Open and Ready for Change

When it Comes to Construction Technology, Companies Are Prepared to Provide Solutions That Really Work

Written by: A.D. Thompson for Constructor Magazine

Why do you think it has taken this long for construction to adopt technological advances?"

It's been a sample question, in various iterations, on this topic, for the past several years. The sources never balk. They answer. And the "blame" generally falls on the construction side.

On its older, less tech-savvy demographic. On its resistance to changing "the way they've always done things."

This year, however, things were different.

"The old adage is that you should fix problems that you yourself are familiar with," says Maria Rioumine, CEO and founder of Kojo. "And quite often, the people who are looking to build tech companies don't know construction."

And so, she says, for much of the time between around 2011 – when job sites first began integrating what's since become everyday tech (smartphones, tablets) – and more recently, "very little best-in-class tech had been built for construction. There weren't great solutions out there, so adoption of tech within the industry was lower than in others."

And since spend was low, there was less incentive for developers to bring solutions. It was a vicious cycle, where the most talented developers focused their efforts elsewhere. But no more.

An increasing number of companies like Kojo, a leading materials management platform that simplifies the process

for contractors from takeoff to closeout, see the gaps in the industry's processes and are working hard to bridge them.

"Over the last 10 years," says Rioumine, "there has been a huge amount of progress in terms of contractors seeing the benefits that technology can bring, starting to really trust that the tech can make them more effective in fixing internal processes, increasing productivity and saving both money and time."

PROVEN SOLUTIONS

"Does it really help us?" It's a question that from one direction seemed to have bolstered construction's rep as an industry that was slow to change, but in many cases that was merely holding tech to the same standards it holds itself.

"[People in this industry] are not averse to adoption. If something works and can make their lives easier, they are on board," says Jit Kee Chin, chief data and innovation officer for Suffolk Technologies, a venture capital firm investing in startups working toward innovation in the construction sector.

Suffolk's CoLabs, in place for four-plus years, have been allowing them to pilot different tech solutions – to date about 190 of them – through applications on real-world job sites.

"It was relatively unique at the outset, in that we had this test bed by which young startup companies could infiltrate into the world of a long-standing GC and get real-time feedback in the field from people who are actually trying to use their tech," says Parker Mundt, Suffolk Tech's operating director.

Mundt worked for five years on the company's construction side before moving to tech two years ago.

"It's given us the ability to track how tech has trended over time in construction. … Over time, we've seen an influx of interested folks coming in, some of whom have a deep tech background and now the industry – and the job site – has become more of a mixing pot with people who are willing to challenge the status quo."

TECHWORTHY

Meirav Oren knew that construction was techworthy – though it may have been her family's construction background that boosted her confidence.

Oren, co-founder and CEO of Versatile, said as much when people told her that it wasn't a good investment.

"'It's antiquated,' they said. 'It's not going to be as quick to scale as other industries. It's not a bankable venture.'"

Fast-forward three years and Versatile – and its CraneView technology, which captures field data from on high sans manual input – has raised $110 million.

Meirav's opinion echoes both Rioumine and Chin.

"What was wrong was the assumption that construction was the problem," she says. "It circles back to the tech providers and how simple you make it. If you make it seamless, if you make it a no-brainer, if you offer them a better way that doesn't really change their day-to-day, that's where you see adoption."

PROGRESS POST-PANDEMIC

COVID, says Rioumine, changed the world as we knew it when supply chains all but shut down.

"In the U.S. today, we import about 30% of our commercial construction materials … and so when global borders shut down, contractors all over the country were in a really tough spot."

In the wake of the freeze, price fluctuations saw companies wondering whether previously priced jobs could even be profitable. The labor shortage – already dire – got even worse. New rules about who and how many could even be on the job site threw in another wrench.

And in this business, time is money.

The real need for a muti-functional management system – something that could check status on materials (What's been ordered? What hasn't? When will it arrive? How do prices compare to estimates? Are we on track to profit?) became apparent.

"On top of this, we built in functionality to make price comparisons across vendors easier," she notes, "adding a lot of automation to the software, digitizing the error-prone, tedious and manual tasks of keeping track."

That's where much of tech is focus, in fact.

Seven years ago, when Suffolk's Mundt stepped on a job site, he marveled that even as he watched tower cranes moving 100-ton pieces of equipment, "I was scanning in carbon copy sheets to track materials that were moving off site thinking, 'How can we possibly still be doing this?'"

And so, says Chin, Mundt's colleague, "we'll see further penetration of digitization into the trades – taking away some of those day-in, day-out processes."

WHAT'S NEXT?

Sustainability, electrification, and robotics are just some fields that the pros predict will be big ones for tech in the future.

"We're already seeing lower carbon materials," says Chin. "The ones who can figure it out at cost-neutral price points, or even just marginally more costly, will [see success]."

Electric cars are already mainstream for consumers, she points out, "but there are still a lot of temporary diesel generators used on site in large-scale construction, and other equipment that has not yet been electrified, and we'll see that, too, with all the focus on climate change and sustainability."

TRUTH OF CONSEQUENCES

What happens to those who don't evolve?

It's another question that we've asked year-in, year-out. At this point, says Curtis Rodgers of Brick & Mortar Ventures, we have the answer.

"They've taken early retirement," he says.

And as tech – and the capital to fund its progress – has proliferated, the smartest companies have created roles for its champions.

"A Construction Technologist role – someone who understands operations, someone who understands IT and who is dedicated to defining the problems that are holding back the company and seeking solutions to address them."

Understanding the needs, he says, is almost more important than knowing – and loving – the tech.

"As soon as you define the problem, it makes you really articulate," he explains. "Then you can go out and ask, 'Do we have existing technology that can solve this?' It's easy to find the solution if you know what you're looking for."

As the old guard retires, seasoned professionals – the ones who trusted tech from the get-go – are now moving into senior leadership.

"They've proven they know what efficacy means," says Rodgers.

And tech purveyors who bring solid solutions, say the pros, won't find the resistance of the industry's supposed bad rep.

The message to construction professionals: it's not you, it's them.

"It's a proud industry at the end of the day. And fairly competitive," says Suffolk Technologies' Chin. "And if something works, they're going to want to adopt it."

About the Article

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