Best Practices Guide:

MANAGING IN THE MOMENT:
SMART MOBILITY DRIVES PROJECT ACCURACY, PRODUCTIVITY – AND PROFIT!

MANAGING IN THE MOMENT:
MOBILE TECHNOLOGY DRIVES PROJECT ACCURACY, PRODUCTIVITY, AND PROFIT.

When construction professionals say they are "in the field," it's historically meant "out of reach." But that's changing as the industry increasingly embraces mobile technology, such as smartphones and tablet computers.

Today, mobile technology is bridging the gap between the office and the field. The rapid deployment of tablets in particular is driving dramatic improvements in the accuracy and efficiency of jobsite data collection. At the same time, mobile is enabling unprecedented remote access to project data and real-time project information that can improve collaboration among all of a job's team members.

A recent report from McGraw-Hill Construction states that nearly 3 in 4 general contractors use an iOS device, such as an iPhone or iPad, on site.[1] These devices – which can deliver instant, at-your-fingertips access to a wealth of information – are empowering construction professionals to enhance productivity with greater convenience, intuitive applications, and real-time communication.

"A construction company will profit or lose its proverbial shirt based on its ability to deal with the myriad of details and moving parts on a job," says Jay Haladay, CEO of Viewpoint Construction Software. "Mobile technology can deliver significant advantages to construction firms. Mobile makes it significantly easier and far more efficient for every department to stay on top of every turn and task as projects move quickly toward completion."

> **We are receiving data from the field and processing it electronically. Our guys really like it and it is a huge improvement as far as getting information from the field to the office.**
>
> *Matt Elfreich*
> *Estimator and Project Manager*
> *Klenck Company*

Mobile: A New Catalyst for Transforming Construction

Over the past decade, technological advancements have led to significant strides in addressing the remote access and communication challenges construction companies have faced. What began with simple push-to-talk (PTT) radios and cell phones improving communications has evolved into smartphones and tablets that are transforming the business of construction, providing a powerful yet easy-to-carry, easy-to-use vehicle for capturing, manipulating, and sharing information.

As a result, construction businesses are dramatically improving how their employees and their partners work together. According to "Information Mobility SmartMarket Report" published in 2013, the most highly reported benefits are better team collaboration and improved productivity.[2]

Viewpoint's Haladay explains, "With the ability to provide critical data in real-time through a smart mobile device, construction companies are empowered to make confident decisions based on accurate details. And they know that everyone, from estimators and accounting in the office to workers in the field, is on the same page."

[1,2] "Information Mobility SmartMarket Report," McGraw-Hill Construction, 2013, available at
http://analyticsstore.construction.com/InfoMobilitySMR13?sourcekey=PRESREL

Recent research also shows that construction businesses are making mobile devices integral tools for achieving their best profitability and for gaining a competitive edge. According to Harvey M. Bernstein, McGraw-Hill Construction's VP of Industry Insights & Alliances: "There are proven results in the value of information mobility investments, with contractors reporting shorter schedules by 9%, project cost decreases of 10% and increases in project ROI of 2%."[3]

Best Practice Advice to Mobilize Your Business

Are you ready to reap the benefits of a mobile-enabled workforce? Here are four areas of focus gleaned from companies successfully using mobile technology in the field to improve visibility, communications, and control throughout the entire project lifecycle:

1 **Provide information access by transforming tablets into virtual binders.**
One of the most important factors driving construction businesses to invest in mobile technology is to provide project teams convenient access to accurate data and information. Right now, only 37% of general and specialty contractors report that their workers on-site can access information outside the trailer.[4]

Imagine the time your people would save if they could access important project and financial documents and data — change orders, RFIs, drawings, and more — all in the field via a virtual binder. There would be no more need to lug around a heavy, mostly out-dated, paper-stuffed project binder. No lost hours walking back and forth to the trailer to leaf through it. No more faxing documents and markups back to the office. Critically important, your teams would have a centralized, digital record that could reduce the possibility of critical information loss. This could also increase accountability throughout the company, eliminating the "never received" excuse once and for all, while minimizing risk through shared information.

"There's no need to suffer the old adage of 'death by 1,000 cuts,' with a job going under as a result of many little mistakes," Haladay states. "With everyone on the same page, and with better control and streamlined processes, contractors can achieve the best profit on every job."

2 **Radically improve daily field reports by actually collecting data in the field, when and where activity happens.**
Daily field reports are a critical part of any construction project — and the process of collecting them is one of the most arduous. A mobile solution that enables team members to collect and sync data with the office can free project managers from calling site superintendents for updates. It can help contractors easily track and manage change orders in real-time, while the financial team in the back office can route change orders, invoices, and purchase orders for timely approval. Plus, those in the field can enter timecards via a mobile device and sync to share with the back office, which not only accelerates the payroll process, but contractors will then also know true labor and equipment costs against jobs for better and timely decision-making.

