



lient satisfaction. Employee loyalty. A company's reputation. Some things are difficult—if not impossible—to measure. But in the world of construction, productivity is not one of those.

Hard as it may seem, many contractors successfully track and measure the outputs that define their production rates. Only detailed production reporting provides the kind of accurate and up-to-date job cost data that can make the difference between a winning project and budget-breaking cost overruns. To automate the process—and make it worthwhile—contractors turn to construction-specific accounting software.

Production reports go beyond basic job cost reporting to help owners and project managers understand the output of a measurable task, such as how many quantities have been completed per manhour or how much it is costing per unit of measure. The benefits of production reporting are threefold:

- it allows contractors to see progress from a production standpoint as a job unfolds;
- it allows contractors to project their costs on a daily or weekly basis; and
- it provides precise historical data for more accurate estimating on future jobs with similar conditions.

TRACK PRODUCTIVITY AS A JOB PROGRESSES

Whether by instinct or based on real data, contractors generally use a generic productivity standard to calculate costs when estimating and bidding. Once a contractor wins a job, however, a greater challenge exists: How can those numbers be measured on a regular basis to learn how much work is being completed versus how much was estimated to be completed each manhour or day? Production reporting is the answer.

Consider what a drywall contractor could learn from a production report that

Unit Cost And Production Reporting

BY MIKE ODE

Reap the Benefits Using Construction-Specific Accounting Software

contains data on quantities completed and hours from payroll. Using previous production data, the contractor estimated it would complete 8.3 linear feet per manhour. However, a current quantity/manhour report shows it is averaging only 7.2 linear feet. This immediately raises a red flag as to why productivity is lagging. It may have to do with the crew, the equipment or timing of material deliveries, but at least the contractor is aware of the situation and has time to get the job back on track.

Tracking quantities also gives contractors more detailed information for calculating percent-complete. Most contractors look only at costs to determine how a job is progressing, but those numbers don't always tell the whole story. For example, a drywall contractor spent \$60,000 to date on a job that has a total budget of \$100,000. Based on those numbers, the job is 60 percent complete. However, a production report shows 16,660 linear feet of wall has been completed to date, and the finished job calls for 33,320 linear feet. Therefore, no matter what the costs say, the job is only 50 percent complete.

PROJECT COSTS BASED ON COMPLETED QUANTITIES

Another valuable benefit of tracking production is forecasting costs. By knowing the quantities completed and costs to date, as well as quantities yet to be completed, contractors can more accurately project what their total costs will be. Because of this critical data, they also can choose to change the course of a bad job or maintain productivity on over-performing jobs.

In order to compare estimated versus actual costs, contractors must begin with a job budget. However, without tracking production, it's often difficult to predict the remaining job costs. It's not enough for a contractor to say, "We projected to spend \$100,000, and we have spent \$50,000 to date; therefore, we have \$50,000 left to spend." The contractor must know the actual unit cost to date, not just the estimated cost. Only with this accurate, timely data and remaining quantities can precise projected costs be calculated.

Rather than subtracting current costs from estimated costs, a contractor that multiplies its current unit cost by the remaining quantities will come up with a more precise remaining cost.

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BID BETTER WITH PAST PRODUCTION DATA

Perhaps the greatest advantage of production reporting is improving the profitability of future jobs. Successful contractors understand that construction—even niche subcontracting—is too complex to intuitively know the unit costs and production rates for all cost codes, phases or activities of their work. Using historical data from previous jobs allows contractors to estimate their costs more precisely and more aggressively for greater profit potential.

Contractors that use production reporting have a competitive advantage when it comes to estimating jobs. When bidding on work for a new office building, for example, a concrete contractor can pull reports from previous jobs that were similar in size and scope. After looking through the reports, the estimator can determine an average production rate for each phase of the job. In addition, patterns about productivity often are revealed, such as certain tasks that are more cost-effective than others.

SIMPLIFY PRODUCTION REPORTING WITH JOB COST ACCOUNTING SOFTWARE

Some contractors wonder if production reporting is worth the effort. To create

these reports using spreadsheets, someone must gather all the information (quantities completed from the field, labor costs from payroll, material costs from A/P, etc.) and then perform numerous calculations. To update this data on a daily or weekly basis could cost a company more in time and resources than it could save by having accurate production data.

Fortunately, job cost accounting systems give contractors quick and easy access to production reporting. The best systems fully integrate with a company's estimating software so all estimated costs flow directly to job costing. The time-consuming work of gathering ongoing job costs is eliminated because integrated job cost accounting systems already provide ready access to all job-related costs. The only step contractors need to assume is entering quantities. How often quantities are entered (such as daily or weekly) will determine how often the reports can be run.

Generally, quantities can be updated by using one of several methods, including timecard entry, importing from PDAs and spreadsheets, and manual entry. Once quantity information is in the system, production reporting occurs automatically.

Construction-specific accounting packages also provide users with flexible reporting advantages. In addition to standard production reports, such as quantity/man-hours and unit cost reports, most systems contain report writers and other features that allow contractors to dig deep into production details and create unique production reports. For example, a useful reporting field available on some construction-specific systems is the "catch-up" calculation. When production rates fall below a contractor's estimated rate, the catch-up rate will report the new rate that must be met to finish the job on time and on budget.

In today's competitive construction environment, contractors are realizing the importance of productivity to their company's bottom line. With the help of construction-specific accounting software, contractors can research job progress, projected job costs and historical production rates in one practical, indispensable process.

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