

# BUILDING A BETTER CONSTRUCTION MANAGEMENT SYSTEM

By John Meibers

As 2011 prepares to unfold, it's time for contractors to reflect on their wins (and losses) of the previous year and create their business plans for the next 12 months. Although the economy is showing signs of improvement, it's no secret that the construction market is still struggling. Most companies have already trimmed overhead, cut staffing levels, and explored new ways to generate revenue. When considering the next steps to survival, a smart strategy is to implement a better construction management software system.

While it may seem counter-intuitive to plan a software change when business is slow, this is actually the ideal time to evaluate and implement a new system because adequate attention can be devoted to the task. And for a fraction of the cost of a new piece of heavy equipment, such as a cement truck, a company can build a construction management system that will increase productivity, improve job costing, and provide the financial visibility needed to make more profitable project management decisions.

In general, construction management systems can be grouped into three basic categories.

- 1. Inexpensive entry level:** This would be the QuickBooks and Peachtree types of systems that are used in conjunction with spreadsheets, as well as low-end construction-specific solutions with limited functionality or scalability.
- 2. Best-of-breed:** This type of system is often deployed at very large construction companies with strong in-house IT departments and big budgets. The best estimating, accounting, project management, scheduling, and supporting solutions are chosen and, in some cases, custom interfaces are developed to tie the various solutions together.
- 3. Integrated modular system:** This type of solution delivers most of the functionality found with the best-of-breed approach, but tends to be more affordable upfront and over time. In-house IT staff isn't a requirement



since the software vendor provides implementation services, software maintenance, and support.

For most contractors, an integrated, modular, construction-specific system is the ideal software choice. To understand why, it is helpful to look at the various system components and how they work together to benefit a contracting business.

## A STRONG FOUNDATION

In many ways, building a construction management system is much like constructing an actual building. From this perspective, it's important to start with a strong foundation of integrated core accounting modules. This foundation typically includes accounts payable, accounts receivable, payroll, and general ledger.

At-a-glance, an entry level system may seem to provide a good foundation. Upon closer inspection, however, limitations are identified. For example, critical payroll features, such as Certified Payroll reporting and multistate/multirate capabilities, probably aren't available. Neither is the ability to automatically track and manage retainage.

## EXTERIOR WALLS

The exterior walls are attached to the foundation and provide a solid envelope for the construction management system. In software-speak, the exterior walls represent the implementation, training, support, and ongoing business relationship between the contractor and the software provider.

When these elements are added to a strong foundation, building the rest of the system becomes much easier. That's why it is important to choose a vendor with knowledgeable staff, a strong user base, and a willingness to put the customer's needs first.

## INTERIOR ROOMS

Inside the structure are the individual modules needed to support a construction company's business needs. Using the great room concept, at the center of the building is job costing. Whether a company does concrete construction, road construction, general contracting, or specialty work, job costing is the focal point of every financial transaction.

Naturally, the job cost module must integrate with the foundation modules to create a seamless flow of information. Labor hours, equipment hours, and production units entered in payroll automatically post to the job. Invoices entered in accounts payable do the same. On the revenue side, billings generated in accounts receivable also flow to job cost.

Smaller companies on a limited budget may choose to leave the rest of their system's "rooms" vacant at first and add additional modules over time. (This is one of the benefits of an integrated, scalable system.) Other companies add modules upfront for specific functions, such as purchasing, estimating, project management, and so forth.

## ABOUT the AUTHOR

John Meibers is the president of ComputerEase Construction Software, a leading developer of accounting, project management, and mobile field solutions for contractors. Attending World of Concrete, January 18-21, 2011? Visit the ComputerEase booth #C4251 for daily afternoon happy hour and live presentations of "9 Deadly Job Cost Mistakes." To learn more about ComputerEase, call 800.544.2530 or visit [www.computerease.com](http://www.computerease.com).

Contractors that own heavy equipment, for example, benefit greatly from an equipment management module that allows them to create individual equipment profit centers by tracking and managing costs, revenue, and utilization. Integrated scheduling, which improves the coordination of labor, materials, and equipment, is a valuable function regardless of contracting specialty.

## NON-STRUCTURAL SYSTEMS

The HVAC, mechanical, and electrical systems are essential elements within a building. Likewise, an electronic document management component should be seen as an essential element of any construction management system. Electronic document management used to be in the “nice to have” category. Not anymore. Paper-based construction processes are inefficient and risky, which are two factors that threaten a contractor’s livelihood.

