



# Solutions for Engineering, Construction and Operations (EC&O)

In a competitive economy, construction EPCMs and contractors are constantly challenged to win more profitable projects and minimize cost and risk during project execution. In addition, the physical distance between the jobsite and the office makes it easy for construction managers to lose sight of field performance, which quickly leads to unwelcome project surprises. To succeed in this challenging environment, companies must implement tight controls around their **design-build, unit-price and hard-bid, fixed-price and cost-plus, joint ventures and time & materials (T&M)** projects.

Construction EPCMs and contractors can increase profitability and minimize cost and risk with InEight software for model-based construction, estimating, project control and field mobility. The integrated InEight solution suite helps estimators, project managers and field staff create accurate estimates and budgets, control costs and reduce schedule risk. With InEight, project teams can leverage real-time jobsite information to make more informed decisions and maintain better visibility and control throughout the project lifecycle.



## Deliver Project Certainty

Construction companies use InEight solutions to:

- **Develop more accurate estimates** for projects by using a variety of estimating approaches
- **Finalize project proposals with confidence** while incorporating continual scope changes, last-minute sub/vendor quotes and strategic markup and pricing methodologies
- **Manage control budgets, forecasts and earned values** to continually monitor project health
- **Maintain real-time visibility with jobsite performance** to avoid unwelcome surprises
- **Integrate with accounting and scheduling systems** for complete project visibility
- Implement a system to assess **changes, contingencies and escalations** to help protect margins during project execution
- Develop a unified construction model that can **identify design and scheduling issues early and increase efficiency of the material procurement process**
- **Control the construction process** for both self-performed and subcontracted work
- Coordinate procurement and installation of materials and equipment to **minimize schedule risk**
- Plan and schedule resources to **optimize productivity**

## Drive Best Practices

InEight solutions feature a common integrated platform and robust capabilities to drive best practices throughout the project lifecycle.

### Design

- Integrate 2D and 3D BIM models with schedules, costs and construction workflows to help visualize successful project outcomes
- Identify design issues earlier
- Create material requisitions directly from design models
- Enrich BIM models with information captured during project execution like maintenance data, warranty information, procurement information and more

### Estimating, Budgeting and Work Planning

- Build accurate and consistent cost estimates using crews, assemblies, third-party cost databases and resource rate libraries
- Benchmark against cost and productivity data from similar, prior projects
- Create time-phased cost estimates via two-way integration with scheduling systems
- Develop detailed work plans using templates, norms, previous project histories and detailed equipment cost models
- Manage budget revisions and estimate changes as projects evolve
- Easily determine cost escalation across multi-year capital projects

### Project Execution

- Keep estimate, schedule and ERP systems aligned across the project lifecycle for improved visibility and control
- Drive forecast accuracy by incorporating performance trends, new expectations and bottom-up re-estimates
- Implement a system with change order tracking, contingencies and escalations to protect margins
- Develop accurate earned value reporting and monitoring of costs, production and time
- Spot cost variances early to stay within required performance goals
- Replace error-prone spreadsheets with an auditable control system
- Simplify commitment and procurement processes by establishing cash spend for material, equipment and resources
- Track budget changes and immediately evaluate their impact on cost and schedule
- Capture information at work locations, including work hours for internal and contractor labor, work progress and inspection results and notes
- Help maintenance technicians receive and prioritize work orders, address defects, record work completed, update repair status and report hours worked
- Easily produce and distribute earned value and other project status reports

