



The most successful heavy civil construction contractors have constant insight into their project's productivity and performance. They always understand:

- Where they are in terms of space, time, and budget
- Where they are going with planning tools that optimize resources, reduce risk, and ensure on-time delivery
- How to get there faster by connecting resources and automating workflows, such as qualityand safety, so that teams spend more time working on value-added activities

However, gaining this level of project oversight is not easy. Roadblocks and challenges present themselves at every step.

Common Heavy Civil Construction Challenges

Heavy civil construction challenges can come in many forms. The most common include:

Struggling to Win Work and Increase Profits

It is hard to find the time to optimize bids, and quantity take-off is labor intensive and error prone. The result is lost work or projects that are not profitable.

Optimizing Project Plans

It is very difficult to plan from contract documents that meet actuals, resulting in field errors, nonproductive use of resources, increased waste and cost, and schedule overruns.

Keeping Projects in Control

Teams are not working off the same information. Tasks are not coordinated. And there is a lack of visibility into project tasks. All of these issues increase project risk, as well as lead to schedule and cost overruns.

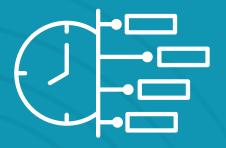
Having Little Insight into Field Performance

There is not any real-time field data capture and site situational awareness, resulting in no clear line of sight to make quick decisions around productivity, quality, or safety.

With the right technology, you can solve these challenges by:

- 1. Utilizing Better Pre-construction Planning
- 2. Optimizing Project Execution
- 3. Enhancing Visibility into Field Performance





SOLUTION 1

BETTER PRE-CONSTRUCTION PLANNING



Leveraging construction technology to enhance pre-construction planning will enable project teams to:

- Optimize resources, increase safety, and reduce project costs
- Provide more accurate project bids to win future work
- Seamlessly communicate the project plan with all stakeholders

How can you plan your pre-construction activities more effectively? Utilize 4D/5D technology to:

- Take control of time with real-time progress updates and scheduling information
- Create constructible components to develop accurate plans and costs
- Protect your budget with automated quantity take off and "what-if" scenarios
- Collaborate on project plans in a digital and interactive visual environment



SOLUTION 2

OPTIMIZE PROJECT EXECUTION



Optimizing project execution will provide you and your team with many benefits, including:

- Better cost management
- Increased coordination of project tasks
- Early identification and resolution of project issues
- Certainty that the team has access to the most updated data

How can you optimize project execution? Leverage construction project and cost management software to:

- Quickly index media to better organize and access data
- Maintain visibility into the 4D schedule to deliver projects on time
- Keep the entire team on the same page with document management
- Manage costs to deliver projects within budget and increase profitability



SOLUTION 3

ENHANCE VISIBILITY INTO FIELD PERFORMANCE



Gaining more visibility into field performance is the key to project success for multiple reasons, including:

- The ability to make better and faster data-driven decisions
- Seamless communication between the office and the field
- More accurate project reporting and forecasting

How can you gain more insight into field performance? Take advantage of field-based applications to:

- View and markup models and PDFs in the field
- Easily document issues in the field to quickly access later – geolocation included
- Quickly capture timesheets, dockets, equipment, and material usage
- Leverage powerful and insightful analytics for complete project visibility

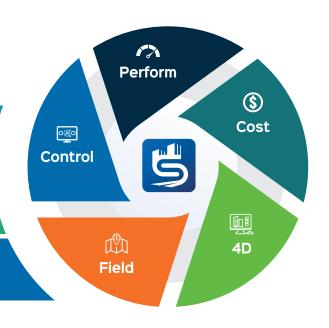




SYNCHRO™ GET TIME ON YOUR SIDE

SYNCHRO is a complete construction management platform - from the office to the field that enables heavy civil contractors to:

- 1. Know where they are in terms of space, time, and budget
- 2. Know where they are going with digital tools to optimize planning
- 3. Get there faster by connecting resources and automating workflows



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