

BUILDING DESIGN + CONSTRUCTION

WHAT DEVELOPERS NEED AND AEC'S ARE MISSING

In Building Design + Construction's latest owners survey report, top developers were asked about their expectations and needs from AEC partners. By carefully analyzing the data, OxBlue identified the tools needed to check off the big-ticket items owners are looking for and stand out to clients.



ANALYSIS: 2021 WHAT OWNERS WANT SURVEY

Building Design + Construction, a trade publication servicing architects, engineers and contractors (AEC), released its first inaugural survey results, which looked at building owners' development challenges, what they expect from building teams and what they want for innovation.

Overall, the report reveals owners from every industry want three things from AEC firms:

- · Fewer delays
- · Better collaboration
- Recommendations of new technologies

A simple way to start tackling these big asks? Construction camera systems enabled with artificial intelligence are helping AECs meet developer needs in unexpected ways. "[For delivery approaches], we want anything that speeds the overall project completion. We have learned to do large, complex projects in 18 to 20 months. I am constantly looking for ways to get from ground-breaking to occupancy in about 12 months."

Reduce Delays with Jobsite Cameras

For many AEC firms, winning business starts with a strong reputation, yet owners and developers are looking for more than a good name to work with. They want someone who can consistently hit deadlines — the ultimate goal is to monetize their new builds as quickly as possible. The survey reveals that rather than focusing on previous work or reputation when selecting an AEC firm, 87.7% of owners consider the ability to complete projects on time and on budget one of the most important factors. In fact, 41% saw it as their primary measurement during the decision-making process.

What are the 5 most important factors or attributes in the selection of your design, engineering, construction, and subspecialty partners?



Building Design + Construction 2021 Owners Survey Report



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Keeping projects on or ahead of schedule requires close attention to detail to identify potential risks and address them head on. This is where visual data from construction cameras begins to make a serious impact. Construction cameras are a common tool for jobsite oversight, allowing project managers, owners and investors all to see progress in real-time from anywhere. However, the images cameras collect can also be used to reduce delays.

"Professional services firms providing consulting design/engineering to builders/ developers need to have a better handle on how to manage a project and anticipate the deliverables at each stage of the process. There is very little talent out there that does this effectively."

- Robert Monnat The Mandel Group

By creating a clear, unbiased record of what happens on the jobsite, AEC firms can justify any change orders needed.

Advanced camera systems chart activity and weather alongside a project's schedule and show when issues outside of the contractor's control gets in the way.

Over time, cameras capture thousands of images, averaging at least 25,000 a year on the jobsite. Yet, this visual data is rarely utilized to its fullest and is a potential goldmine of information. If teams use a construction camera across all their projects, they'll have access to a record of data that can help call out trends. Through simple features like image comparison,

time-lapse and day counters, it becomes easy to see when the average concrete pour, for example, should begin and what conditions lead to optimal productivity. Much like the farmer's almanac uses past weather data to predict future seasons, AEC firms can use the data captured by a construction camera to adjust for the future.



Communicate and Manage with Visual Data

According to the survey, owners see collaboration as a means to achieve project goals. Survey respondents mentioned wanting a partner who has a "genuine interest and understanding of the project." They're looking for partners who can take the job seriously, and monitor it for quality control.

"Teams have demonstrated, when using constructive collaborative partnering, that time and money can be saved while maintaining and increasing quality on all types of projects."

- Survey Respondent



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Construction cameras help AEC partners take a more active role in the project through remote monitoring and give room for better jobsite communication. Embedded markup tools in advanced camera systems ensure comments and concerns are paired with crystal-clear images. Automatic report scheduling features can ensure everyone receives the same, updated information, at the same time, so team members aren't left in the dark.

"I would like a Google Street View for the construction site; i.e., the ability for architects and engineers to remotely monitor construction progress, quality control, etc."

- Survey Respondent

Expert architects and engineers who may not be on site can view the cameras, a time-lapse or side-by-side overlay image comparisons, to quickly call out any issues. With access to visual data, AEC firms have a simple way to see the entire history of the project and can work to adjust blueprints faster than they can get on a plane. For owners, the benefit is clear — they'll be able to see exactly what's happening with their investment and know that project teams are all on the same page. The camera helps everyone see in the simplest way possible, what they need in order to understand project progress. It's an all-inclusive visual record that takes the quesswork and uncertainty out of jobsite communication.

Influence with Artificial Intelligence

Owners crave new technology and trends — and they want AEC professionals to make recommendations based on both. The survey suggests owners are turning to AEC firms to help them take advantage of the latest products, citing quickly moving technological advancements in the industry. They find it difficult to keep up, which makes AEC firms who provide practical solutions a covetable asset. Essentially, architects, engineers and contractors have become the influencers of the construction industry.

"Builders, architects, and designers need to get much smarter about incorporating amazing technology into buildings holistically. The IT/technology piece is a mystery to them."

- Lynnette Boylet

Principal with Beanstalk Real Estate Solutions

The survey also found that owners lean toward AEC firms with evident return on investment and who can recommend cutting edge innovations. Solutions with





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cost control baked into them and that provide building performance monitoring are more likely to attract owners' attention.

Artificial intelligence is the next leap in technology to provide greater awareness of operations, predict likely outcomes, and enable faster decision making. Forward thinking construction camera service providers are offering AI capabilities to help project stakeholders sort through vast amounts of visual data to gain deeper insight into construction progress and safety compliance throughout the life of a project. While time-lapse capabilities and image sharing help with collaboration and communication, it's AI that helps unlock the rich insight inside construction camera images. Al and machine learning algorithms are trained to quickly sort, detect and report important details on the user's behalf, identifying key patterns that can help save time and money.

By using Al-enabled cameras, owners and AEC firms can easily and quickly take advantage of new technology, enhance their oversight capabilities and make more data-driven decisions.

See how to implement this solution with OxBlue.

Schedule a FREE demo today



Visualize Your Data

- · 25,000 photos per camera, per year
- · All-inclusive visual record
- · Easy data access via user interface
- · Curated time-lapse videos

Use Visual Data to Edge Out Competition

Visual data solutions are still an underutilized tool in the industry, and AEC firms who take advantage of the technology are often not using it to its full potential. By getting ahead of the curve, firms can check three of the largest asks owners want:

- Minimize delays with real-time visibility of the jobsite
- Increase collaboration & transparency with instant time-lapse and live streaming video
- · Champion construction innovation with Al

Taking advantage of the latest innovations in construction camera technology is a simple starting point for professionals to stand out against the competition.