

5 WAYS TO IMPROVE PROJECT KNOWLEDGE

A HANDBOOK FOR SUCCESS

INTRODUCTION

If you've ever grappled with how best to have a simple yet powerful snapshot of your capital projects, you're not alone. To help simplify things, we've come up with five ways to improve your project knowledge through real-time reporting using today's best construction project management software.

These reports will help you reduce time spent collecting and manipulating data, provide you with greater project transparency and let you get on with the business at hand — planning and executing your best capital project outcomes.

From a real-time view of crew performance to increasing project productivity, the right data can make all the difference. Create a new window into your capital construction progress with these five ways to use enhanced analytics to improve your project knowledge and overall certainty.

1 CREW PERFORMANCE ANALYTICS

Tired of waiting on payroll to know how your job is performing? Or waiting for month-end results to find out if your job is on track? Maybe you're struggling to have the information you need to adjust your operations? That's where crew performance analytics can help. No need to wait for payroll to run or month-end to close to understand if your job is winning or losing. A crew performance report tells you whether your job has made or lost money each day, and what you have planned upcoming, allowing you to adjust before things can get out of hand. In addition to seeing your entire project's results, you can also focus on areas such as cost code or crew, letting you home in on specific areas of your choice. Crew performance gives you the shared knowledge required daily to keep your project on track.



“Being able to see period and job to-date progress in relation to forecasted remaining units allows you to **focus your attention on the underperforming operations, or conversely, take action on the over achievers and adjust your estimate to complete (ETC) forecast accordingly. **Displaying tabular data as well as trend graphs makes this report a must-have for tracking daily performance.**”**

– John Upton, InEight Product Director for Field Execution

2

COMMODITY, COST AND MAN-HOUR CURVES

A commodity, cost, or man-hour curve is a great way to identify how you are performing against your schedule and committed deliverables. Having a visual representation that shows you planned versus actual earned hours, quantities, and cost gives you an accurate view of how your project is progressing and if you are trending in the right direction. You can quickly see where you are having any potential issues and make adjustments to get back on track while there is still time. In addition, this knowledge is beneficial to share with project staff and clients to provide transparency and to identify any potential risks that might impact the project.



“By comparing **actual hours worked versus earned hours, you can see how your jobsite is performing over time. You can also set up an early and a planned finish curve to drive a project’s completion. By updating and tracking your actuals, you can get an **accurate depiction** of the progress of your project, see any trending, and adjust where needed to either **get the project back on track or push to an early finish.**”**

– Dominic Cozzetto, InEight Product Manager for Field Execution



3

QUANTITY CLAIMING HISTORY AND WORK PLAN PACKAGE

Understanding the total quantity for a component and what has been installed versus what is remaining is important in understanding scope and progress. Data from the quantity claiming history report provides detailed information that highlights (by WBS phase code and component) what has been claimed, when the work was installed, and if the claimed quantity was approved.

This report makes it easy to identify if work is still outstanding, right down to the steps in each component. In addition, you can see the daily plan the work is associated with, the executor and approver of those daily plans, and what man-hours have been earned. You get a granular view of what has been claimed over time, along with an audit trail. And it doesn't require manual intervention or manipulation to collect and understand what work is remaining.

When it comes to construction and engineering, planning is critical. Ensuring you have the right materials, equipment, and people — all available at the same time — is imperative to a project coming in on time and under budget. Coordinating this effort takes time and energy. That's where data from the work plan package report assists and ensures that the entire crew is on the same page. They'll have shared knowledge about what is needed to accomplish the planned work for the week.

The work plan package bundles information such as budget, sequence of work, goals, components, equipment, and materials in a report formatted so it can be printed out and handed to a crew if necessary. This report also supports projects that are using the advanced work packaging process by bringing in all the data needed to determine if a work plan is ready to issue.

Eighty-three percent of industry executives reported feeling that in the next five years, organizations will be data-driven, including routine use of data analytics and predictive modeling for project planning and monitoring.¹

¹Future-Ready Index: Leaders and Followers in the Engineering & Construction Industry, KPMG Global Construction Survey, 2019.

