

Brasfield & Gorrie and Touchplan

Keeping Up with Demand in Data Center Construction – A Leader’s Story



Touchplan is the most popular solution for data center construction planning, used by 13 of the 25 largest data center contractors on projects for 14 of the 50 largest data center owners. Brasfield & Gorrie is one of those contractors. Together with one of the largest data center owners they selected Touchplan as their primary planning software for a greenfield megaproject that will cover up to 2,500,000 square feet and deliver as many as 360 megawatts of power when complete. Spanning more than a half-dozen sites, these large data centers were planned to be built in rapid succession using multiple general contractors and several large mechanical, electrical, and plumbing (MEP) subcontractors. They needed a cloud-based planning platform that would be easy to learn and use, enable continuous collaboration between all project stakeholders, and provide detailed, real-time data and analytics for requirements, constraints, and performance. Touchplan was the logical choice.

Hyper, Mega Everything

The growth of AI, cloud computing, work-from-home, and digital business transformation is driving unprecedented demand for data center construction. With the average build time per site now 12 months or less, and the total U.S. planned square footage growing at 350,000 square feet per month, construction planning software has become one of the most important tools on the jobsite. Resembling a large warehouse, constructing the data center shell is simple enough. But the design and fit-out for the required power, cooling, fire prevention, security, and other essential systems is exceedingly complex. And even a short commissioning delay can cost owners millions of dollars in lost revenue.

One of the largest portions of construction value and work is in the hands of specialty MEP contractors. As such, general contractors (GCs) face unique planning and project management challenges where a whiteboard full of sticky notes in the trailer just won't cut it. Keeping everyone on track to meet the schedule and owner's expectations demands a new way of planning, a digital way.

The owner and Brasfield & Gorrie are the leading firms in the rapid construction of large data centers providing capacity to hyperscale and colo tenants. Mastering the intrinsic complexity and urgency of this kind of construction has made them thought leaders in the application of digital technology to construction planning and management, as this story will show.

Planning for Repetition

The owner is one of the largest data center operators in the U.S. and Brasfield & Gorrie is one of the largest builders. Together they are creating new capacity at an unrelenting pace. They were faced with a new project for constructing as many as 10 massive and highly complex data centers in rapid succession where the work would be shared between several different vendors hired by the owner and would require Brasfield & Gorrie to coordinate the work and to manage the work of many specialty contractors and trade subcontractors.

The serial, build-and-repeat nature of data center construction called for the owner and Brasfield & Gorrie to select a construction planning solution that would enable them to develop highly repeatable processes and workflows to assure consistency and reduce schedule risk over the course of the multi-site project.

To this end, they identified the need for a seamless platform for coordination and collaboration that would enable Brasfield & Gorrie to work efficiently and effectively with the owner, vendors, large MEP contractors, and many trade subs. They were determined to provide everyone involved with:

- a unified, detailed, real-time view of project resources, commitments, and outcomes
- an easy-to-use, cloud-based platform that could be accessed by everyone from everywhere
- easy to understand analytics, insights, and reporting for project progress, issues, and outcomes

Touchplan for Teamwork

Based on the client and the project senior superintendent's previous experience with Touchplan, Brasfield & Gorrie was confident that it was the right choice for the massive new greenfield project facing them. They also knew that their expanded role in this project would present new, larger challenges that were sure to test the capabilities of the Touchplan platform and their ability to use it to its full effect.

Brasfield & Gorrie Senior Superintendent Chace Larson was tasked with managing a team of project superintendents working on various parts of the project and directing the work of the specialty and trade subcontractors. This is how he described the management challenge:

"This was a fast-paced project with a very large team, and getting all the information to all the trade partners was critical. Because you can't do this kind of project with old-fashioned trade stacking, everybody's got to have their own space and allocations of time. But it's also all about managing a very complicated workflow. Touchplan is a great tool for that because everybody sees the flow and has ownership and buy-in for planning and execution. The ownership happened quickly after we got everybody used to the software and understanding what we were trying to do."

