Capital projects are inherently complex. With so many moving parts and the potential for delays and budget overruns, complete project visibility is always a must to achieve desired outcomes. That can only come from a single source of truth (SSOT).

With projects becoming more heavily data-driven, that single-source project visibility revolves around having access to real-time data that provides insights into project performance and progress. For project owners like you, this visibility into the data doesn't just show you the big picture; it tells you what is really going on with your project. That, in turn, helps you know what to do with that information.

project, if you know which are likely to occur through data-based predictability, you can prepare for them by building contingencies.

Visibility into those performance metrics we mentioned above provides insights into those risks — and helps neutralize the element of surprise. Past project data stored within the SSOT helps inform those insights, providing a baseline against which to gauge mitigation efforts as risks begin to surface.

» How is the project faring compared to past similar projects?

» Looking at past performance metrics, what was the impact of risks and were contingency plans effective?

» Did it jeopardize the completion date or send the budget soaring?

» How does that historical data help you prepare for them before they occur?

» Based on what real-time data shows, when and where should you invest resources to minimize risk?

With an integrated solution constantly collecting data from multiple sources and condensing them into an online dashboard — consider it hyper-focused project visibility — you can monitor performance across all areas of the project at once. Make sure to set up alerts that notify you when a cost or schedule metric swings outside its acceptable operating range. In many cases, this gives you, your contractor and your project team enough advance notice to address it quickly before it becomes a much bigger problem that could delay completion or significantly increase costs.

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Successful project outcomes for today's capital projects are in large part dependent on a constant stream of decisions, which are based on an equally constant stream of data.

As the owner, you're inheriting the project, so naturally you have a vested interest in being involved in the decisions that can optimize those outcomes, particularly for those projects that are larger in scope, complexity, and financial investment. This further elevates the importance of having visibility into project data. So, decisions based on owner access to this data, both historical and current, are more likely to be made with an eye toward the operational phase. And that means they'll be more rooted in confidence than in assumptions.

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Lack of effective, frequent communication has long been a sticking point in construction projects. Much of it is fueled by siloed information sources, making it difficult to know what data to trust. This can leave things open to interpretation — or misinterpretation — about what's really happening with your project.

Because there's so much happening in a capital project, you need to be able to see all the data that's coming in from different sources. That means having one place where you can look at all your contracts, change orders, and invoices for everything that's going on with your project.

Single-source project visibility into a unified data source creates this transparency among you, the contractor, and other stakeholders. When everyone is working from the same source of data, there are fewer misunderstandings about how tasks are being completed or what work has been done thus far on each project. This leads to better communication between team members and less confusion about where things stand in terms of progress on individual tasks or overall outcomes for a particular project.

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Understanding where the project stands and what needs to be done next is critical, especially when it comes to projects that are more complex, larger in scope, and involve considerable investment.

So it's no surprise that there's growing expectation among project owners to access the data and insights their projects produce. And why not? You can't manage what you can't see. Without project visibility, the consequences of missed completion dates and blown budgets are dire and still far too common.

From this outcomes-based perspective, how does visibility benefit you?

» You can monitor key performance indicators (KPIs) — such as cost and schedule performance indexes — that objectively show how well your project is doing throughout execution.

- » Make more informed decisions based on facts, rather than speculation or assumptions, about when and where to apply resources, as well as how to react if a negative trend emerges.
- » Realize greater project certainty. Especially when KPIs leverage historical data, you're more likely to get risk-adjusted costs, schedules and risk-mitigating contingency

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