

Technology Is the Key to Overcoming Labor Hurdles

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The construction industry has around 430,000 job openings, with 40% of the U.S. construction workforce poised to retire over the next decade. At the same time, President Joe Biden's Bipartisan Infrastructure Law (BIL) is set to create hundreds of thousands of new jobs by 2028. Although the BIL will increase job opportunities in the coming years, the construction industry will likely struggle to find skilled workers to fill these critical roles.

To supplement this labor gap, construction firms must make strategic technology investments that reduce jobsite and administrative inefficiencies. The right technologies can offset labor challenges by empowering teams to optimize workflows and complete projects faster. They can also lessen the amount of hard labor required to complete projects - protecting and incentivizing construction workers in labor-heavy roles.

Identifying Areas For Improvement

Inefficiencies behind the scenes can compromise construction projects from the start. Project managers juggle complex workflows by managing talent, budgets, and communication simultaneously across operations, all while keeping time-sensitive projects on schedule. One mistake can derail a timeline and disrupt the entire organization.

Further, some leaders make their jobs harder by managing projects across multiple, disparate systems. Often, this takes



the form of manual time entry and important cross-team decisions being made and communicated via text messages. On the admin side, confusing folder systems bury important contracts, material orders, and other documents. The more spread out a project becomes, the higher the risk of costly miscommunication.

Construction firms are busy developing the next generation of construction workers, who need time to hone their expertise. With this in mind, leadership can't afford to lose out on productivity by not streamlining project communication. Onsite, employees have to shoulder excessive amounts of hard labor to complete projects. This painstaking work can deter new workers from entering the industry at a time when construction firms are desperate to replace retiring employees. To make employees' jobs easier and still maintain quality craftsmanship and service, construction leaders must leverage technology to optimize their processes.

Integrating Targeted Construction Technologies

Targeted technology can address labor and operational challenges, but only if you approach implementation the right way. Careful business evaluation and integration will ensure your chosen technology drives the results you're looking for.

Here are four tips for integrating targeted construction technologies into your team's operations:

1. Evaluate your processes and programs

Before rushing to implement new technology, identify your specific organizational challenges. A good way to do this is by analyzing how your existing processes and programs will affect your teams down the line. For example, if a contractor uses generic accounting software rather than construction-specific software, it will be harder to access the detailed views of individual jobs that allow for proactive decision making.

In addition to identifying your specific needs, consider the financial impact of new technologies. Calculate the return on investment of different tools and evaluate whether the ROI outweighs the initial cost of implementation.

2. Gather cross-team feedback

Don't make technology decisions in a vacuum. Instead, solicit opinions from employees across different teams about the problems they're encountering and which tools could help solve them. Include cross-departmental stakeholders in the decision-making process as well - this will make it easier to secure organizational buy-in when it's time to implement new technologies.

For example, when securing buy-in, remember that unless all cross-functional teams (e.g., accounting, project management, purchasing, service and ownership) have bought in, chances of a successful implementation are limited. In the construction industry, these cross-functional teams work so closely together that everyone needs to be on the same page to achieve their desired outcome. If there's disagreement or confusion regarding your chosen technology, don't be surprised if the integration process is rocky.

3. Prioritize technologies that lighten the load

Leverage technologies that reduce the amount of hard labor each project requires. For example, the bridge rebar company Shelby Erectors handles bridge ironwork for clients throughout Florida. Bridge ironwork is a long, laborious process, so the company implemented robotics technology to automate the task. This ultimately allowed crews to shift their attention elsewhere.


The high stress and long hours of many construction roles can take a toll on employees and ultimately lead them to consider other employment. Look for targeted technologies that can provide these employees relief and enable them to complete projects more quickly.

4. Lean on trusted technology providers

Integrating new technology can be stressful, so consider enlisting the help of a trusted technology provider. Experienced providers understand the challenges of your industry and are available to guide you throughout the integration process.

It will take time for your employees to adjust to new technology even with a trusted provider, but it's important to lean on them for support. With the help of your provider, you can apply the same attention to detail you did in the planning phase to training employees on new technology.

Targeted Technologies Eliminate Construction Inefficiencies

Industry developments will likely widen the construction labor gap in the coming years, and project and process inefficiencies will only exacerbate this challenge. Leveraging targeted technologies that streamline operational inefficiencies and make construction workers' jobs less strenuous is one way to positively reverse course. 



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