Catching Problems Early

As expected, as the project progressed, working with the four other large vendors hired by the owner presented some hiccups. A problem emerged that could threaten the all-important project schedule, but Brasfield & Gorrie was able to use Touchplan to quickly resolve conflicts and recover the schedule's timeline.

"We had a schedule performance risk for one of the other vendors. The Touchplan variance reports showed all the data we needed to clearly understand the issues causing the potential delays. The team course corrected, and we were able to salvage the end date. Without that data, it would have been difficult to recover the time. With Touchplan, we identified that the problem was in the vendor's plan, and we helped them get back on track quickly."

Avoiding and Managing Rework

In construction of all types, rework is a common challenge. But in large data center construction projects it can be especially costly to correct mistakes and accommodate design changes. Brasfield & Gorrie was able to use Touchplan to prevent the former and manage the latter. According to Larson,

"Most of the time, rework on this kind of project is due to a trade starting work before they're supposed to, but we were able to avoid this using Touchplan. We built the master schedule knowing we would be using Touchplan for managing the work. As such, all milestones within the master schedule were organized in the Touchplan format and we were able to integrate the schedule with the actual workflow. This allowed us to avoid corrective rework. There were also design changes that required rework, and Touchplan provided a big benefit there. We were able to track the rework in real time and easily coordinate it with the ongoing production work."

Owner-Contractor Collaboration

Given the large scale, short schedule, and high cost of data center construction for owners and contractors, mere cooperation is not enough; they must be true collaborators. For the owner and Brasfield & Gorrie, this is a prime directive, and Touchplan played a critical role in assuring continuous, consistent owner-contractor collaboration.

Unlike other construction planning software that is built only for contractors, Touchplan provides equal value to owners and contractors alike. Touchplan is produced by MOCA Systems, Inc., a company with deep experience and expertise in owner's representation services that assures the software's ability to fully support owner-contractor collaboration like no other product. This capability is vivid in Larson's description of Touchplan's use in Brasfield & Gorrie's data center projects.

"The owner's representatives used Touchplan to make sure we were staying on track, especially in the commissioning stage. They joined our commissioning meetings to go over the plan for the next few days. But things don't always go according to plan. Touchplan allowed them to see live information depicting when the plan was impacted by unexpected events. As a result, it was determined that they needed more manpower for their vendors, and some of our vendors needed to increase their speed of production. I think that is why we were able to finish the building in such a timely fashion because they had full visibility of time constraints and various loose ends that were happening. They see each constraint, whether it's theirs or ours; Touchplan is an open book."

Touchplan is Easy for Everyone

In data center construction, collaboration between general contractors and subcontractors is important, but it is difficult to accomplish when they are using different planning software with different data formats and workflow schemes. Brasfield & Gorrie knew this from experience and as a result directed their subcontractors to use Touchplan on the project. Not surprisingly, they encountered some initial resistance to learning new software. But this resistance quickly faded when the subcontractors saw how much easier Touchplan could make their jobs because of the software's user friendly, highly visual design. Larson describes it this way:

"Touchplan is so simple to use. Somebody who's never used the software can easily see a circle is a constraint, a diamond is a milestone, and a rectangle is an activity. And the colors also make it really easy to understand. Orange is for our electrician, the plumber is always blue, and so forth. And it's an online platform that is always available to anybody, anywhere. You don't have to have a sticky board in one room, take photos of it, and then have to deal with people moving stickies around. It's all digital and real-time."

“Regardless of tech-savvy, everyone found Touchplan to be easy to use. And folks from the more sophisticated companies can easily see how much value Touchplan can provide them in all their projects. For example, the electrical sub on the project, one of the largest in the country, had never seen Touchplan before we asked them to use it. They were so happy with it that they adopted it for their other projects where we were not involved.”

What Can Touchplan Do for You?

Touchplan is the result of more than a decade of software innovation and has been used by nearly 70,000 users in more than 6,000 companies around the world. It is tested and ready for assuring success in large, complex data center projects and virtually every other type of construction.

If you are an owner, operator, general contractor, or MEP contractor approaching a greenfield opportunity, a tricky renovation, or a big project gone wrong, Touchplan is here to help. Please visit [Touchplan For Data Centers](#) and tell us what we can do for you.

