



Key Financial Indicators of Project Progress

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Contractors often can determine if a project is meeting completion milestones simply through experience and intuition. But a more accurate method entails the analysis of data collected from the accounting department, which should be monthly at a minimum. The key is knowing what data needs to be reviewed and analyzed in order to determine whether the project is running as planned.

Contractors can use bid spreads to assess a job's progress. Assuming this information is available, knowing what other contractors bid on the project versus their own bid serves as a comparative gauge to track expenses and progress. A large bid spread suggests a project may present more risk than anticipated. This alone is an indicator that the project should be closely monitored to ensure that it remains within the budgeted bid.

Contractors should maintain contract schedules that include all projects, open or closed, worked on during the year. These schedules are essential for data analysis and must be tied into the contractor's accounting system to capture all billing and

costs, including indirect costs such as depreciation of equipment or certain insurance costs. Projects in progress should be reported on the percentage of completion method of accounting, usually utilizing the cost-to-cost method.

Underbilling and Overbilling

The cost-to-cost method compares the cost incurred on a project thus far to the total estimated cost at completion in order to determine the percent complete. That percent complete is multiplied by the contract value to determine the revenue the contractor earned on the project. The revenue earned, based on the percent complete, is then compared to the amount billed on the contract. The difference between these two amounts is the underbilling or overbilling on a project.

Underbillings imply two scenarios: Either the contractor was not able to bill for work performed due to certain requirements in a contract, or the expected profitability on the project may be overstated. Underbilling should be analyzed carefully in an effort to understand what went awry.

Overbilling, also known as job borrowing, is a more beneficial method, as it grants contractors the opportunity to have their customers finance the project for them.

Overbillings can be the result of two different cases. Either the contractor front end-loaded the schedule of values in a contract to allow for more profit at earlier stages of the project, or the estimated profitability on the project is understated.

A contractor needs to be careful not to overbill on a good project to fund another project that is in trouble. This may seem sound in theory, but could potentially result in the inability for the contractor to fund the good project that was overbilled when invoices are submitted later for payment of the good project.

Cash flow by project is another important analysis tool. A contractor must know which projects are providing cash and which are using cash.

A contractor needs to be prudent when cash flow is provided by good projects and borrowed by poor cash flowing projects. Doing so could be detrimental in the long

term, should the poor cash flowing projects not turn positive.

To calculate the net cash flow on a project, the contractor would compare the total amount billed on the job (less the amount included in contracts receivable, including retainage) to the cost incurred on the project (less the amount included in accounts payable, including retainage).

Usually, at the start of a project, the contractor is in a negative cash flow position. As the project progresses, this negative cash flow position should dissipate, turning positive.

A negative cash flow position that persists throughout the project could be the result of poor billing and cash collection practices, or poor estimates that may have a hidden loss on the project.

Projects should be separated by type and management. In analyzing projects by project manager, the contractor can gain pertinent information about an individual's abilities regarding future job bids, completion and profitability. If a particular project manager's jobs have consistent fades (reductions in the estimated profit on a project), the contractor can identify these trends and isolate projects particular to an employee's strengths or weaknesses.

Determining Job Profitability

An alternative analysis tool is to compare the anticipated profit percentage on a project to a historical profit percentage earned on a similar project to see if the current project may be overstating the anticipated profit. The following scenario represents how this tool

could be beneficial in determining the status of job profitability.

A school project is currently in progress for an electrical contractor anticipating a 15 percent gross profit. However, historically, the electrical contractor earned 10 percent gross profit on other school projects that were consistent with the current project. This would immediately raise concern that the contractor is estimating too much in gross profit.

Once estimates toward completion are reviewed (ideally monthly), the data should be compared to a prior period to determine if the project performance is better or worse than expected. This analysis is typically referred to as project gain or fade. When a project has a fade, it is important to understand the cause of that fade in an effort to reverse that trend going forward.

Contractors should utilize an accounting system that allows for a comparison of the budget of the anticipated cost, by phase or cost code, to the actual cost incurred. This will allow for a better understanding of what exactly is occurring on a project. For example, if a project anticipates \$1 million in labor costs and the actual labor expended on the project at a point in time is \$600,000, the contractor would be able to determine if it makes sense that 60 percent of the labor should be complete based on the work performed and the balance of work left to perform.

Comparing the overall percent complete can be helpful. However, determining the percent complete by individual phase or cost code will allow for improved accuracy and better project analysis.


Change Orders

Contractors also should set restrictions regarding unapproved change orders. Often contractors will be requested to perform work that is out of the scope of the contract. If this situation arises, the work should not be performed prior to obtaining an approved change order from the customer for the new request.

Unfortunately, this is not always possible. The contractor is often told to proceed with the work, and the price will be negotiated later. Essentially, the change order is approved for scope, but not for price.

The importance of limiting the occurrence in completing unapproved change orders is directly related to the leverage a contractor has on a project. Once the scope is approved and the work is done, the allowance for negotiation on price becomes much harder to bargain.

Simply stated, several methods exist that both protect and prevent contract schedules from costly profit-reducing issues.

Contractors with the most success analyze their contract schedules monthly, if not biweekly or even weekly. Employing this routine allows projects to run as scheduled and potential problems to be anticipated before, rather than after, they occur. 

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