In this second installment of a three-part series, John Meibers, president of ComputerEase Construction Software, discusses the economic benefits associated with field-to-office communication technology and how integrating an electronic field data capture solution with accounting software delivers workflow efficiencies in the field and in the office.

As the economic downturn continues to hit contractors hard, cutting costs, improving productivity, and preserving profit margins have become vital to long-term survival. Companies looking for a single construction management toolset that addresses all three of these challenges should consider paperless field-to-office communication technology.

The benefits associated with field-to-office technology are many, especially when the field solution integrates with the main office accounting system. In this case, data is entered in the field using a tablet PC or notebook computer and electronically transferred to the accounting system, bypassing the traditional paper shuffle. Duplicate data entry is eliminated, errors are reduced, and job costs get updated in near real-time.

**ELECTRONIC TIMESHEETS: A COMPELLING EXAMPLE**

One of the best examples for highlighting the benefits of an integrated field-to-office technology solution is the use of electronic timesheets. This type of field data collection application is relatively inexpensive and simple to deploy, and benefits contractors of all sizes and specialties. Electronic timesheets eliminate the need to manually enter hours in the accounting system, which streamlines the payroll process. And, by collecting employee hours on a daily basis, job costs will be more up-to-date. This example becomes even more compelling, however, when the impact of eliminating timesheet errors are taken into account.

Whether a contractor realizes it or not, timesheet errors are common when hours worked in the field are submitted on paper at the end of each week. Take Joe, for instance, who left the jobsite 2 hours early on Tuesday for a dental appointment. By Friday at 4:00 P.M., that appointment is a distant memory. In a rush to get his weekend started, Joe quickly completes his timesheet by logging 8 hours for each day that week. Although Joe’s error may be accidental, if the oversight isn’t caught, the company will pay him for 2 hours of un-worked time.

To expand on this concept, and illustrate the potential cost associated with paper timesheet errors, consider the conservative example below.

- **Annual un-worked hours per employee:** 10
- **Fully-burdened rate per hour:** $30
- **Number of employees in the field:** 50
- **Annual cost related to timesheet errors:** $15,000

This example assumes that each field employee is inadvertently reporting 10 un-worked hours each year (less than 15 minutes per week) on their paper timesheets. When those 10 hours are multiplied by an estimated, fully-burdened labor rate of $30 an hour, total payroll over-payments come to $300 per employee per year. If that $300 is multiplied by a field force of 50, the cost of payroll over-payments associated with paper timesheet errors equals a staggering $15,000—for a single year. If a company has a large field force or a more significant issue with timesheet errors, the cost for payroll over-payments will soar even higher.

**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. John’s 20+ years of industry experience, including a decade of hands-on management of a 300-employee mechanical contracting firm, have helped ComputerEase establish a solid reputation for delivering cutting edge solutions that are also easy to use. To learn more about ComputerEase, call 800.544.2530 or visit www.computerease.com.

**Part 2: The Compelling Case for Paperless Communications**
When electronic timesheets are completed daily, and posted to the company’s accounting system automatically, the opportunity for errors—and thousands of dollars in payroll overpayments—is dramatically decreased. (Using the example above, Joe’s dental appointment day wouldn’t be forgotten because it would be logged in real-time.) Add the cost-saving benefit of electronic timesheets to the workflow efficiencies gained by eliminating paper and duplicate data entry, and the importance of having more accurate job costs, and the value of this electronic field data collection application becomes clear.

**DIVERSE FINANCIAL BENEFITS**

Other electronic field-to-office technology applications deliver similar benefits, although the bottom line results may be more difficult to quantify. In the three examples below, the elimination of paper streamlines workflow and captures information in the accounting system early. Like the cost savings associated with electronic timesheets, each of these applications also bring a unique financial benefit to the table.

**Routing and approving invoices.** When paper invoices are routed for approval prior to entry in the accounting system, approval delays are common. At one time or another, most contractors have gotten to the end of a seemingly-profitable job before realizing that one or more invoices were sitting unapproved (and unpaid) on a project manager’s desk. Scanning invoices and entering them in the accounting system when they arrive, and routing them electronically for approval, eliminates the profit fade associated with lost or misplaced invoices.

**Generating purchase orders.** Sometimes, material purchases must be made from the field to avoid a costly work delay or stoppage. When this happens, bypassing the normal purchase order process is common, which delays job cost updates and can lead to confusion when the invoice arrives. Having the ability to generate a purchase order from the field, e-mail it to the supplier, and transfer it electronically to the accounting system keeps job costs up-to-date—and keeps accounting, project management, and purchasing on the same page.

**Managing work orders.** Paper work orders are typically completed and returned to the office in batches, where they must be re-entered into the accounting system before the customer is invoiced. It’s not uncommon for this cumbersome process to delay service work billing by a week or more. Completing work orders electronically in the field and seamlessly transferring them to the accounting system supports same-day billing for service work. For many contractors, getting these invoices out immediately provides the cash flow boost needed to survive the downturn.

**PROVEN VALUE WHEN EVERY DOLLAR COUNTS**

After comparing the differences between paper-based and paperless field-to-office communications, it’s easy to see why electronic workflow increases productivity in the field and the office. Taking the time to calculate the potential cost savings generated by this type of technology will further prove its value in the current economy, where every dollar counts.

Next month, in the conclusion of this three-part series, the discussion will focus on how contractors can identify the internal processes that will benefit most from paperless field-to-office technology, how to evaluate electronic data collection solutions, and why the tablet PC may be the preferred platform in the field.