

Member Communication Experience

Jobsite AI Integration Will Aid AI Construction

Written by: Viyas Sundaram, CEO, STACK Construction Technologies

Data centers have been causing quite the stir in recent months, with lofty plans to construct hundreds of buildings nationally. For construction workers, this investment boom has been a blessing and a curse.

On the one hand, this means there's more urgent demand for construction projects, with the immediacy fueling high salary offers, bonuses, paid time off, and steady work. This is a saving grace, as with the current high mortgage rates and weaker demand for housing, residential construction has been cooling down significantly.

With data centers, the paycheck is higher and the potential for overtime to make even more exists, making the projects attractive for entry-level workers and industry veterans.

However, as demand for data centers continues to increase, there are only so many current skilled workers who can fulfill this need.

The irony is the workers with these skills who have been in the industry for decades are often resistant to integrating artificial intelligence into their workflows, which would otherwise help to speed up manual tasks. This means much of the work is still done via pencil and paper, which leads to longer, unpaid hours, and often, less accurate estimations and takeoffs in preconstruction.

According to the Financial Times, it's predicted that 40% of data centers originally forecasted to be completed in 2026 will



face construction delays.

Humans aren't designed to keep up with this incessant demand, but the industry is resistant to digital tools that could accelerate the job. So, what comes next?

WHY THERE'S RESISTANCE

Tradesworker shortages caused disruption during the building of over half of data centers this past year, the Wall Street Journal reported. Integrating existing technology into workflows could alleviate these issues or at least bring down their numbers, yet workers default to what's proven and familiar, especially when deadlines are tight and the cost of a misstep is high.

But AI is no longer just a “tech person” tool — it’s a baseline shift, the same way the internet once was. There’s no longer a choice on if you’ll need to learn how to use AI, no matter what industry you’re in. There’s too much at stake when it comes to profit and productivity, so you can’t afford to turn a cold shoulder to this technology, at the risk of falling behind other professionals willing to adapt.

HOW WE CAN SEE THE SHIFT

This conversation starts with leadership. That means taking on a larger role in communicating the benefits of AI-integration to teams and implementing ways to familiarize workers with these new programs. Jobsite personnel need to learn how they operate ahead of being on a project and catching themselves up to speed in real-time.

These are skilled, hard workers who have built up their careers and credibility in the field over many years. It’s a hit to the ego to have to accept the construction landscape is changing, an industry they’ve grown so accustomed to navigating day to day. Yet their jobsite expertise is exactly what makes them better equipped to evaluate and deploy these tools than anyone else.

Creating safe spaces for these workers to learn and become exposed to just how seamless and easy to use the technology is will be essential in promoting adoption.

CONSTRUCTION’S CAPABILITIES WITH AI

Construction workers have always been the ones closest to the work and that proximity is exactly what makes them the most valuable users of AI-powered tools. With access to AI-integrated software, workers can cross reference design against real-world constraints before a single nail is driven or brick is laid.

Consider a practical example: A contractor reviewing plans for a data center can now identify that a mechanical room’s square footage doesn’t align with the cooling requirements before it becomes a costly change order. That’s more than an efficiency gain: It’s a shift in project knowledge.

Within the next five years, construction workers won’t just be executing plans, they’ll be blending decades of on-the-ground experience with technology to co-author them. That’s not a threat to the trade, that’s an elevation.

EVENTUALLY, THE DATA CENTER BOOM WILL BUST

Given how nascent the construction plans for data centers are, there is no set timeline in place for when these should be widely completed. This means the opportunity will run out for construction workers cashing in on the urgency, we just don’t know exactly when.

When this occurs, these projects and urgent demand will hopefully have taught the industry a valuable lesson. We can no longer rely on lengthy build timelines and delayed projects. Today’s tightening margins, between spiking material costs and living in an increasingly on-demand world requiring more infrastructure, mean this level of build pressure will remain.

Instead of having to scramble when the next data center comes around, contractors will have integrated digital tools into their systems to be prepared to handle more projects with less workers. They’ll have also given their teams the time to learn these tools and feel comfortable using them, eliminating the learning curve and potential pushback to stick with antiquated methods.

Just because the construction industry has been around for a long time, doesn’t mean it’s not capable of evolving. The data center boom isn’t just demanding more buildings, it’s demanding more from those who build them. 



About the Author

Viyas Sundaram is the CEO of Cincinnati-based construction estimating software provider [STACK Construction Technologies](#).

About the Article

Republished from [Construction Dive](#) online. Construction Dive is a leading industry publication operated by Industry Dive. Their business journalists spark ideas and shape agendas for 10+ million decision makers in the most competitive industries. The daily email newsletter and website cover topics such as commercial building, residential building, green building, design, deals, regulations, and more.

Any views and opinions expressed in this article may or may not reflect the views and opinions of the Construction Management Association of America (CMAA). By publishing this piece, CMAA is not expressing endorsement of the individual, the article, or their association, organization, or company.