

Technology Tools for the Field

Process Mapping is the Hottest Thing on Your Phones. Have You Upped the Ante to Bring The Most Efficiency to Your Employees', Vendors' and Subs' Workflows?

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Over the past ten years or so, the construction market has changed from the home office dominating all of the data entry, reporting and decision making, to the field performing these functions at the site. The reason for this shift? Contractors have wised up: It just makes sense to capture data where it originates! Superintendents and project managers are entrusted with thousands, if not millions, of dollars of company assets, a.k.a. construction projects, and we need to provide them with the tools to be successful. The question is this: With the shift away from the home office controlling data, what is the technology that best enables the most-efficient manipulation of that data in the field? Well, you can see the answer just by turning on the TV or reading a magazine...it's mobile phones with Internet connectivity. Today, even moderately priced cell phones can use "phone apps" to do everything from time-stamping time cards and GPS tagging your subs, to variance purchase orders on the fly and even authorization to pay upon check-list walkthroughs.

Not only does improved connectivity between the field and the home office empower the field managers, it also dramatically improves overall productivity. You don't have to waste time driving to and from the home office and that alone makes these managers more efficient as they move from jobsite to jobsite.

And oh yes, this technology is a very **GREEN** thing to do, when you consider the paper-free aspects of a digital management system, but also the reduced use of fuel, and more importantly the cycle time reduction when building homes or commercial projects. And that's to say nothing of the baseline office functions that are now so much more efficient. *"We have created and rolled out three forms for the field staff to date. With many employees in the field, this brings the processes closer to them and able to be approved within hours instead of days traveling back and forth to field and Corporate/Regional offices,"* Commented Liz Schellenger, IT Project Manager, Darling Homes as she related some of the efficiencies they have from improved mobile communications.

When construction companies purchase ERP systems, these systems typically handle 75% of what the construction firm requires for baseline operations, like accounting and estimating. But that's never really been a cost center for contractors, because the contractor can exercise such centralized control over those processes. It's the other 25% that kills you. It's the 25% -- with improved process workflow internally and improved communication with the field -- that can dramatically increase the bottom-line, affecting it by double-digit percentage points. Jeff Walsh,

Systems Manager for Infinity Homes, Denver, Colorado explained his use of workflow management software and process optimization this way: *“The jobsite super’s schedule change triggers a series of messages and e-mails to the appropriate people. We are able to focus on quality control and not ‘damage-control’.”* Also Justin Meyers adds, Eastwood Homes found that *“Improved mobile communication allowed 80 staffers to eliminate 2 to 3 hours per week in manual duties, yielding 240 hours a week in savings. Multiply that out over a year, and its 12,480 hours saved each year (312 work weeks or 6 full time employees).”*

Today, just as when a construction company researches its ERP back-office accounting, project management, and estimating solutions, construction companies are finding they have to put as much focus on selecting the correct mobile technology as well. There are numerous wireless products that perform one or two basic functions, whether this is time-card entry, change order control, bidding, RFI’s, etc. But these “off the shelf” functions are really built for a one-size-fits all approach to mobilizing your data, and you need a system that can accommodate the idiosyncrasies of your company. You don’t want to jam a “round” mobile app in a “square hole,” so to speak.

In today’s market, there are new and exciting technology tools that construction companies are using to see a 5 times **Return on Investment** and that 5 X is realized in just days and weeks after implementation...not years. These technologies – which are basically workflow maps that have extreme versatility and customizability -- have the ability to design any type of web-based process workflow and engineer it to easily communicate with and support the field, engineers, architects, subs and owners...no matter what type of device they are using to access the Internet, from their kid’s AOL account, to 3G linked mobile phones loaded with very cool apps. The real advantage of these workflow mapping tools, is that they can affordably design *any* process the way *your* company wants it designed, and connect to *any* back office software at a fraction of the cost of buying all of these individual mobile software products, let alone trying to connect them all to their back office.

BuilderMT, for example, introduced BPM – Business Process Management, in conjunction with Symantec Corporation, and it is just such a process mapping tool for the construction industry. According to Philip Robichaud, Information Technology Manager for Morrison Homes, Calgary, Canada, *“We took an entire process paperless with BPM, with the data exchanges among supers, back office and vendors now entirely electronic, with no re-entry of data, exactly the way we operate, and paid for the software in about a week’s time in the cost savings and efficiency gains alone.”*

In conclusion, as the marketplace remains tight and project budgets are under even more scrutiny, construction firms need to evaluate the importance of improved field data collection, tracking and reporting by establishing a list of improved functions between the home office and the outside world in order to see the gains I have described above. Your homework assignment is to hold a *“round table meeting” with your field and office staff and gather information such as, “if we could do anything to improve the way we operate as a construction company, what would it be?” or “what types of improved communication to our vendors, owners, project managers, municipalities, etc. would improve our efficiencies and lower the time it takes to perform project management?”* You may be surprised with the feedback. Use this information to establish a wish list to select technology tools that can provide you your own **5X ROI!**

Tom Gebes is President of BuilderMT, a long time technology development company and part of the Sage Development Partner Program. He can be reached at tom.gebes@buildermt.com or www.buildermt.com.