk management, understanding data empowers decision-makers to quickly make the best possible decision. If you're using data, you're making an informed decision about any of those elements and can drill into specific examples. Data literacy helps us understand a project's limitations early and catch potential obstacles before they materialise into work stoppages. If you are accurate and realistic initially, you can reduce the need for schedule changes in the future.

Building a Data Literate Team


Right now, organizations are struggling to find and retain top

talent. However executive leaders who lean into data literacy gain a resource to help make their workforce more effective. First, the insights found through data literacy empower contributors to achieve more high-value outcomes, providing an important counterbalance to the labour shortage. Data-driven views of each project, let teams more clearly understand the actual requirements of each contract. This freedom enables our teams to focus on the necessary work and avoid getting tied down to fruitless tasks.

More than ever, talent is entering the field with a grasp of what it means to be data literate, but a culture of literacy cannot be built from the bottom up. We expect the CEO to be reasonably financially literate, and in the same vein, executives must demonstrate data literacy. Culture is defined in the executive suite. By demonstrating data skills, knowledge, and behaviors at the top, those habits cascade through the business and set the tone for every decision to come.

Expect Change in 2024

We hear it a lot, but that's because it's true: Construction has not progressed as quickly as other industries when it comes to being data-driven or scientific. Companies in many industries wouldn't be without a chief data officer, for example, and we don't yet see that across the board in construction. But we're starting to see a shift. More and more of our customers are placing a greater emphasis trusting the expertise and input of the roles with a closer tie to data, rather than leaning exclusively on those whose skills were built more traditionally on the jobsite.

Remember - data-driven decisions are only as good as the data they are drawn from. Nearly 80% of organizations find accessible data to influence their project outcomes, but that data must be structured and consolidated across the organization to drive results. Imagine a novel without punctuation. A company without structured data can do great work and have a profound impact but struggle to find sustainable meaning. Integrated software solutions are a great place to amplify your impact, because they can offer a single location where key decision-makers can understand any project. 



About the Author

Rob Bryant is responsible for overseeing operations in the Asia-Pacific region for InEight. His primary role involves building and maintaining customer and stakeholder relationships to enhance their experience with the company's digital solutions. Rob is a recognized speaker and contributor to discussions on digital transformation in the engineering and construction sector, based on his decade-long experience in the field.

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