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5G ushers in new era of construction technology - by Patty Luxton

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The arrival of 5G wireless enables much broader internet availability and greater speeds on the job site as well as the opportunity to employ IoT (internet of things) devices that previously would not have been practical.

Connecting operations

It can take weeks to get cable or fiber installed at a job site so operations and management can have reliable, high-speed internet capable of handling large files integral to construction. If the job site is in an area with 5G coverage, it can enable your team to get networked in a matter of minutes.

One option is simply to provide your team with 5G-enabled devices. This can be expensive and limiting. You're bound to come across devices without 5G capability that you want to connect.

Another route is to use a 5G wideband adaptor, firewall and LAN to pull in the 5G signal and allow your team to connect via WiFi. Once this system is in place, it's highly portable. If you finish a job in the morning and start another in the afternoon, the 5G network could be moved from one site to the next during lunch.

The full power of IoT

IoT technology is gaining traction in the construction industry, but it has been limited by network speeds. Here are a few IoT opportunities that 5G at the job site makes possible.

Location services - Is there a tool or piece of machinery that always seems difficult to locate? With IoT trackers, you see in real time where all of your assets are.

Sensors - Do you need to make sure certain materials don't exceed a certain temperature? IoT sensors can notify you if they're getting close.

Wearable tech - IoT devices that report spikes in vital signs of workers can help you stay ahead of safety concerns and respond to incidents quickly.

Getting access

Currently, the greatest challenge with 5G is getting it. Only some towns and cities are currently 5G-enabled because it requires many small antennas on structures such as light poles.

However, the wireless carriers are desperate to expand 5G coverage. This can present an opportunity for developers and construction firms to partner with carriers to build 5G emitters and repeaters into property so that it's connected as soon as tenants occupy it — and during the construction process.

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