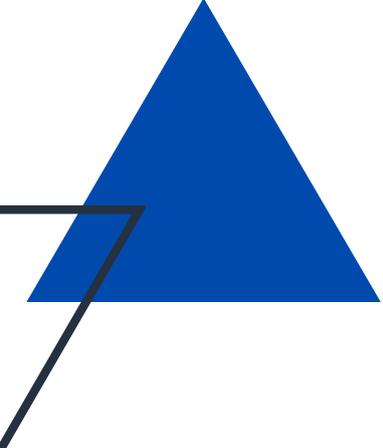




THE AEC INDUSTRY FORECAST – CHALLENGES IN 2022



INTRODUCTION

Are your eyes on the tides and currents of the AEC industry? You are not alone!

The operational and maintenance challenges in the AEC industry to achieve timelines, prevent setbacks and cut the costly loopholes always keep the AEC professionals in a state of flux. This turbulence has increased following the onset of the global pandemic and subsequent lockdowns in countries around the world. Many sectors within the AEC industry either deteriorated or suffered serious setbacks in 2020 after the pandemic.

However, 2022 offers some promising changes in the AEC industry. For the U.S. architecture, engineering, and construction industry, 2022 is looking better. In mid-November, President Joe Biden gave the consent to implement the Infrastructure Investment and Jobs Act (H.R. 3684), a five-year, \$1.2 trillion package providing historic levels of infrastructure funding. It is good news for the AEC industry, expected to pave the path for better years ahead.

In 2022, as we move into the second year of recovery, the importance of the AEC industry's economic impact will be even greater. It is witnessing a new phase of technological integration into key workstreams to further enhance productivity and efficiency. But companies are spending less time and budget on incorporating technology into the system.

The Annual Construction Technology Report, based on a survey of around 3,000 construction professionals, concludes,

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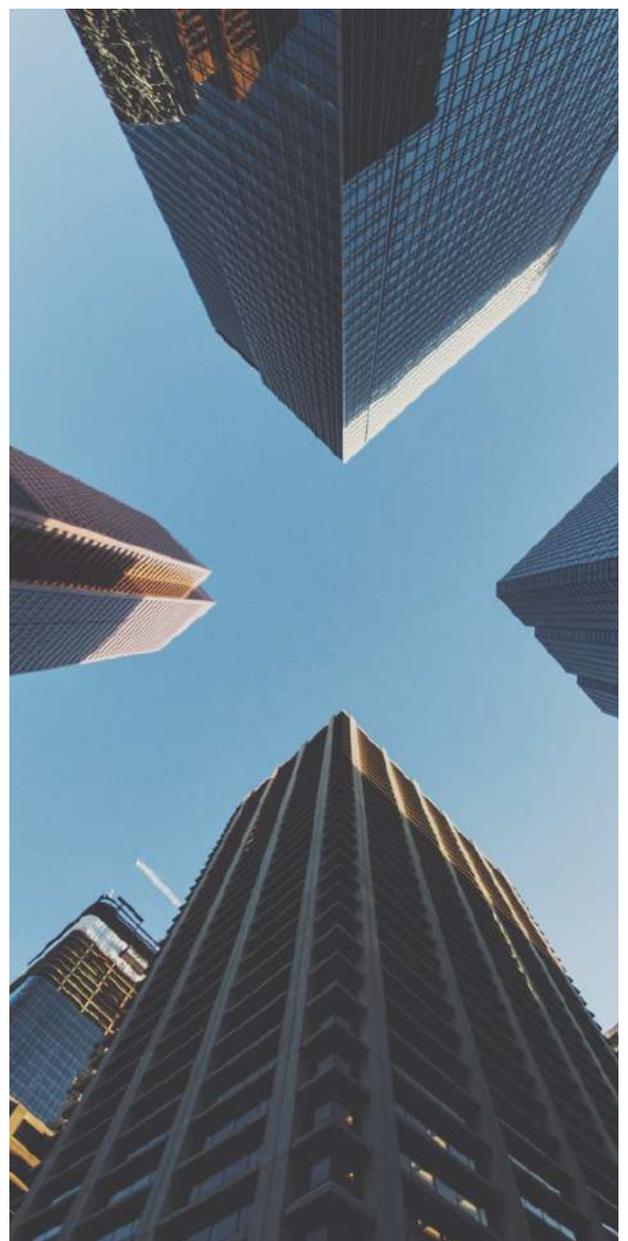
Despite a noticeable uptick... construction continues to budget the least for information technology compared to other industries.



However, the rising technological transformations make it important for industry firms to start thinking of how roles and jobs will change to reflect the use of these new technologies and to address challenges that have plagued the construction industry for the past decade: an aging workforce, skilled labor shortages, the lack of efficiency, productivity, and innovation.