[3, 4] "Contractors Benefit from Advances in Information Mobility, but Gaps Still Exist, According to New McGraw Hill Construction Report," http://construction.com/about-us/press/contractors-benefit-from-advances-in-information-mobility-gaps-still-exist.asp

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> *McGraw-Hill Construction*

At Pacific Foundation, Inc., a geotechnical construction firm headquartered in Vancouver, WA, founder Michael Zeman has dramatically streamlined all of his company's operations in the office and in the field with mobile reporting. Proudly, he explains, "By introducing a solution that allows project managers to submit timecards and other documents daily from the field, we have reduced the time required to process payroll by a minimum of 25%."

3   **Record markups, notes, changes, and issues where they happen, as they happen.**
Mobile applications can allow contractors to take notes, markup changes, take pictures, and more. Plus, technology can pull it all together in a single record that can be synced back with the office to not only clarify and support change orders, as noted above, but also to track receipt of materials, explain delays, protect against back charges, even serve as legal documentation in case your company faces litigation or investigation by OSHA, DEP, etc.

Jason Davis, Product Manager at Viewpoint who also has 15 years of experience working in construction, shares a real-world scenario that pulls it all together: "Let's say you're receiving a delivery of expensive custom light fixtures. Using your iPad and mobile app, you could pull up the delivery ticket and highlight, strike through or check off the delivery. And, let's say maybe one of those fixtures is damaged. Then right at your fingertips, you could mark the damage on the purchase order or ship ticket, take a picture of the damaged fixture, insert the photo in the PO, even ask the delivery person to 'sign off' on the PO using the signature tool right on the iPad, and attach it to the project record in your virtual binder. You can also then instantly send the electronic files to the supplier, demonstrate you're not responsible for damages, and initiate the process of re-order."

In addition to documenting damaged shipments or deliveries, you can use a tablet's camera to record site damage, or even safety and performance citations or violations — and easily store these photos in a central location with all other project-related data. That's exactly what Evansville, Indiana's Klenck Company is doing. Matt Elfreich, the company's estimator and project manager, explains, "At the end of the day, the team always takes a photo of the job site, so that if there are any discrepancies, we have proof in our system. This allows us to note progress. And, if other trades come on site and dig up our work and we're asked to re-grade it, we have documentation that shows how we left the site. This has made a huge impact."

4   **Choose a construction management solution with single-source mobile capabilities.**
Collecting, manipulating, and communicating information in the field is only half of the mobile equation. Once changes and reports are recorded, they still need to make their way into the centralized construction management system. Documents can be sent back to the office any number of ways, from email to consumer file sharing solutions such as Dropbox or Google Drive — but these methods are typically inefficient, risky, laborious, and costly. They also require you to take your sensitive internal documents and place them in a third-party tool (as opposed to remaining inside of your own trusted and seamless construction management software platform), and require additional overhead for subscribing to these bolt-on products.

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> *Founder*
> *Pacific Foundations, Inc.*

"Mobile technology should help cut down the tedious and time-consuming task of data entry. Why add any redundant steps?" contends Davis. "After your on-site teams record information, you want them to be able to simply tap, sync, and move on to the next important task. At the same time, your people in the office should be able to access and use that information without having to enter it into the system again or verify it's accurate and current."

Conclusion

Construction companies that leverage the power of mobility as outlined in these four points of best practice advice are poised to improve accuracy, productivity, and profitability. The benefits of mobile implementation can be realized quickly — and can have a long-lasting impact on your ability to minimize risk, control costs, and grow your profits on every project.

Best Practices Guide Series

This article is part of Viewpoint's *Best Practices Guide* series, the aim of which is to provide straightforward, actionable, and detailed advice on the business and technology topics that are most important to construction firms. The advice is synthesized from conversations with leaders of construction firms of all sizes and in all industry segments.

ABOUT VIEWPOINT

Viewpoint, a leader in meeting the collaborative and information needs of the AEC industry offers construction-specific solutions for a variety of professionals including small, medium, large and enterprise contractors. Viewpoint solutions include takeoff and estimating, project management, accounting solutions, enterprise resource planning, project and BIM collaboration, mobile field-to-office and enterprise content management. Viewpoint customers include more than 30 percent of the ENR 400 and have the most technology partnerships with the top 50 mechanical and electrical contractors in the United States. Viewpoint serves as the technology partner of choice to the construction industry and delivers the right solutions on the right platform, including cloud, SaaS and on premise solutions and provides customers improved accountability, efficiency and productivity throughout the U.S., Canada, the United Kingdom, Europe, the Middle East and Australia.

" *Our mobile solution is very useful for managers who can easily access project billings, accounts payable, and other critical cost controls for projects, in real-time, regardless of whether or not they are in the office.* "

Michael Zeman
Founder
Pacific Foundations, Inc.

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