



## **Disruptive technology in construction: The future of our industry may be here already**

In the business world, the word “disruption” has taken on new meaning. Here is one interpretation:

*“.. a disruptive innovation is an innovation that creates a new market and value network and eventually disrupts an existing market and value network, displacing established market-leading firms, products, and alliances.”*

Technology holds a firm grip on all aspects of the commercial real estate industry. From prefab bathrooms for luxury hotels to innovations in material, the construction industry is experiencing a disruption of its own.

REIAC Southwest gathered a panel of construction experts at its November event at Paradise Valley Country Club who shared how disruption is affecting their segment of the industry.



Moderated by Keyvan Ghahreman, Director of Client & Preconstruction Services, Willmeng Construction, the panel featured John Platon, OldCastle/SurePods; Mike Rock, Katerra; Matt Steere, Autodesk; and Scott Root, Kitchell Integrated Services.

You want cutting edge? Platon’s company produces pre-fabricated bathrooms for the hospitality industry. It cuts down on construction cost and building time. Katerra, a technology-driven offsite construction company, has built a global supply chain of curated, high-quality products, eliminating middlemen and passing on the savings directly to its customers.

Autodesk makes software for the architecture, engineering, construction, and manufacturing industries, including AutoCAD. An architect, Root is part of the team at Kapture, which offers a simplified, innovative, and streamlined design and production process with greater precision in a more productive and safer environment.

“How far have we come?” Ghahreman asked. “Manufacturing, it has evolved over the years. Construction, it started by stacking blocks to build the pyramids. Today, it’s stocking blocks at the construction site. It’s hard to break old habits.

“Think how far manufacturing has come in terms of productivity. The world is different now than it was 10 to 15 years ago. Technology is moving our industry forward,” Ghahreman said.

Steere said this technological change can be seen in the combining of architecture and construction. “We like to help support companies that market themselves as a technology company that builds things.”

At OldCastle/SurePods, Platon says his firm installs about 30 pre-fab bathrooms a day. “It has taken a lot of headaches away and saves about three months of building time,” he said.

“At Autodesk, we look at design drawings and take a holistic approach,” Root said. “We find a sweet spot, add the details, and fabricate it. Interior walls or bathroom pods, it doesn’t matter what it is. We find things during the design phase then bring them to the site.”

In its attempt to revolutionize construction, Katerra is focused on pre-fab and aligning the industry with technology. “We look at a building as a product made up of components. Walls, ceiling, bathrooms. This brings more of the trade work into the factory, increasing the level of completion,” Rock said.

What does the future hold?

Rock: “Having to invent things that don’t already exist in the market.”

Steere: “Augmented reality ... You have a space, say a TI, and have a QR code on the floor. You look at an iPad with virtual reality goggles.”

Root: “3D printing; seamless buildings.”

Platon: “Bathrooms ... IKEA pods to 5-star.”