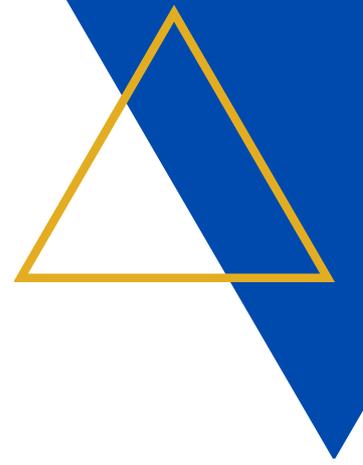
While industry leaders step up to explore, understand, and implement technology in the operations, new challenges and opportunities will arise. Some jobs will disappear, other new, exciting careers expected to be created as AEC industry prepares to shift towards connected construction capabilities.

2022 is likely to be an exciting year for the engineering and construction industry, as technology can be a boon for the construction industry. It's up to your company to embrace and invest in it or run the risk of being left behind as we explore five key challenges to watch closely.



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COMMON CHALLENGES CONSTRUCTION PROFESSIONALS ARE FACING



With so many challenges and conflicts facing the construction industry, it is nearly impossible to overcome most of them on your own. That's where technology comes into play!

TOP BENEFITS THAT ENCOURAGE CONTRACTORS TO INVEST IN ADVANCED TECHNOLOGIES



Source: [U.S. Chamber of Commerce](#)

It is important to know the top construction challenges for AEC professionals based on the construction software features that are most in demand with buyers so that they can understand how technology is bringing viable solutions for them

CHALLENGE 1

COST MANAGEMENT

“Nine out of ten construction projects normally experience cost overrun”

Cost overruns are a common problem prevailing in the AEC industry. Payment delays for completed work, frequent design changes, poor cost estimation, and poor material management result in the rise of cost management issues.

Other than that, the proper cash flow also becomes a hindrance to meeting expenses. There are many black holes in the operational and management processes in the AEC business that can take off a huge chunk of your money – manual and outdated processes being major contributors.

Closing your construction projects on time and on a budget should be a top priority. But achieving on-time, on-budget projects can be challenging. Unexpected change orders combined with unpredictable material and labor costs can easily upend schedules, soaring construction budgets. If your construction team cannot give accurate estimates, you may start to lose business to firms that offer accurate estimates.



According to a small business construction survey of more than 500 construction professionals conducted by [Software Advice](#), 42% of the professionals marked more accurate estimates as a top positive impact of their construction software, putting that ahead of all other positive impacts.



How BOLDBuild Can Help?

Management of project cost is a key ingredient in attaining profitability. Incorporating construction accounting software can help the execution team to retrieve and always have an eye on the expenditures and requirements. BOLDBuild has a viable solution to address this issue.

BOLDBuild provides accurate, automated, cloud-based automation throughout the project lifecycle. From bidding management to assigning project budgets and change order management, BOLDBuild can help eliminate manual errors, update changes on the go and reduce your overall effort. Any change in the scope and unexpected requirements can be addressed dexterously.

BOLDBuild helps users resolve cost estimation issues with:



Detailed overview of project costs by cost class.



The ability to clone existing estimates to track improvement/changes to the original estimate.



Features that monitor estimation revisions and accurate calculation of estimation line items and more.

CHALLENGE 2

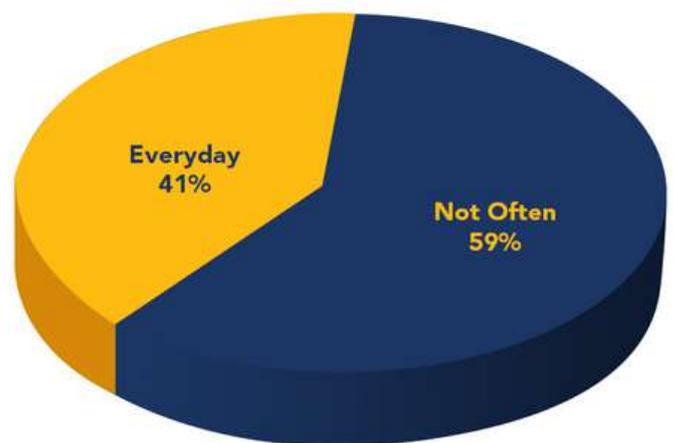
PROJECT MANAGEMENT

“More than **40% of contractors** in North America report scheduling problems impact projects daily”

The opportunities in construction are growing, but so is project complexity. If you are the contractor, you will find construction projects more complex than others. Scheduling and management can always be tricky, even with the most experienced construction professionals. Many inefficiencies in the construction lifecycle can be traced back to poor processes or workflow management.

