

Technology's Role in Solving the Construction Labor Shortage

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The construction industry is still dealing with a significant labor shortage, and businesses need to adopt new processes and technologies if they are to adapt.

The scale of the problem has been highlighted in recent research. According to data from the Associated Builders and Contractors, the sector needed to attract approximately 501,000 additional workers in 2024 alone. Longer term, the Home Builders Institute believes this number will be closer to 2.2 million.

There is by no means a straightforward solution, but there are several solutions out there.

WHAT'S CAUSING THIS PROBLEM?

This isn't just a numbers problem: There's also a critical skills gap emerging.

Contractors, trade partners, jobsite workers, and construction executives alike know that the industry needs skilled people to work across all aspects of construction. It's not only the tradespeople working onsite; there are also project managers and technical experts to consider. All these roles require training, and that takes time.

Skilled trades such as carpentry, plumbing, and electrical work are being most acutely impacted, with the numbers leaving the profession or retiring far outweighing those joining.

There are also external – often unpredictable – factors to consider: rising interest rates being a prime example. With



property owners – commercial and residential – concerned about what the future might look like, many are opting to transform their existing property into a mixed-use facility or simply personalize their current living spaces, rather than taking on the financial strain of maintaining a vacant building or straining under the rates of a new mortgage.

This trend has led to increased demand for remodeling and specialty outdoor projects, and while this is certainly good news for the industry, it has further increased the need for skilled labor.

DIGITAL TRANSFORMATION IS WELL UNDERWAY

It's fair to say that for many years the construction industry was resistant to the introduction of new technology, with many

adopting an ‘if it ain’t broke, don’t fix it’ mentality. However, as Gen-Z becomes more embedded within the workforce, and businesses look to scale, this mentality is changing.

As leaders turn to new strategies for help, technology will play a significant role both on and offsite. Able to automate manual, repetitive tasks, there are already solutions out there that can help businesses optimize processes, harness crucial data, and inform decision-making, planning, and forecasting.

There’s also a growing recognition that technology can function as a vital ally in tackling labor shortages and freeing up teams to focus on the work that requires their skills and strategic expertise. In fact, with the implementation of certain software, some companies have increased their job volume by five to 10 times – without adding any other extraneous resources.

AVOIDING MISCOMMUNICATIONS

When teams are spread too thinly across projects, communication gaps arise and can be costly. It only takes one small oversight for the entire project to be stalled – or even derailed. Technology can bridge the gap between different stakeholders, helping to avoid miscommunications or oversights.

Enterprise resource planning software options can seamlessly integrate your project processes, meaning that everyone is able to access project information, as and when needed, via the cloud. With this capability, anyone pertinent stakeholder can view information about the project, as well as create and visualize project schedules.

KEEPING TRACK OF BUDGETS

Alongside these communication gaps, labor shortages can make it more challenging to get accurate and detailed estimates for material costs and expenses and to keep track of overall project expenditure. With the price of raw materials constantly fluctuating, being able to rely on an ERP to stay up to date on current and projected spending can automate one aspect of the job, taking it out of the hands of an already busy finance team.

FACILITATING COLLABORATION

ERP software has been designed to support real-time


collaboration, document sharing, progress tracking, and reporting. All stakeholders can be confident that the information they are working from is accurate and up to date, minimizing the chance of duplicated work.

The most transformative impact of ERP technology on the workforce, though, is the introduction of remote working. The cloud facilitates collaboration across states and even different countries. This allows businesses to tap into talent from different geographies for things like design, planning, and project management.

With the best talent on board no matter from where they log on, your business will be set to thrive.

MEETING CUSTOMER EXPECTATIONS

With the entire population now much more digitally savvy, there are also evolving consumer expectations to consider: Online services such as virtual tours, interactive floor plans, and online customization options are no longer nice to have, they’re necessary.

So, while the construction labor shortage presents significant challenges, the integration of technology offers a path to more efficient, resilient, and innovative ways of working. The capabilities of ERP systems highlight how leveraging technology can not only mitigate immediate workforce and skills shortages, but also pave the way for sustainable growth and modernization in the construction sector. 



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