The Clark Construction Group, LLC Case Study

- Ranked 15th on ENR Top 400 Contractors
- Over 1,400 local and national awards for quality, craftsmanship, sustainability, and safety

Project Objectives:

- Reduce costs and improve productivity

"Since rolling out Kahua, we have realized considerable productivity improvements through improved usability, better collaboration, seamless integration with our ERP system and other applications, and a platform to develop and launch apps quickly."

Steve Stankiewicz, Applications Development Manager Clark Construction Group

BACKGROUND

Based in Bethesda, MD, Clark Construction Group, LLC, is one of the nation's most experienced and respected providers of construction services. With more than 4,000 employees and $4 billion in annual revenue, Clark is consistently ranked among the largest general building and civil construction companies in the United States.

Clark Construction's diverse construction portfolio, specialized divisions, and subsidiaries ensure that each project is matched with appropriate resources and expertise. Through technical skill, preconstruction know-how and self-performance capability, Clark Construction anticipates project challenges, develops solutions that meet clients' objectives and ultimately delivers award-winning projects. Since their early beginnings, Clark has been at the forefront of new technologies and evolving building trends. With this spirit of innovation, Clark was an early adopter of cloud-based collaborative project management systems in 1999.

REVIEW OF SYSTEMS AND PROCESSES

By 2001, Clark Construction had implemented an enterprise collaborative project management system, the leader in the category at the time, eventually managing over $36 Billion worth of work completely in the cloud. While the technology served them well at the time, their vendor was ultimately acquired and product development and enhancements slowed dramatically. "We were concerned, but to be honest there really wasn't anything better on the market and migrating to a competing system at that point would have been a lateral move at best," said Steve Stankiewicz, Application Development Manager.

In 2009, the economic downturn provided the perfect opportunity for Clark to look for ways to improve productivity so that they could emerge from the downturn with a jump on the competition. "Whether it involved changing business processes, seeking better technologies, or making different hires, nothing was off the table," noted Dave Golden, CIO of Clark Construction Group. The Clark team embarked on a thorough review of all their systems

and processes, identifying and documenting what they called "ideal" processes. When the team reviewed their incumbent project management system, the analysis revealed that the amount of time it was taking to execute their ideal processes and return actionable data was markedly inefficient and overly time consuming. "Project Management systems should enhance business processes and allow for quicker decision making, not be a bottleneck," added Stankiewicz. This inefficiency was not only impacting Clark, but the project owners, subcontractors, architects, and the rest of their project partners. To further compound the issue, the analysis also revealed that their systems were rather inflexible and incapable of easily integrating with other applications, thus making it more difficult to access vital project data when they needed it.

A SOLUTION FOR THE FUTURE

After completing the review of their systems and business processes, Clark set out to find a vendor that would address their challenges today with the flexibility to adapt as their business needs change down the road. Clark reviewed several vendors and even considering building a solution internally, but ultimately selected Kahua. Unlike other systems, Kahua had several key differentiators that Clark found very compelling:

Cloud-Based Platform

Kahua was designed as a Platform-as-a-Service(PaaS) not just an application. Historically, developing Apps was a rather tedious and timely process requiring an organization to set-up a database, user accounts and security, reporting, UI design, etc. With Kahua, all of those things already exist in the platform so when you're building an App, all you have to focus on is the business process, forms and workflow allowing for speedier App development. Additionally, Kahua's online marketplace, the kStore, contains a variety of Apps that have already been built and tested, such as Design Review, Checklist, and Value Engineering to name just a few.

Ease of Use

Clark's end-users range from individuals right out of college to those that have been in the workforce for a while. One of their key selection criteria was how intuitive the system was and how easy it would be for users to get acclimated. In order to ensure maximum return on investment, user adoption was key. In Kahua, Clark found a solution that was easy to use, easy to learn, and easy to remember resulting in improved productivity and reduced training and support costs.