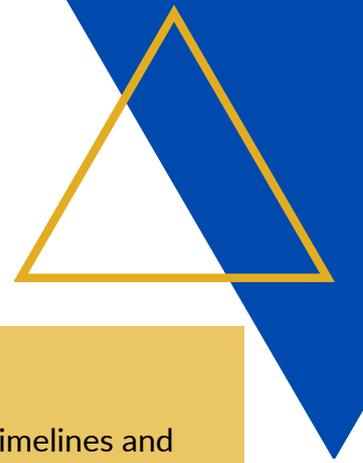
From outlining to delivering the final product, any project includes various things to keep track of, including resources, budget, and even your crew members. At times, it's tough for contractors to keep track of the time, resources, employees, and subcontractors needed for a project. And sometimes it's an uphill task to plan and organize project's every step of the way to ensure deadlines are met, overbooking doesn't happen, and everyone involved knows what they're supposed to be working on and within what budget.

How often do resource delays impact your bottom line in terms of keeping projects on schedule and on budget?



Contractors confirmed that getting people, equipment, and materials to the right place at the right time is a constant and critical challenge.

Scheduling and construction planning can also be long-drawn since many vendors and other third parties are involved. That's why coordination and collaboration between internal and external resources are very vital.



Some key results from the [survey](#) concluded:

- More than 40% said scheduling and dispatching problems impact project timelines and budgets daily.
- Real-time visibility across various roles emerged as an important goal in the survey, but older, offline tools remain prevalent.
- Nearly 75% of contractors indicated that spreadsheets, whiteboards, or paper were their primary tools for managing resource scheduling and dispatching.
- For 91% of those surveyed, phone calls, emails, or text messages were the main methods of communicating changes in the schedule.

How BOLDBuild Can Help?

BOLDBuild is an easy-to-use construction management software helping contractors manage projects smoothly. You can transform your business with one system from the first takeoff to the final invoice. By choosing BOLDBuild as your construction project management solution, you can overcome its internal process inefficiencies. Its key feature includes:

Suppose you have a growing business that is struggling to keep up with its schedule and budget. In that case, BOLDBuild will help you advance your design strategies with a robust solution to keep up with the modern construction business landscape.



Project management



Lead management with client dashboards



Individual insights

CHALLENGE 3

MOBILE CONSTRUCTION MANAGEMENT

“80% of construction professionals say mobile technology is a top priority”

Mobile technology is transforming construction management solutions as it improves efficiency and streamlines project schedules. That's why it has become imperative for companies to embrace this change and recognize the importance of these emerging capabilities. In this age, the cloud, mobile computing technologies, and mobile applications are becoming the preferred way for most businesses to operate, and contractors are implementing these technologies into their own operations.

Many construction leaders are equipping field teams with technology, but aren't getting the maximum return on investment by leveraging mobile software. It's mainly because workers are not taking full advantage of mobile devices and IT investments. They prefer using email, text, and phone calls to access project data or collaborate with project stakeholders.



On the other hand, operating project data on mobile devices can be challenging because some project management apps require manual file exporting and importing to make them viewable on mobile devices. An all-in-one solution that simplifies document sharing and has a robust mobile interface is hard to find. Even if you have a field mobility solution, delivering information to the field may involve a large amount of manual preparation.

For example, documents may be accessible in the field only after someone has exported them as PDF files and uploaded them to a file-sharing website. This approach makes it difficult to track and control versions, as well as limit document access to authorized users.

How BOLDBuild Can Help?

With BOLDBuild's mobile app, managing construction projects away from your office is no longer an issue. Our mobile and web-based construction management software allows you to easily assign work no matter where you are. It provides a simple interface to stay on task and on time. Photos, videos, work item quantities, daily reports and punch lists can all be quickly and easily formatted, drafted, and transmitted to the team. Workers can access project documents, plan, design and complete a schedule item, right from a mobile device or tablet.

You can always quickly create and assign tasks, set a priority, categorize, due date, and assignee, and then share files and photos with BOLDBuild Mobile app and stay on top of task progress. Location is no longer a constraint on your construction project success.



CHALLENGE 4

SKILLED LABOR SHORTAGES

“The Associated General Contractors of America survey reported that almost **80% of construction companies** couldn't find the qualified, skilled workers they need”

As industries are evolving in a post-pandemic world, we cannot afford to return to old habits since advancements in construction technology are growing. How will you compete with companies who are using the latest tech to streamline their processes if your worksites are behind schedule and over budget due to a reduced workforce?

