SIX BEST PRACTICES for Construction Software Selection

BY SHELDON NEEDLE & DAVID BROWN

One or two accounting functions shouldn't be your primary focus when evaluating the effectiveness of IT solutions.

As a CFM, new technology initiatives affect your department's work processes. That's why it benefits you to get involved in the software selection process.

To remain profitable in today's competitive climate, construction companies need to monitor job costs in "real time," systematically track change orders, and reduce risks. As a result, the role of today's CFM extends well beyond such traditional accounting procedures as A/P, A/R, payroll, and financial reporting.

Here's the good news: Industry-specific software programs can integrate construction financial management with traditional accounting functions, making it easier for you to profitably manage information.

Although each company has unique accounting and financial management requirements, there are IT needs that apply to all contractors, regardless of specialty. In this article, we focus on several best practices that will help you select software more successfully.

Process Mapping

Whether you're generating a certified payroll, combining several change requests into a single change order, or running a job cost report, you need construction software that enhances your workflow.

That's why it's a good idea to map your current construction management and accounting processes before you evaluate IT solutions. This will help you to fully understand how your company earns profit – and uncover areas for improvement.

Process mapping can be simple or elaborate. Exhibit 1 in this article, shows a detailed process map of a billing process. At a minimum, you and your team should:

- List your "mission-critical" company processes.
- Get new ideas for improving processes from key staff, including owners, PMs, estimators, and accounting personnel.

- Outline ways to use IT solutions to integrate your list of processes.
- Identify gaps in your current systems and processes; these gaps often pinpoint other IT needs.

How is purchasing handled? How does estimating transfer a job to accounting? How are change orders entered? These are just a few examples of processes to map. When you look at the five or six mission-critical processes that add the most value to your company's financial management, you'll be better prepared to determine how different software products can help.

Although correlating your financial management needs to specific software features is an important part of software selection, try not to isolate those features from the processes they support. In other words, don't get hung up on features that you don't really need and, worse, will never use.

I refer to this as the car-buying mentality. When buying a car, most people base their preferences on features – they want the coolest features they can buy for their budget. In reality, a vehicle that automates parallel parking sounds great, but you have to wonder if it really adds value to your driving process. In construction financial management, processes make money, features don't.

Best Practice 1: *When defining your company's IT needs, focus less on individual features and more on how the features will streamline your processes and facilitate workflow improvements.*

Integrated Job Costing

In general terms, accounting software is pretty much geared toward paying bills, staff, and taxes. These are processes that a CFM deals with on a daily basis, and you'll find that most of the leading software systems will handle them in a comparable way.

Differences in construction accounting packages become more apparent when you see how these same functions support the more fundamental goal of job costing. Nearly every piece of data entered into construction accounting software ties back to a job. Equipment hours, production quantities, and material costs are just some examples. When you use the company's construction accounting software to see (in real time) how all of this data affects job costs and company profit, you can understand the importance of integrated information.

The real value of a construction-specific IT system resides in the ability to achieve job cost reporting and key performance indicators (KPIs) in real time. When you can provide this information to PMs, estimators, and field staff, problems can be fixed early enough to increase profitability.

For example, one Texas contractor takes real-time information and decision-making very seriously. His field staff call in production numbers to the office twice a day. His philosophy is: "Why lose money all day when I can know by noon that I'm losing money and can take steps to fix the problem!"

(For a thorough discussion of accounting's role in construction operations, see "The Impact of Accounting on Job Management & Profitability" by Parviz Daneshgari and Michelle T. Wilson in the January/February 2007 issue.)

When evaluating construction accounting packages, consider several questions:

- How thoroughly does the software handle job costing? (This lets you accurately estimate cash flow.)
- Can you accrue costs on a daily basis, including payroll data? (This gives you a comprehensive view of the job's progress.)
- Is it easy to enter various types of data – such as production quantities, purchase orders, and equipment hours – from the field? (This reduces overhead and administrative costs; paper handling is minimized and data is captured early.)
- Are job cost reports available in real time? (This can significantly improve decision-making.)

When you apply these questions to different solutions, note how seamlessly these job costing elements come together. Do single data entries flow effortlessly throughout the software? Or, are multiple workarounds and duplicate entries required to achieve real-time costs?

All data entry roads should lead directly to job costing, without any detours that can sabotage productivity and introduce the possibility of error (like manual reconciliation).

Best Practice 2: *When evaluating construction accounting software, look for the best real time, integrated job costing capabilities available.*

Project Management

We talk with CFMs every day who struggle to get project-

related financial information because their company's PMs still use spreadsheets and paper-packed binders to manage jobs. Sometimes, the information is even stored on individual laptops.

This poor visibility into project details creates equally poor control of profitability. Searching for information also diverts your attention from financial management because your time is spent chasing numbers.

Here's an example of a typical problem created when accounting and project management are disconnected: The CFM of XYZ Construction realizes that Job A is underbilled by $80,000 and worries all weekend about how the underbilling will affect the financial statement. On Monday morning, the PM announces that he has $100,000 in change orders for Job A that haven't been processed yet!

