

You Can't Fix What You Can't See

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Every construction project, no matter how well planned, runs into unforeseen challenges: Weather, labor shortages, material supply issues, and design changes, among other factors, make on-time project delivery a constantly moving target. And while many factors contribute to this problem, one of the most important – and often overlooked – solutions is schedule data. Having access to up-to-date schedule data provides a clear picture of project progress. Without it, construction businesses risk operating in the dark, making it difficult to manage projects proactively and avoid the pitfalls of delay and disruption. After all, you can't fix what you can't see.

THE ROLE OF SCHEDULE DATA IN CONSTRUCTION

Let's face it: The top priority in any construction project is maintaining profitability. Every day a project runs over schedule, you're burning money and potentially damaging valuable relationships. To avoid this, you need to be able to understand, with a high degree of certainty, what's happening across all your projects – where the risks are, what's causing delays, and what's needed to get back on track.

This is where schedule data comes into play. A critical path method (CPM) schedule is the only project document that ties together all aspects of a job, from labor and materials to tasks and timelines, creating a logically connected road map of what needs to happen and when. If properly maintained and updated, the schedule provides real-time insights into how a project is progressing, where the risks lie, and whether deadlines will be met.



However, schedules are often viewed as static reporting documents, updated irregularly or regarded solely as contractual requirements. This approach overlooks the utility of schedule data in getting ahead of risks and positively influencing your bottom line. Regularly analyzing schedule data, from update to update, provides a means to spot issues early, forecast future challenges, and make informed decisions that keep projects on track.

TIPS FOR USING SCHEDULE DATA EFFECTIVELY

There are five specific ways to use schedule data as a valuable source of project information and insights.

1. Build With Best Practices: Quality Schedules, Quality Results

Not all schedules are created equal. Poorly constructed

schedules typically lead to erroneous float values and misleading critical paths, setting up teams for failure. Many don't realize the risks of schedules that don't follow best practices. A well-built schedule connects all activities with proper logic, has accurate durations, and reflects the realities of the site. Industry-approved methodologies, such as the Defense Contract Management Agency's 14-point assessment, help assess schedule quality and ensure alignment with best practices.

Investing in quality schedules ensures that all your projects have a resource to identify and respond to impacts, delays, and inefficiencies of ongoing work, providing a "single source of truth" for understanding historical and future project performance.

2. Update Regularly to Reflect Reality: Optimism Can Be a Hidden Risk

Schedules should reflect actual site conditions, not just the assumptions made at the beginning of the project. When delays happen, the tendency is to make overly optimistic adjustments. This can lead to exceedingly compressed schedules that don't reflect reality, resulting in unreliable timelines and greater risk.

When updates are driven by recovery logic – such as shortening durations or adjusting logical dependencies – you risk pushing the project into an unachievable schedule, leading to further delays and cost overruns. It's like trying to drive with a foggy windshield: You may know the general direction you are heading, but you are blind to the obstacles ahead.

To overcome this challenge, ensure that schedules are updated regularly, reflecting current site conditions and actual progress. While schedule updates are typically a monthly requirement, weekly updates are much more effective.

3. Determine Key Metrics for Schedule Data Analysis

For schedule data to be truly effective, key performance metrics must be analyzed at every update. Determining what metrics are most valuable on your projects allows you to simplify the information into actionable insights. Key areas to analyze include:

- » Schedule quality – Prioritize setting clear standards for schedule quality and ensuring every project meets these expectations.

- » Performance tracking – Track progress against the plan, identifying where delays and acceleration are happening.
- » Critical path changes – Monitor changes to critical and near-critical activities, and question whether these changes are valid or feasible.
- » Schedule compression – Determine if future tasks are becoming compressed due to delays and assess the feasibility of the revised timeline.

These examples represent a fraction of the number of insights you can glean from schedule data. The most important thing is to ensure that all project participants – from executives to site teams – can understand the data and act on it before it is too late.

4. Use Schedule Data as a Communication Tool

One of the most overlooked uses of schedule data is as a communication tool. When everyone has access to the same data, it becomes easier to collaborate on issues that drive quality decision-making. Educating executives on key schedule metrics and ensuring that site teams understand the implications of schedule data allows for better decision-making at every level of the company.

For example, executives need to understand big-picture risk metrics – how feasible the end date is, how much the schedule is compressed, and where major risks lie. On the other hand, site teams need to understand day-to-day data – which tasks are slipping, what the critical, and near-critical activities are, and what needs to be done to avoid impacts.

To make this a reality, make sure your schedule data is visible to all stakeholders in real time and is easily digestible.

5. Invest in Project Controls

Project controls are analytical processes and outputs used to understand and communicate project information. While project controls involve the dedicated function of analyzing schedule data, they are often missing from many construction firms. Without a dedicated resource, the valuable insights contained in schedule data can be lost or overlooked.


Project controls ensure that schedules are built with integrity, updated regularly, and analyzed for risks, keeping the project on track and preventing costly overruns. Therefore, investing in integrating this capability into your operations is worthwhile. If

your company doesn't have a dedicated project controls team, consider investing in software that automates this role for you.

FINDING YOUR ANALYTICAL SIDEKICK

With all the challenges involved in building a modern construction project, making schedule data your “analytical sidekick” can make all the difference. It works behind the scenes, providing checks and balances, explaining delays, and offering a clear forecast of what lies ahead.

By investing in schedule quality, ensuring regular updates, focusing on key metrics, and using schedule data as a communication tool, construction companies can get ahead of risks, make informed decisions and keep projects on track.

In an industry where time is money, you can't fix what you can't see. Having a clear understanding of your schedule data ensures that nothing is hidden from view. 



About the Author

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About the Article

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