Bringing Your Projects Into Sharper Focus With the Right Cost Management Tech

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Industry professionals have accepted the importance of Enterprise Resource Planning (ERP) and accounting programs to run the financial side of their businesses. However, when managing capital construction projects on the jobsite, the timeliness of information is paramount to making good decisions.

Unfortunately, due to their almost mechanical, transaction-oriented nature, ERP and accounting systems suffer in providing this timeliness: an inherent lag in time exists between when work is performed, and when meaningful reports can be distributed to project teams. Over the years, individuals have bridged this gap with a myriad of stand-alone tools, mostly Excel spreadsheets, and some version of a scheduling application.

The reason for this is the requirement to understand where work in progress stands, at any point in time, and to objectively assess the project performance, as work is being performed. Project team members make day-to-day decisions based on new information to ensure the project stays under budget and on schedule. While some of these decisions are made instinctively, industry best practices acknowledge the importance of data driven decisions. Let's dig into the why and how of it all, and how you can make sure you are going in the right direction for your business.

Having the Right Tools For the Job

The right project cost management tools provide project team members with visibility into their project's performance, and to

drill down to specific areas needing course correction. Project controls platforms give these teams the ability to perform "what-if" scenario modeling, while reporting on industry standard project Key Performance Indicators (KPIs), such as Cost Performance Index (CPI), Schedule Performance Index (SPI), and many others.

Connected data is leveraged to support inter-connected business processes. For instance, when a contract is issued to a supplier or vendor, the committed value of that contract can be used to forecast the remaining cost of work under construction, without duplication of entry into disparate systems.

Further, project team members are interested in tracking work activities, which can then roll up to the reporting "buckets" maintained in accounting. The creation of a Work Breakdown Structure, with quantifiable tasks, allows for project teams to perform earned value analysis: How much should I have spent in dollars and hours to achieve this much progress? How much have I spent? When accounting cycles close, typically at the

end of each month, "estimated" actuals can be replaced with the actual data from accounting via accessible integration touchpoints.

Project teams are enabled by tools which allow them to perform what-if scenarios, for instance the best case, worst case, and most likely case for the work to be performed. This information, along with the likelihood and severity of each case can be used to generate risk models, as well as to forecast the cost and effort of remaining work.

The Power of 3D

Three dimensional models can be leveraged to help project teams translate model data into quantifiable components, which allow for quantity growth (or shrinkage) to be measured and managed. Other metadata can be attached to model elements which allow for further organization and analysis of model elements. When performing work on the jobsite, the model can be updated to represent progress, providing a visual record of how work stands.

Schedules can be produced which allow for project teams to generate time-phased budgets and forecasts, along with understanding when key resources will be needed onsite.

Every capital project has changes. As issues arise on the jobsite, these can be captured and organized into various categories. A vendor or a client change order may be in order as these issues are tracked and dispositioned in more detail. Depending upon the approval thresholds, workflows kick off to ensure the appropriate parties are informed and can approve or reject changes to the project's current budget.

Leveraging Your Scheduling and Planning

Pre-planning daily work means site supervision has an idea as to whether the plan will result in a cost and workforce hour gain or loss before any work is performed during the shift. The daily plan can then be automatically converted to a digital timesheet, which becomes the record of not only who worked how many hours, but also for capturing equipment utilization, material installation and task quantities compete. Safety and quality data can also be collected at the source in the field, to enable organization-wide reporting and compliance.

The right project management cost systems do more than replace the stand-alone side spreadsheets that have long been the staple of the industry. They become key sources of data which can be acted upon in real-time, as well as normalized for benchmarking future projects.

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