

## **Emerging trends revolutionising Mideast construction technology**

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The construction industry in the Middle East is witnessing a transformation, thanks to technological advancements, according to WakeCap, a leader in smart solutions for construction site management.

These innovations enhance safety and efficiency on construction sites and pave the way for cost savings and improved project execution.

WakeCap is an IoT-based enterprise solution to monitor workforce activity and collect profit-impacting data on actual hours, progress, and safety. It gathers data through a knob that attaches to a standard hard hat worn by site workers.

It is live on 30+ mega sites and giga sites in Saudi Arabia and the US with an average 2,000+ workers per project, and has logged over 70 million worker-hours.

According to WakeCap, the key trends shaping the future of construction technology in the region are:

\*Enhanced collaboration through IoT: The rise of Internet of Things (IoT) technologies is fostering increased collaboration within construction sites. Real-time insights into worker activity and equipment usage are now possible, enabling project managers to make data-driven decisions that enhance site safety, streamline workflows, and optimize project execution.

Strategic partnerships are expanding the suite of IoT solutions available, making cutting-edge tools globally accessible. WakeCap is at the forefront of forging these kinds of strategic partnerships to harness the potential of the latest technologies, including collaborations with EarthCam, the leading provider of construction camera solutions based in the US; Novade, a global leader in cloud-based field management software based in Singapore; and OpenSpace, a US-based leader in reality capture and AI-powered analytics; amongst many others.

Most recently, WakeCap has acquired Crews by Core, marking one of the first acquisitions of a Silicon Valley tech startup by a Saudi company. Crews by Core is an Al-powered field scheduling platform for the construction industry, and this strategic move allows WakeCap to create the most comprehensive suite of hardware and software tools to increase job site safety, productivity, and profitability. In Saudi Arabia, where the company has its headquarters, WakeCap is contributing its industry expertise to drive opportunities across construction technology.

- \*Digital passport systems: To streamline site access and maintain up-to-date worker training records, digital passport systems are increasingly being introduced across the region. These digital IDs ensure compliance with safety protocols, offering an efficient and secure method to manage personnel on construction sites. This implementation is particularly crucial in a region where large-scale sites are the norm, such as those in the UAE where there is a big workforce on site, and the gigaprojects in Saudi Arabia.
- \*Digitization of toolbox meetings: The traditional 'toolbox meetings', essential for daily briefings on work plans and safety issues, have been digitized. This modern approach reduces wasted time and promotes a consistent and informed approach to maintaining site safety, making the process more efficient and effective.
- \*Advanced vehicle tracking: Moving beyond traditional speed cameras, new vehicle tracking technologies offer 100% monitoring of vehicles across construction sites. These systems have significantly reduced overspeeding violations by providing continuous tracking rather than point-based speed detection, enhancing overall site safety.
- \*Al and Video analytics for smarter monitoring: Al-powered analytics and video Al are revolutionizing how projects are managed and monitored. These technologies provide enhanced visibility into construction progress and detect safety hazards in real time.

On a mission to continue setting the industry standard for data-powered site visibility, Dr. Hassan Albalawi, Founder and CEO of WakeCap, said: "These trends showcase the dynamic evolution of construction technology in the Middle East, driven by a commitment to innovation, safety, and efficiency."

The automation of safety monitoring tasks, he stated, reduces the need for manual inspections, improves site safety, and boosts productivity.

"Partnerships with companies specializing in AI and video analytics are equipping construction firms with tools for smarter, safer, and more efficient operations. As the industry continues to adopt these advanced solutions, the future of construction looks brighter and more promising than ever," he added. **-TradeArabia News Service**