The AEC industry lags almost every other major industry in technology adoption despite an onslaught of technological advances and opportunities in the industry. One of the reasons can be that the myriad of new construction technology can be intimidating for non-tech savvies. Secondly, the selection of the wrong technology might make things difficult instead of making them easier. Today, field workers may need to use virtual reality, wearable technology, or work with various applications and project management software if they don't find the right solutions.

However, perceptions regarding the construction industry are slowly changing. It's no secret that a new workforce is eager to adopt new technology and are more likely to leverage its ability to make their work easier and more productive.

The combination of enhancing project complexity and decreasing experience is a risk multiplier, increasing the risk of deliverable delays, quality construction problems, and employee safety concerns.



The construction industry is bracing for a dramatic reduction in the workforce. The Associated General Contractors of America (AGC) found that 74 percent of the total respondents believe there is a crunch in skill trades, and 53 percent said they were unable to hire construction professionals such as supervisors, estimators, and engineers.



The 2020 AGC survey highlights the most notable effects of the skilled labor shortage in construction:

- 57% cite the skilled labor shortage as the biggest challenge to worker health and safety.
- 44% of companies have seen higher project costs.
- The 2020 AGC survey highlights the most notable effects of the skilled labor shortage in construction.

How BOLDBuild Can Help?

Adopting the right construction software helps your business keep everything organized. Equipping your employees with tools that allow them to perform better demonstrates your long-term commitment to their personal growth and success. With BOLDBuild, you will be providing employees with the best tools to perform their jobs.

BOLDBuild creates proactive communication and bridges the gap between the office and field, and readily provides widespread information and instant access to accurate, up-to-date project and management information from a single, digitized location. It is a goodbye call for days when processes were manually done via excel, outlook, or when contractors had to handle the bundles of papers, documents, and receipts.

BOLDBuild has a dedicated team to collaborate with clients and in-built integrated construction solutions that streamline every aspect of the project. Our construction management solution makes sure that technology implementation should not be time-consuming and tedious, a key to address the skilled labor shortage in the construction industry!

CHALLENGE 5

SLOW TECHNOLOGY ADOPTION

“The biggest problem with adoption to the technology is really just hesitation and not immediate ROI!”

Lizz Babin, COO, PACE Group LLC

Numerous surveys and studies have proven that the construction industry is slow in incorporating new technologies. 2022 being no different, advancing technology has a major impact on all industries, but the construction industry has been slow to adopt technological changes. Stakeholders and business honors are reluctant to invest in technology.

Even if an AEC company uses certain programs or software, that will not necessarily mean your subcontractors will utilize them. Although the construction industry continually suffers from labor shortages, cost and time overruns, and outright project failures, it has been painstakingly slow to realize a digital future, despite proven profitability and performance results.

Challenges like shortage of trained workers and supervisory personnel are expected to only worsen in the coming years.

These are immediate concerns that demand new approaches to planning and delivering construction projects. Technology alone might not solve the labor shortage, but it's necessary to make construction a safer and more efficient industry.

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“This is an upfront cost that the value isn't seen until you're finished.”

Lizz Babin, COO, PACE
Group LLC





How BOLDBuild Can Help?

The time is now... if the AEC industry is striving to survive the coming changes, technology adoption needs to happen now.

Request a Demonstration

Our BOLDBuild Community loves engaging with the greater construction community and is happy to walk any contractor through the value their software can provide. Contractors can always reach out to us to ask about free trials or how our solution can help solve these existing problems. Getting into the software independent of a sales representative can help you better understand how it will fit in with the day-to-day objectives and processes.

Our Construction Focused Webinars on Tech

Our webinars would allow prospective contractors to explore and evaluate several construction related technologies in a short amount of time. The plus side of virtual conferences is:

- You can attend them without needing to travel
- They help contractors set clear expectations, express their reluctance and hesitations
- You get a chance to ask questions

READY TO FIGHT THE CHALLENGES?

Digital software solutions are changing the landscape of construction processes, saving time and costs, and boosting efficiencies across the board. Making wise technology investments to improve construction efficiency and productivity makes sense and is essential in today's competitive environment.

Technology investments are as important as good field tools to reduce project delays, efficiently and complete tasks quicker, improve operations cost control, adapt to project changes, and provide a quality project on time and budget

BOLDBuild's construction project management was built for the specific needs of general contractors and their project teams. This cloud-based software will help you manage projects and reduce risk through a single solution of collaboration and information for all project stakeholders.

BOLDBuild also helps eliminate the pesky element of human error, which is inevitable with manual workflows and can quickly result in cost overrun.

We understand that many factors must be considered when selecting and implementing a new software. With BOLDBuild, we believe in providing the right technology for your construction company.



The question isn't whether you can afford to invest in new technology this year. It's whether you can afford not to!

Propeller Aero

CONTACT US

To learn more about what our solution can do for you, schedule a demo today!



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