

Modern Tools Are Key to Future-Proofing the Construction Industry

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The U.S. construction industry is facing a tech revolution that's upending the roles of skilled workers. Many traditional contractors are struggling to embrace the new technologies customers increasingly demand, while the industry struggles to attract young professionals. According to the latest American Community Survey data, the median age of a construction worker is 41.

This is particularly concerning given the confluence of two trends: the construction industry is facing a critical workforce shortage that's only expected to intensify, and the workforce is aging - NCCER is predicting around 40% are expected to retire by 2031. Industry leaders must prioritize using the latest industry solutions and innovations to modernize construction work, transform the construction industry, and appeal to the next generation of contractors.

Throughout COVID-19, the construction sector experienced a higher number of workers quitting jobs as opposed to being laid off, indicating the older workforce likely took the opportunity to retire early, along with more than 3 million other Americans who did the same. Currently, industry leaders are not doing enough to communicate opportunities to help shift the career perception of electrical contractors from simply being "blue collar" and un-exciting. A 2019 National Association of Home Builders (NAHB) survey found only 3% of people ages 18 to 25 were interested in pursuing a construction career, with most respondents noting the desire for a less physically demanding job.



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The passage of the Infrastructure Investment and Jobs Act last fall will pump billions in new spending into the nation's most critical infrastructure - funding critically needed to efficiently modernize and repair outdated and crumbling roads, bridges, buildings, and more. But achieving that modernization cannot happen without skilled workers and innovative technologies to ensure infrastructure is built in the most efficient and safe way that also ensures resiliency against climate change and cyber-attacks.

Specifically, the introduction of a new toolbox for contractors focused on devices, mobile software, safety, and training opened up new opportunities for trade workers, especially among millennials and Gen Zers entering the workforce. While seasoned contractors may have years of field experience, younger workers have a grasp of technology that must be tapped into to modernize contractor work. Embracing digital solutions will not only help construction companies and contractors drive efficiency gains and overcome industry hurdles but also help improve the overall job appeal, particularly to millennials, who are now the largest generation in the U.S. labor force. In addition to being well-versed in digital technologies, millennials are a key force in advancing workplace safety across industries - an area this new set of digital tools can help augment. A recent report confirms that focusing on infrastructure investments in digital technologies will help mitigate the worker shortage by leading to new job opportunities, as well as having environmental benefits and longer-lasting economic growth. These investments are vital for bigger-picture infrastructure improvements but also trickle down to the level of daily functionality.

Given that these new technologies are designed to streamline processes and digitize operations, the modern contractor role is nowhere near as labor intensive as the traditional job, mitigating the main concern of younger generations. The lack of initiative to clearly relay this shift in contractor work and jobs, if continued, poses a significant disadvantage to the health of the industry, which will depend entirely on new skill sets and specializations in the coming years.

In addition to appealing to a key target audience to fill the workforce shortage, innovative tools that leverage artificial intelligence can help contractors, system integrators, distributors, and facility managers maintain systems, improve sustainability efforts, and optimize the construction lifecycle. Contractors need access to digital platforms that provide simplified and customized insights into their work. These platforms hold tremendous benefits for improving productivity, uncovering new strategies and techniques to lower energy consumption, and managing multiple complex projects simultaneously with minimal downtime. Implementing digital platforms can not only help partners but also drive business efficiency on a larger scale. The shift toward more technologically smart devices means today's contractors can equip themselves to tackle a broad range of challenges, including sourcing products more quickly, accessing expert advice in real-time, managing system operations, and responding to any potential customer issues as they arise. By consolidating this data into one centralized platform, more valuable insights are readily accessible to any user that may need them. We must break down the prevalence of data silos and pursue fully integrated data solutions.

The modern contractor faces more unique challenges than ever: growing urbanization, increased consumer and enterprise demands for smart technologies, operating their own business, and the movement to service-centric business models. As we look toward the promise of modern infrastructure, adopting new tools is critical for digitization, improved safety and efficiency, and attracting the next generation of skilled workers. In a nutshell, the future of the construction industry is on the line. *S*

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