4

BUYOUT REVIEW AND PROCUREMENT STATUS

Once a project is awarded, scope gets broken down into bid packages that receive quotes and terms from subcontractors and suppliers. On a large capital project, there could be anywhere from 50 to upwards of 500 bid packages to manage. That's where the buyout review report becomes a necessity for managing the scope that needs to be completed and ensuring you stay on budget. The buyout review also removes the manual work associated with keeping track of individual bid packages, so managing escalation, change orders, and un-awarded scope is easier and more efficient.

You also get critical project analytics from the procurement status report, which shows the status of each of your bid packages and whether they are on track for completion or behind schedule. Traditionally, this information is captured in several spreadsheets or, worst case, only in someone's head. Having the ability to track key dates and ball-in-court for all bid packages lets you quickly review to determine where you need to focus your time and energy. The report also has the necessary level of detail you need so you don't have to go back to the application and look up individual bid packages.



“One of the challenges of procurement reporting has always been collecting the necessary information to produce weekly, monthly, or on-demand reports — followed by a significant amount of effort to review and manipulate the data.

Having this information consolidated into one report saves a tremendous amount of time that traditionally would have been spent manually manipulating reports and data to achieve the same view.”

– Ryan Kerschen, InEight Product Director for Project Administration



5

PROJECT COST SUMMARY AND PROJECT PRODUCTIVITY

Understanding and knowing your costs is arguably the most important information you need on a job to manage the work and ensure a positive outcome. Identifying potential cost overruns and getting ahead of issues will ensure you are prepared if the unexpected occurs, as it often does.

The project cost summary report provides detailed analytics by cost code so you can understand where your money is being spent and where you might have a potential problem. A common issue is not having summary-level information detailed enough to make the necessary changes to get the project back on track. For example, perhaps recent hurricanes have had an impact on budgets. It would therefore be important to identify where there might be an opportunity to make that money back. This report provides period metrics, along with to-date metrics so you can compare to your budget and forecast.

Productivity is the measure of how much you accomplished compared to what you spent — which means you need to deliver more than you spend if you want to beat your budget and stay on schedule. As an industry, it is estimated that productivity has averaged only 1% growth per year over the last 20 years — which means more money is being spent than output delivered across the entire industry, leaving approximately US\$1.6 trillion on the table.²

Consider this scenario: Your crew shows up for the day, only to discover they don't have what they need to accomplish the day's plan. You still have to pay for the crew's time and you are now behind schedule because you have spent money without completing the planned work.

Having access to your productivity rates and being able to compare them to other projects allows you to stay on budget. Earlier identification of productivity issues is key to keeping your project on track, and that starts with tracking and measuring productivity analytics to understand where you have successes and issues. The project productivity report provides this information for you — and allows you to see where you might need more planning, assessing, or optimization. It also challenges your teams to go beyond projects with good productivity rates, achieving even better outcomes in the future.

² Reinventing Construction Through a Productivity Revolution, McKinsey Global Institute, February 27, 2017.



“There is always competitiveness in our crews. The guys love showing up someone on another crew, and using the InEight dashboard to tap into that competitiveness reflects on their performance. Everyone can see their daily production curves and how they are performing.”

– Brett Bieberdorf, Rural Electric

READY TO TAKE A DEEPER DIVE?

CONTACT INEIGHT TO DISCUSS YOUR
SPECIFIC NEEDS OR REQUEST A
CUSTOMIZED DEMO HERE.

BOOK A DEMO

ABOUT INEIGHT

InEight provides field-tested project management software for the owners, contractors, engineers, and architects who are building the world around us. Over 575,000 users and more than 850 customers worldwide rely on InEight for real-time insights that help manage risk and keep projects on schedule and under budget across the entire life cycle. From pre-planning to design, from estimating to scheduling, and from field execution to turnover, InEight has powered more than \$400 billion in projects globally across infrastructure, public sector, energy and power, oil, gas and chemical, mining, and commercial. For more information visit [InEight.com](https://ineight.com).

Contact InEight at sales@ineight.com to discuss your specific needs or to request a customized demo.

INEIGHT 