THE MARRIAGE OF
SCHEDULING AND EXECUTION:
YOUR KEY TO PROJECT CERTAINTY

When it comes to realizing your best execution outcomes, the practices of planning, scheduling and risk forecasting all with an eye toward execution have never been more important. However, due to the confusion often surrounding these disciplines, many construction businesses end up simply having to deal with challenges as they have in the past, one at a time, and as they come up. In addition, traditional scheduling for construction projects often generates a best-case project scenario that assumes everything will be executed per the plan rather than a most-likely scenario. The problem with this practice is a well-known one — best-case scenarios in construction projects very rarely happen.

Added to this is the fact that on most projects, struggling with the challenges of scheduling can often prove frustrating to all involved. Contractors put so much time, energy and money into just winning the bid, they often decide to invest in a well-established software system and then rely on their scheduling teams to work things out.

But if you understand how to marry scheduling and execution by selecting the right kind of software for *your particular needs*, it is now possible to practice planning, scheduling and risk analytics that work in the real world. When considering what you may need in the way of scheduling software, there are three keys areas to look at: risk forecasting, consensus building and a practical planning process.

InEight®
SCHEDULE

PROVEN PROJECT CERTAINTY.

RISK FORECASTING FOR HUMANS

In its simplest terms, risk forecasting is a means of determining weaknesses and hot spots now that may trip you up in the future. It follows, then, that being able to forecast such problem areas before they happen can be a huge advantage. How do you do this? By building risk into your projects not at the end, but at the beginning and all the way through so that all parties will have one version of project truth and will be able to make full use of the data that is "mined" or uncovered. This involves attaining buy-in through multiple contributions, ultimately leading to a reliable, consensus-based forecast.

Construction organizations are known for having amazing, "native" expertise. With the right tools, they can now digitally capture this expertise and then use their software to mine this data to assist in the still-very-human process of planning. If the suggestions the software makes are not seen as relevant by team members, they can push back on those suggestions, and then the software will actually self-adjust. With human input, it "learns" from its mistakes and the subsequent suggestions then become more relevant to the team as time goes on.

This means that the next time you start or create a new project, you will have the luxury of starting with that knowledge again rather than starting with a blank slate. With this kind of augmented intelligence or AI-driven risk analysis, you can now come up with a much more realistic sequence of work in order to satisfy the path of construction for all stakeholders, helping to bridge the gap of understanding and expectation for everyone while providing project risk transparency and truer project certainty.

What you may need:

- Risk registers that can be run through AI-driven risk analytics to come up with a much more realistic sequence of work, helping to provide project risk transparency and truer project certainty

- A risk management feature that helps to identify and quantify risks and opportunities, determine contingency and adjust the plan as work progresses, protecting against margin erosion

- Waypoint markers that visually indicate just how aligned plans are with relevant details from a Knowledge Library that contains historical information on your projects

PROVEN PROJECT CERTAINTY.

BUILDING CONSENSUS THROUGH COLLABORATION

Though there are many good scheduling programs on the market today, many of them do not really address the issue of collaboration and consensus building; they are simply built to schedule tasks. This lack of collaboration creates a lot of risk, and no one needs more of that. Therefore, having capabilities that address these issues head-on have become must-haves for today's construction businesses.

Ideally, each team member's feedback should be captured in their own personal plan redline. A lead planner will be able to control when and how the feedback from your team is incorporated into that plan. **Team feedback will be collected and incorporate team member expertise (or not), allowing you to visualize the level of consensus and impact on your plan in real time.** Your team will then be able to analyze the achievability of your plan with fresh insights, including measures for plan realism, buy-in, continuity and detail.

What you may need:

- The ability to do markup and review in a way that can capture expert feedback on your plan from your team in the field through a simple markup process

- The ability for each person to have a home base within your system so they will be brought into a solution that's meant for them, i.e., if you're a project manager, you can go to risk; if you're a foreman, you can go to short term interval planning

- Team feedback that can be captured in a simple scorecard view and then, by interacting with the plan timeline, allows for team members to add project register items in their feedback including risks, ideas, opportunities, issues, and change requests

PROVEN PROJECT CERTAINTY.

REDUCING DOWNTIME IN THE FIELD WITH A PRACTICAL **PROCESS**

Like every project process, your approach is only as good as your methodology. Recent studies have shown that as high as one-third of the average craft worker's time is nonproductive, meaning that work is not getting done due to unresolved constraints such as material shortages, hold-ups in another area of a project, labor shortages, etc. Though these non-productive times can never be eliminated, interval planning can address the dynamic nature of executing work in the field and continuously evaluating dependencies and other constraints to keep work flowing smoothly. Interval planning goes by many names; short-interval planning (SIP), short-interval scheduling (SIS), look-ahead scheduling, field execution planning, workface planning and last planner. They all mean the same thing.

The critical path method (CPM) is a well-known scheduling technique that consists of listing all activities in a project and including information about how long each activity will take and how each relates to the completion of other activities.

If used to its best advantage, it can be a great tool to map out a total path of construction that a project will take from beginning to end, resulting in a successful, on-time project. It serves a great purpose in breaking down the work from high level, level one, level two, planning packages and work packages, all the way down to the activity level.

Whether it's SIP or CPM that's the right planning and scheduling tool for your project in the field, the steps or tasks oftentimes need to be rearranged and split up waiting for material or equipment. It's a free and dynamic environment that these situations create, so you need free and dynamic software. As long as you have software that can keep those details within the activity boundaries set out by the CPM or SIP, then all is good.

In the end, it shouldn't be a question of CPM or interval planning. It's a question of these two things working in concert with each other and getting the most out of that roadmap for your best path of construction-level CPM planning and scheduling.

What you may need:

- The ability to deliver scheduling information out to multiple stakeholders, i.e., a subcontractor or a foreman, that they can have in their back pocket on whatever mobile devices suit them

- CPM and SIP working together to provide a really powerful means to improve overall planning efficiency

- A checklist feature to provide a quick and easy means of seeing which line items are in or out of alignment

A MORE PERFECT UNION

When it comes to choosing the right scheduling and execution tools, there's more to the right choice than simply great software. Having a company that knows the reality of the construction business inside and out and has the ability to evolve with it is, of course, ideal. But first and foremost, whatever you decide, remember to do your own research, take your time and make sure to get the system that suits *your specific construction needs*. Doing so as you work to consistently bring planning, scheduling and risk forecasting into the beginning of your plans will ensure your "marriage" of scheduling and execution stands the test of time and yields the project certainty you deserve now and in the future.

Ready to find out more?

Contact InEight at 1-866-225-9570 to discuss your specific needs or request your customized demo here.

PROVEN PROJECT CERTAINTY.