



Case Study



Construction Management Firm Increases Efficiency by 35 Percent, Reduces Project Schedules by Two Weeks

Overview

Region: North America
Industry: Construction

Customer Profile

Pinnacle/CSG is a construction management firm dedicated to consistently delivering high-quality results through value-engineering and innovative solutions. With the goal of maximizing technology, human resources and expertise to deliver measured value to clients, the company executes every project with the precision designed to exceed expectations. By listening to clients' goals, developing strategies, delivering results and tracking performance, Pinnacle ensures the successful completion of quality projects on time and within budget.

Business Situation

In order to replace its predominantly paper-based workflows, Pinnacle looked at laptops, but found the form factor to be too cumbersome. Pinnacle then trialed a consumer tablet, but quickly realized the device's limitations.

Solution

After piloting the **Motion@ F5v Tablet PC**, Pinnacle immediately fell in love with the device due to its seamless backend integration, hot swap battery feature and Microsoft Windows operating system requiring no additional staff training.

Benefits and Results

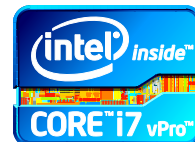
- Increased efficiency by 35 percent
- Reduced project schedules by two weeks
- Enhanced collaboration
- Reduced paper waste and printing expenses
- Improved customer service
- Enables real-time communication

"The F5v Tablet PCs have increased the time the superintendents are physically in the field by at least an hour and a half, and that allows them to shave two weeks off the overall construction schedule at a minimum. On a large project, that time savings translates to thousands of dollars in cost savings."

Cory McFarlane, PMP, Chief Visionary, Pinnacle/CSG

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“We piloted one device, and everyone fell in love immediately,” said McFarlane. “Not only does the device run a full Windows desktop, but everyone is already familiar with the operating system, so there’s no training period.”



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Challenge

Pinnacle understands that while safety and quality are the foundation to any successful construction company, the 21st century owner is looking for a company that is agile and delivers dynamic information around the clock. As such, the company embraces technology and sees it as a competitive advantage.

“Gone are the days of paper plans. Now, clients want to see what’s going on at a site even when they are 1,000 miles away. It’s Pinnacle’s corporate initiative to utilize the right technology to make that happen,” said Cory McFarlane, PMP, Chief Visionary, Pinnacle/CSG.

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“The consumer device was great for surfing the net, but it was more a personal than professional tool and just didn’t make sense in our environment,” said McFarlane. “Its biggest downfall was that it didn’t run Windows. Since all our backend systems and software are Windows-based, it just wasn’t going to work.”

Solution

After further research, Pinnacle came across the Microsoft Windows-based [Motion® F5v Tablet PC](#).

“We piloted one device, and everyone fell in love immediately,” said McFarlane. “Not only does the device run a full Windows desktop, but everyone is already familiar with the operating system, so there’s no training period, and we didn’t have to figure out how to make it work on the backend.”

McFarlane also cites the F5v Tablet PC’s ergonomics, ruggedness, digitizer pen and integrated camera as essential features. Now all of Pinnacle’s superintendents as well as several project engineers and safety workers are equipped with Motion Tablet PCs.

According to McFarlane, the F5v Tablet PC’s [hot-](#)

[swap battery feature](#) alone has made Pinnacle’s team 15 percent more efficient. “We don’t miss a beat with the hot-swap battery, and we’re never waiting around for the tablet to charge,” he said.

Pinnacle also utilizes [Bluebeam® Revu®](#), which provides the company with the necessary tools for accessing, managing and editing plans. “Bluebeam is more than just a markup tool,” said McFarlane. “It’s one of the most customizable pieces of software we’ve encountered and allows us to enter details and update plans directly on the tablet from the field.”

Results

“The superintendents never leave home without their tablets, they’ve become just as important as their hard hats,” said McFarlane.

With the F5v Tablet PCs in hand, the superintendents are connected from the moment they arrive on the job site to the moment they leave. In real time, the superintendents are able to:

- Access and adjust schedules during morning task meetings
- Access, record and upload information for safety reporting
- Maintain ISO 9001 certification by having documents readily available
- Access, edit and update plans using Bluebeam Revu for red line adjustments and sharing as-built drawings
- Process submittals if issues occur
- Access warranties and communicate with partners on broken or misplaced items

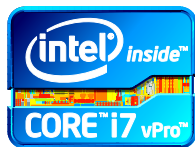
As many of the activities on a job site are constantly changing, having real-time access to information offers a significant benefit. As-built drawings are continually kept up to date, and superintendents no longer have to wait several days when requesting copies – **a process which previously took days, now only takes hours.**

According to McFarlane, the superintendents enjoy the tablets’ portability and mobility even off the job site as they are able to access information or check the next day’s schedule from home in the evenings.

“We are a small construction company, but we have embraced technology as our competitive advantage. Even before we step on the job site – when we’re at pre-bid meetings and pitching clients, we bring the tablets, and they’re immediately interested in what we have to say,” he said. “The Motion F5v Tablet PC helps us connect our construction operations in the field directly with the office, enabling real-time communications that enhance our collaboration.”

In order to stay connected across its three Florida-

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based and one Los Angeles-based offices, Pinnacle uses [Microsoft Lync](#) for live video chatting. With the F5v Tablet PC's integrated camera, project managers can attend regular meetings as well as share live updates from the field. The superintendents also use the camera to take photos throughout the day.

“If something is broken or there's a question, the superintendents are able to snap a photo and immediately send it off without having to travel back to the trailer to scan or upload it,” said McFarlane. “Every step they take away from the site and toward the trailer is time lost from the job.”

According to McFarlane, **by using Motion Tablet PCs, the company is 35 percent more efficient** since the superintendents no longer have to walk from the site to the trailer and back again in order to process information or manage multiple devices.

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While Pinnacle is currently 95 percent paperless, the company found that its previous paper-based processes were draining resources.

“The guys would lose plans or they would get ripped and torn, and that would cost us \$100 a pop. Or, the superintendents would have to print out 20 sheets for the safety and quality checklists,” said McFarlane. “While 50 cents a copy may seem like a small amount at the time, if you're on a seven month project, that's \$2,100 down the drain just in paper costs. Getting rid of paper and standardizing on the tablets added money to our bottom line.”

Conclusion

“When you boil it all down, the most important advantage is that we're able to deliver exceptional customer service,” said McFarlane. “We're able to share project information, such as plans, drawings, issues or questions, with clients in real time. And we all benefit from faster project completion.”

Looking forward, Pinnacle plans to incorporate the F5v Tablet PC's integrated RFID reader for tagging components of the structure as they are built. Once scanned, the information will feed directly back into the building information model (BIM). By incorporating the project management software, Pinnacle and its clients will have a holistic view of the project.

“We studied a lot of computer solutions out there – we looked at them, we owned them and we moved on. The only exception was the F5v Tablet PC,” said McFarlane. “It's a huge advantage and creates a win-win situation for our company and our clients.”