And, the more PMs in the company, the messier the situation. This kind of scenario can be eliminated by replacing spreadsheets and localized filing systems with project management software. A centralized project management system, whether stand-alone or integrated with accounting, is a phenomenal step forward because it brings standardization to the table.

Such a system also provides visibility across all jobs – a huge benefit for CFMs. PMs can be pretty protective of their job data, sometimes to the detriment of the company as a whole. Gaining insight into outstanding issues, such as unanswered RFIs or unapproved change order requests, allows you to establish a cohesive P&L picture.

Look at it this way: PMs don't keep individual A/R ledgers or personally pay invoices associated with their jobs, so why should they keep their own RFI log or change order records? From a financial management standpoint, it makes more sense to keep this information in a central location.

Best Practice 3: *If you want to see where your company's money is and need to identify problems early, then centralize your PM system.*

Forensic Accounting

Disputes, litigation, and audits are realities in construction. Typically, the burden of supporting a claim will fall on you as the CFM – whether that claim is against your company or on its behalf. A detailed and indisputable transaction trail can make the difference between winning and losing a case.

Leading industry software providers understand construction risks and have built safeguards and audit trails into their products. However, the way software is set up and subsequently used can create problems unrelated to the actual software. For example, if your company goes into dispute over one particular job and doesn't have *a solid, traceable method of allocating that job's indirect costs,* then your company has a problem.

Indirect costs (such as small tools, cellular phones, drug testing expenses, service vehicles, and safety costs) can get buried in the accounting system, and can translate to as much as $4-$8 per labor hour. These expenses are often kept in a "pool" that gets spread across all jobs at the end of the year.

However, in a dispute situation, you might need to provide documentation that shows how the company arrived at its indirect costs figure. Spreading a pool of indirect costs across all jobs without a rational explanation is not validation. Boom! There goes a large line item from the claim.

The best accounting systems provide the flexibility to apply indirect costs in many different ways. These costs are driven by a variety of factors, including gross pay, man-hours, and equipment usage – and may even vary by project phase.

Best Practice 4: *Your company's software should have a proven methodology to ensure that your data is accurate, documented, and easily accessible – and that your job cost management process supports your company's position in a claim.*

Reporting & Analysis

Construction accounting software is an important tool for creating financial statements and tax returns. But the P&L statement, while necessary, is one of the least vital reports generated from your accounting software. Why? Because it's really just a summary of the many decisions made by each PM and job foreman every day.

Financial reports that accurately reflect these daily decisions will provide a clearer picture of profit or loss. Your reports should provide KPIs by answering questions like:

- Are daily production goals being met?
- Is equipment being used efficiently and charged to jobs accurately?
- Are phases of work being completed per schedule?

- Are project management documents being dealt with quickly? (A late RFI today turns into a cash-flow problem tomorrow!)

When the financial statements are complete and the taxes are paid, there are many financial reports that contribute to better decision-making. One example is the work-in-progress (WIP) report, which provides a real-time snapshot of costs-to-date and a job's projected profitability.

