DATA INTELLIGENCE

for today's construction site

The WakeCap Solution allows companies to improve operations on construction sites by giving crew chiefs, project directors, and managers a much clearer idea of who is on the site and how well they are moving around relative to their work packages. At the heart of the solution is a helmet-mounted, ultralight, ultra-long battery device that's easy to use while providing visibility into the workforce activity and protecting worker privacy.



The WakeCap Solution makes any construction site a smart worksite. Every worker wears a standard safety helmet fitted with a lightweight, WakeCap designed sensor. This sensor replaces the standard ratchet knob on a helmet, making it clean and out-of-the way to ensure wearing it feels no different than any other helmet, and to ensure it's never left behind. The device connects to a WakeCap wireless mesh network installed on the job site to guarantee coverage even in challenging structures and to promote a safe working environment and a more productive workforce.

The Digitization of a Construction Worksite

Replacing clipboards, manual recording, and labor-intensive tracking of time and location is a thing of the past with modern Internet of Things (IoT) products for Construction. Today we have the ability to automate data collection for input as the backbone for analysis and automated reporting.

The WakeCap system is a major step forward for construction site digitization. It's the ultimate in next generation data intelligence – capturing data, as it happens, to provide site management with the ability to:

- Ensure workers check in and out accurately and find the physical location of all workers on the site throughout the work day, without being able to track them at home or off the job site
- Map the construction sites on the blueprints or 3D imaging and overlay workforce location and movement in relation to all zones of the site, from the basement to the highest floor.
- Monitor activity in real-time with indication of the worker is moving or not.
- Detect falls, since the device identifies any event of sudden aggressive movements to immediately report the probability of a fall greater than 1.5 meters and take appropriate emergency steps.



WakeCap is a true IoT System

The definition of IoT continues to evolve as we see the costs drop while still improving with the convergence of real-time analytics, machine learning, powerful sensors, and practical battery life.

A simplified definition of the Internet of Things (IoT) is:

"A network of Internet connected objects able to collect and exchange data."

One of the advantages of the WakeCap system is its ability for two-way communication. WakeCap will be able to know if workers venture into unsafe zones, or if there is a need for immediate evacuation. Signaling to an individual worker is even possible, with the worker acknowledging by a simple press of the button built into the helmet harness. Like other mature, secure, sophisticated but simple IoT products, the WakeCap technology is built on the ability to upgrade the helmet with firmware and security updates, via the network, to prevent operational down-time.

Immediate Usefulness

The WakeCap solution provides immediate return on investment to contractors who adopt it. Several use cases are offered out of the box, with the easy option to extend to more key metrics based on customer ideas. The comprehensive, web-based, user-friendly, dashboard includes:

- ♦ Attendance Automation
- ♦ Location of crews and workers across the site relative to work zones defined by the customer.
- Key productivity metrics, like how much of each shift's time is spent in designated work zones vs. being stuck waiting for elevators or traveling to and from tool warehouses
- Increased safety by knowing where workers are, and by speeding emergency evacuations and identifying stragglers
- ♦ Site performance comparative analysis

WakeCap a Journey - Not a Software Solution

The benefits of implementation of WakeCap on any construction site are both tangible and intangible. Every company wants to see a return on investment for any capital expense - with WakeCap the cost saving starts from day one.

But the journey doesn't stop there. Integrating the operational data from the WakeCap solution with your core business processes provides the competitive edge needed for your business to work better overall, learning from other industries to operate like a 21st century construction organization.

Most construction firms track costs by associating work to cost codes reflected in certain work types associated with the construction site. The ability to link the time worked by all crews to these activity codes allows cost controllers the opportunity to monitor, in real-time, the site productivity from any office.

WakeCap takes the nightmare out of site cost management. It automatically reports "time spent active" in each allocated zone, divided by crew, shift, person, trade, or subcontractor.

"We take the guesswork out of site performance to highlight what needs to change to improve productivity, performance and site efficiency".

The WakeCap journey begins when our clients recognize their current business processes are hindering productivity.

But with the right tool for the right job, organizations can get much deeper visibility to understand and monitor performance, with senior management better able to make decisions that altering and speed their current business.

WakeCap is your eye on the ground. We can show you the problems for immediate action, today - not tomorrow. The first step is knowing the true nature of your site activity. With this knowledge you'll have the power to implement real CHANGE FOR THE FUTURE.

IMAGINE THIS You are the project manager with the need to adhere to a tight timeline. You're reviewing the reports provided by your team and everything seems to be going according to plan.

You open your WakeCap system to notice that the actual work hours in Zone 1, Floor 1 are 60% lower than the planned hours for the last 2 days. You immediately call the engineer responsible for this zone, who tells you the chief and crew are all waiting in the yard because the material hasn't been shipped to the site yet. The 20 workers have been idle for the day and there could be a costly consequence for ongoing site. Now your blood begins to boil - you escalate the issue to the store manager, who ensures you the material will be there tomorrow morning. With WakeCap at your fingertips, you've identified an issue early before it got too far out of hand.

If you've ever managed a site before, you're probably remembering other, typical real-life situations as this.