Like the water, air, and energy that flow effortlessly throughout a building’s non-structural systems and is available on-demand, capturing information electronically in your construction management system allows it to be retrieved instantly by any authorized user. Eliminating the profit fade associated with a single misplaced material invoice can easily justify the cost of adding electronic document management to a new system.

## DRIVEWAYS

Most buildings have one or more driveways that connect them to the main road. When this concept is applied to a construction management system, the “driveway” becomes an electronic mobile computing solution that connects the main office to the jobsite.

Electronic timesheets that support daily employee time, equipment time, and production unit entry from the field keep job costs up-to-date. Managing details like material purchases on a laptop computer or tablet PC keeps busy project personnel out of the office and in the field. And capturing change order details electronically, and as they happen, boosts a project’s bottom line.

## LANDSCAPING

Landscaping provides the finishing touch to a building’s exterior and must be maintained over time. Maintenance releases and major upgrades are the construction management system’s landscaping equivalents.

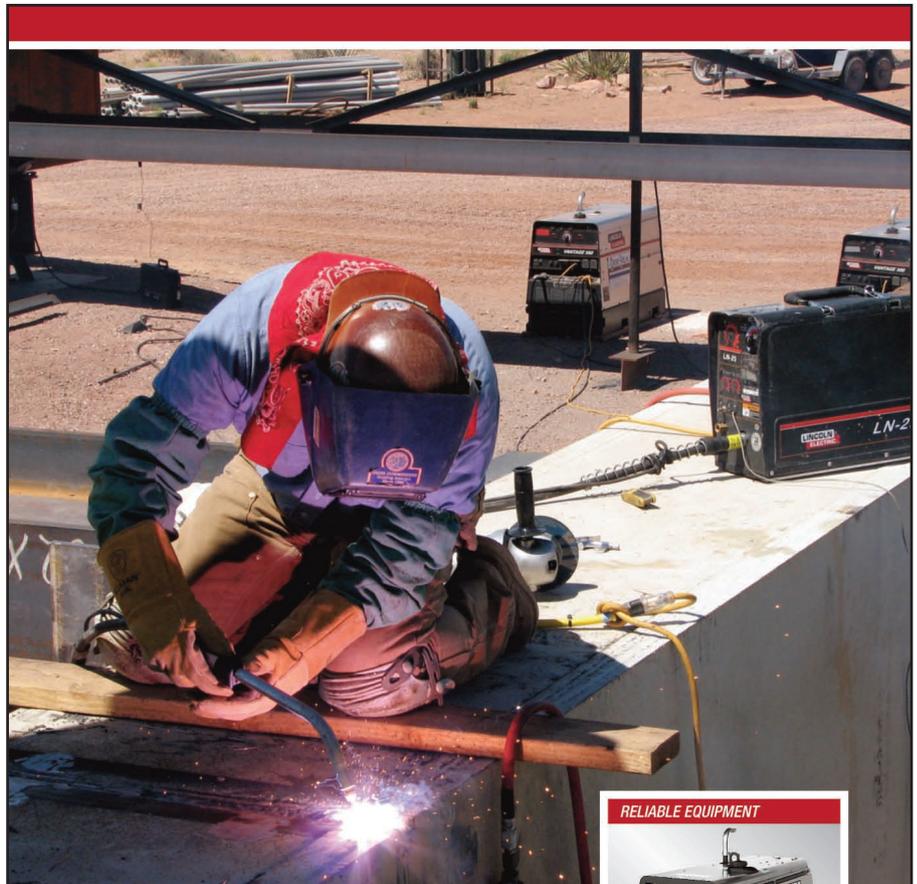
Like regular mowing, weeding, and fertilizing, maintenance releases keep a software system operating in top shape. In addition, periodically adding new plants, trees, and flowers to a building’s landscape equates to the new features and

enhancements that are delivered with major software upgrades. Both maintenance releases and major upgrades are important to a software system’s ability to deliver an on-going return-on-investment (ROI).

## ROOF

No building would be complete without a roof. In this analogy, the “roof” represents the owner or top level manager who is

mandating the implementation of a new construction management system. Successful technology initiatives begin at the top, which is the same place that other game-changing business decisions are made. For construction company leaders who are questioning whether their companies can afford to implement a better software system, the more prudent question to ask is, “Can we afford *not* to?” ■



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