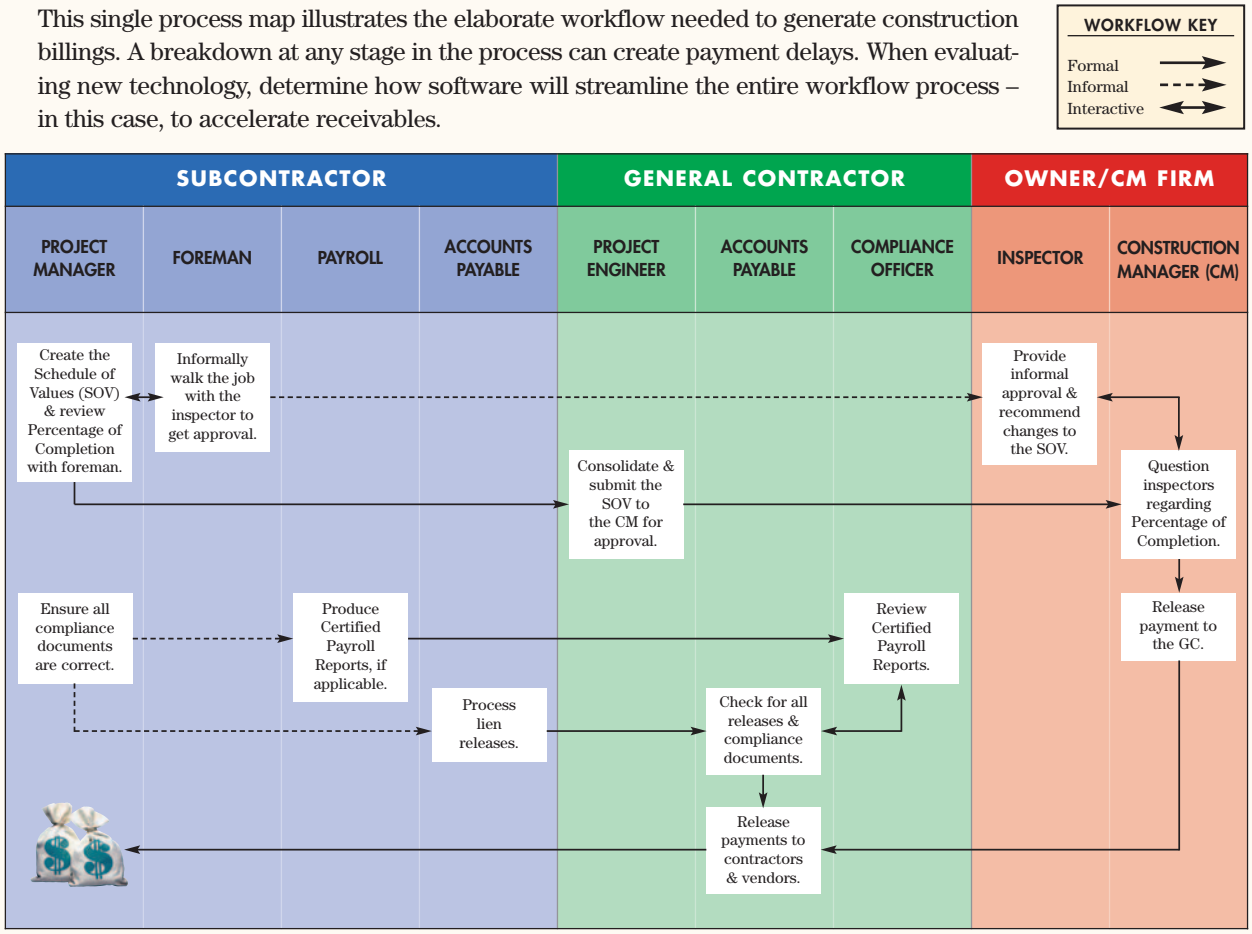
Another example is a comparison of estimated and actual data. Let's say your company estimator anticipated that pipe will be laid at 100 feet an hour, but the subcontractor can only lay pipe at 80 feet an hour. The difference between the estimate and actual performance is 160 feet in an eight-hour day. That means a four-day job will run over by a day and all the trades that follow will probably need to be rescheduled.

The faster you uncover the disconnect, the faster the appropriate parties can make adjustments. The longer the problem continues, the wider the gap between expected and actual productivity – and in many cases, the more expensive the cost to catch up.

Your construction software should give you the ability to generate *reports that identify problems so corrections can be made as soon as possible.* That's the value of having accounting data available in real time. If your accounting and financial data supports the jobsite staff, and they learn to use that data to make good decisions daily, your P&L statement will be more

Exhibit 1: Process Mapping the Billing Process

This single process map illustrates the elaborate workflow needed to generate construction billings. A breakdown at any stage in the process can create payment delays. When evaluating new technology, determine how software will streamline the entire workflow process – in this case, to accelerate receivables.



precise and you can avoid complicated secondary processes like spreadsheets.

Best Practice 5: *When evaluating IT reporting capabilities, look for reports that will help you make profitable business decisions. Find the technology that will generate financials that support the hundreds of decisions being made on a daily basis.*

Changing Old Mindsets

A construction company implemented new software but the accounting staff applied their old views to the new program. The CFO understood how the new software worked, but didn't have a firm grasp on what KPIs the owner and field staff needed to make better decisions.

Subsequently, use of the new technology remained focused on functionality (entering data, paying invoices, processing payroll, etc.). The company didn't take full advantage of the new software capabilities because the operators hadn't changed their thinking. The moral of the story? To leverage construction accounting software, *you need to be willing to shift from a linear accounting mindset to one that encompasses broader construction management practices.*

Here's another example: Many people use Microsoft Excel as if it were a yellow tablet that lives on their computer. When people take an old mindset (the yellow tablet approach) and apply it to newer technology (computerized spreadsheets), they tend to use just a small percentage of the application's functionality. Instead of improving their processes and increasing productivity through the technology, they apply the new tool in the same old way.

So, how do you break free from the old mindset? Focus on your company's processes rather than software features, and remember to avoid the car-buying mentality. And, ask yourself if you can eliminate all, or at least most, of your spreadsheets.

Best Practice 6: *When embarking on a new construction IT initiative, make up your mind to use the software to its fullest capacity. (It will work better than you think!)*

Conclusion

When selected wisely, construction IT has the potential to be a 10-year (or longer) investment. Yet, a minor functionality issue, like the need to create better certified payroll reports, often drives the desire for change. This approach can prevent you and your company from achieving the full benefits of a new system.

But, if you analyze your company's internal processes before you begin to review construction accounting software, not only will you understand your needs as a financial manager in more detail, but you will also understand how to improve profitability across all departments.

With this approach, you can use IT to create financials that lead to better project management, streamlined workflows, and improved interdepartmental communications so that your company can increase its revenues and add value to its bottom line. BP

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