How to Analyze WIP Schedules

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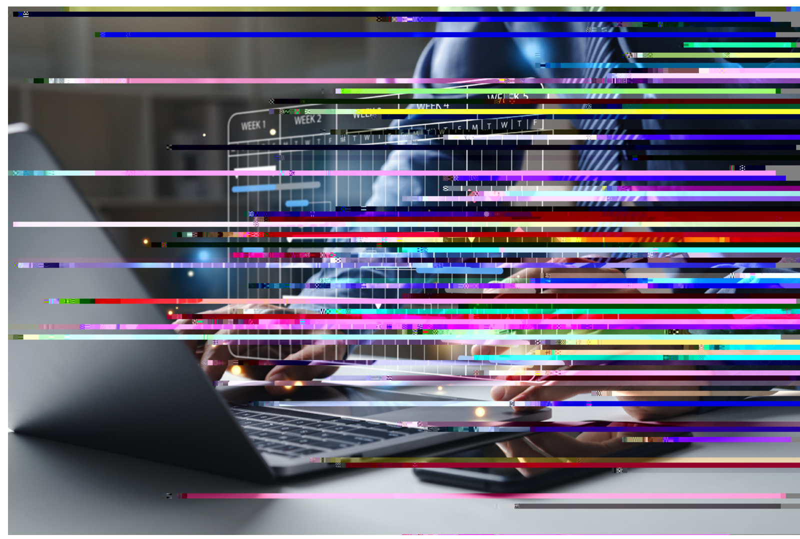


TRACKING CASH FLOW AND PROFITS THROUGHOUT THE PROJECT LIFE CYCLE

A contractor's work-in-progress (WIP) schedule is used by the company's accounting department to vet the trajectory of each construction project. When the WIP schedule is accurate and updated, contractors can foresee and possibly prevent potential issues from occurring.

Key indicators to scrutinize on any project included in the WIP schedule are underbillings and overbillings, cash flow, and gross profit.

Underbilling vs. Overbilling

Underbillings and overbillings are determined based on a comparison of the revenue earned through percentage of completion accounting compared to the amount that a contractor has billed from the inception of the project through a specific date. If the contractor is underbilled compared to the amount earned, the contractor has performed work that is not billable to either the owner or general contractor. Underbillings are not a common occurrence and, when present, are a cause for concern. Contractors should be able to bill for all work performed, so an underbilling could indicate that the contractor is either not making as much money as expected or is losing money on the project. There can be legitimate explanations for underbilling, such as certain criteria that must be met on a project before it can be billable, or change orders that have been approved for scope but not cost, which can result in the delay of billing until the updated price is approved.

Overbillings result when a contractor bills the project owner in excess of what the contractor has earned through percentage of completion. This shifts the burden of financing the project to the owner as opposed to the contractor. Often contractors will front-load a project for more profit during the earlier phases versus the final stages. As a result, the contractor will have more funds available at the beginning of a project. Contractors should tread cautiously with this practice, as they may deplete profit from a project by utilizing those funds on another project that may be underbilled or a loss. It's important that any overbilling is represented by cash in the bank.

Cash Flow on Projects

Contractors should strategize the cash flow from each individual project. Cash flow is determined by comparing the amount billed on the project minus the amount of accounts receivable, including retainage, to determine the amount received. Additionally, a comparison of the total cost incurred to the amount included in the accounts payable listing will determine how much money the contractor has paid out. A net positive number of amounts received minus amounts paid is imperative to ensure that the contractor is not funding the project. If a project is in a negative cash position, the contractor needs to remedy this in order to be ahead on cash flow.

Expected Gross Profit

During the bidding process, prospective companies estimate the cost of the project, known as a "takeoff." From inception, the contractor should routinely gauge costs to determine the gross profit expectation in relation to the original bid. The following areas should be analyzed as part of the estimation process, both during original bidding and as the project progresses:

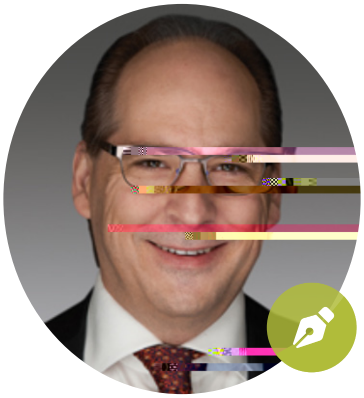
Historical gross profit — What is the historical gross profit on these specific types of projects? If the gross profit expected on a current project is significantly higher or lower than prior similar jobs, a determination of the discrepancy must be made.

Labor cost compared to estimated total labor — Contracts that are labor intensive should routinely audit labor expended on the project so far, and compare that to the total estimated labor expected at completion. Securing labor costs is a challenging but crucial responsibility; it is often a source of unexpected expense. Contractors that accurately scrutinize their labor by schedule of value line items or cost codes build a more effective analysis tool than those comparing only total labor incurred to estimated total labor at completion.

Gain/fade analysis — A contractor should routinely analyze project progression from a gross profit perspective. One method is gain/fade analysis. This breakdown compares the original gross profit from takeoff to the expected gross profit at completion as the project is progressing. If the gross profit calculation comes in higher than originally estimated, this is known as a gain. Alternatively, gross profit projected to be lower than anticipated is known as a fade. The analysis should be done monthly, at a minimum.

Sureties and other recipients of contractor financial statements will do a gain/fade analysis. Gain/fade is performed on each project for each of the time periods that the user of the statements has information, such as at each of the contractor's year-end. This procedure also reveals how well a contractor is at estimating projects. A contractor that fades on a consistent basis will most likely render unfavorable determinations from sureties and perspective financial lenders.

Contractors' financial statements are based on educated, factual and historical estimations. The accuracy and nature of the methodology is imperative in tracking the progress and profitability of any given project. As a result, contractors need to use tools in order to audit their positions and address issues before they present. WIP schedules are integral data collections to assist contractors in ensuring continued success and growth.



About the Author

Robert S. Mercado is a partner in Marcum LLP's Assurance Services division and serves as the construction assurance group leader and the New England regional construction leader. He has extensive experience conducting, reviewing, and analyzing financial information for construction contractors, manufacturers, and service corporations. As a Certified Construction Industry Financial Professional (CCIFP), he is knowledgeable in troubleshooting problem job performance for construction projects and recommending practices to enhance profitability.

About the Article

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