Collaboration without Compromise

One of the biggest shortcomings of their legacy system was the Hub and Spoke architecture which limited other project partners' means of collaborating, was impacting productivity, and causing major data ownership issues. Instead of a hub and spoke architecture, Kahua is designed as a Hub-to-Hub architecture. With Hub-to-Hub, each project partner has their own Kahua database allowing everyone on the project to truly collaborate, share data, and use the workflow capabilities of Kahua to assign and manage project tasks. In this model, each entity has their own system and their own project record.

Seamless Integration

Maintaining data in various systems is inefficient; when a project team member has to look up vital project data in multiple systems, it impacts productivity. So in addition to ensuring that their project partners were able to better 'integrate' through enhanced collaboration, Clark determined that productivity gains could be made by ensuring that their next-generation system could easily integrate with their ERP system and other 3rd party applications. Since Kahua was built on open API's, it easily interfaces with other systems.

RESULTS

Since Clark had performed such a detailed analysis of their systems and processes, they had a very good baseline to track performance improvements. The more noteworthy and tangible improvements included:

Usability and Cost Reduction

In addition to positive feedback about the user interface and overall more intuitive nature of the system, Clark conducted a detailed analysis of the processes that were optimized in Kahua. In taking a Change Order from conception through RFP, proposal submission, approval and eventually generation of subcontractor change orders, they determined that it took significantly less time to complete this process. Similarly, Clark realized similar improvements for other vital processes like Submittals and RFI's. These efficiency gains came about as a result of the combination of Kahua's modern and intuitive user interface, as well as, the workflow automation capabilities. From a true cost savings perspective, these and other associated productivity gains will enable Clark to reduce on average, one FTE per project.

Productivity Gains

In addition to the productivity gains resulting from a better user experience, Clark was also able to dramatically improve efficiencies for key processes like Daily Reports. By leveraging Kahua's workflow automation, Clark designed a two-part automation that would generate a daily report each night so that the superintendent could review first thing in the morning. This enabled the superintendent to review and remove any subcontractors that are no longer

on the job and add any new ones expected onsite that day. At noon each day, the system sends a task to each subcontractor still listed on the report to complete and submit their daily report via a simple form that captures information like work descriptions, labor types and quantity. Upon submission of the reports by subcontractors, the system automatically compiles them into a master report for review and completion by the superintendent. Depending on the size of the project, this process saves Clark 1-2 hours per day and ensures that comprehensive daily reports are completed each day.

Integrate, Not Re-Create

Since Kahua already has a number of out-of-the-box integrations with a number of leading technologies, seamless integration is a reality and far less complicated than with Clark's previous systems. With Kahua's open API, Clark was able to integrate with their ERP system, as well as, other third party applications like Bluebeam and DocuSign. If a user has the Bluebeam application installed on their PC, they can click on any attached file in Kahua and immediately open the file in Bluebeam, mark it up, and close which automatically saves the file back into Kahua when finished.

Rapid App Development

The rapid App development capabilities of the Kahua platform have enabled Clark to develop Apps quickly and cost efficiently. The flexibility of the Kahua platform enables Clark to modify existing Apps rather than re-create them. Using this approach, Clark was able to modify various Apps to meet their specific requirements. Clark used this approach for submittals, RFIs, daily reports, and change orders resulting in workflow improvements.

CONCLUSION

Through the implementation of Kahua on all new projects, Clark Construction has realized considerable productivity gains through improved usability, streamlined and efficient process execution, seamless integration with their ERP system and other essential applications, and a platform to develop and launch Apps quickly. As further testament to the success of the project, Clark has already deployed Kahua on over 50 projects valued at over $5 Billion. In November of 2014, Clark made a commitment to standardize and deploy Kahua on ALL new projects.

About Kahua

Kahua is changing the way that capital projects are delivered and managed. The Kahua Network is the world's leading collaborative network for real estate and construction project management. Kahua's collaborative project management solutions improve communication and performance throughout the entire lifecycle of your capital assets. Delivered as a secure, scalable Application Platform-as-a-Service (aPaaS), The Kahua Network enables users to easily share data, documents and workflows across all applications and projects. Kahua supports leading mobile devices and tablets, integrates with third party applications and numerous accounting systems, and enables customers and certified development partners to quickly modify existing applications or build custom applications that operate on The Kahua Network. To learn more, visit **www.kahua.com**.