

ENABLING SMART CONSTRUCTION WORKFORCE & ASSET MANAGEMENT AT THE EDGE



Imagine a construction site where every tool, machine, and piece of equipment is perfectly tracked and utilized — no more lost tools, underused machinery, or unexpected breakdowns. Every asset is accounted for in real time, allowing you to know exactly where it is, how it's performing, and when it needs maintenance or replacement.

In today's fast-paced construction industry, managing assets efficiently is critical to staying on schedule and within budget. The increased adoption of digital and Internet of Things (IoT) technologies in construction is part of a broader trend to leverage better asset management and operational efficiency. The overall [asset tracking market](#) is projected to grow from USD 25.58 billion in 2024 to USD 47.33 billion by 2029, with a CAGR of 13.09%.

To meet this need, Veea has partnered with Crowdkeep, an IoT leader in data collection, asset tracking, and condition monitoring. Together, the solutions combine data collection, monitoring and edge computing to empower enterprises to make informed, real-time decisions across a single, integrated platform.

KEY FUNCTIONALITIES INCLUDE:



Automated Attendance



Asset Managing



Workforce Analytics



Safety & Compliance



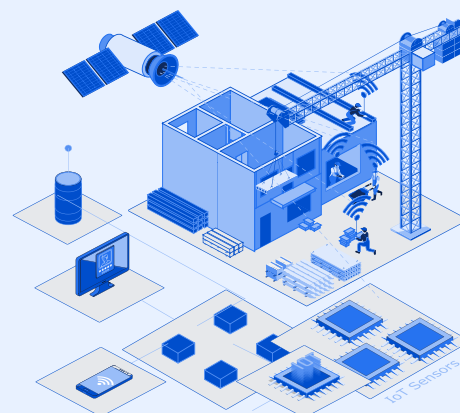
Workforce Managing



Contact Tracing

TRANSFORMING ASSET MANAGEMENT FOR STREAMLINED OPERATIONS

According to recent statistics from the National Equipment Register and National Insurance Crime Bureau (NICB), construction equipment theft alone accounts for annual losses ranging from \$300 million to \$1 billion in the United States. Construction sites are attractive to potential thieves as they are often left unattended while construction activities are suspended. In some cases, the impact can be as direct as thieves stealing heavy machinery, tools, and electronics left on premise. In other cases, contractors can experience indirect impacts such as costly job delays, downtime for operators, higher insurance premiums, or possible cancellation of an insurance policy. Figures suggest that less than 25% of assets stolen at a site are ever recovered. A theft can easily result in a permanent monetary loss for a construction company on a project.



Deployed with Veeva's Edge Platform, Crowdkeep's Asset Management system allows users to have full assurance of where their assets are, who on their team has used them, and determine the productivity analytics of individual assets. With Crowdkeep, every important asset worth tracking is mounted with an asset tag. This allows the Crowdkeep platform to maintain constant and consistent monitoring of the location of assets. Similarly, asset-specific sensors can be integrated for more detailed analytics of an asset's usage, productivity, and status (e.g., motion sensors for heavy machinery or moisture sensors for a cement mixers).

Industry studies estimate a 10% error rate in asset data due to manual tracking, such as spreadsheets and paper records. This inefficient supply chain and asset management can translate to \$1.2 trillion in losses annually. With validated and automated asset management such as that enabled by the combined Crowdkeep and Veeva solution, project sites become much easier and more efficient places to work.

AUTOMATED ATTENDANCE TRACKING TO IMPROVE WORKPLACE SAFETY



Precise tracking of employee hours is key to improving productivity in construction. It allows project leaders to pinpoint delays, make informed decisions on resource distribution, and keep projects on schedule. Crowdkeep's automated time and attendance tracking allows employers to easily and accurately track all employee clock-in and attendance throughout the day. Crowdkeep's IoT mesh network automatically tracks the entry of an employee tag into the project site's geofence. The geofence, made up of IoT anchors and gateways installed at the project site, communicate with the tags and each other to track the exact time when an employee shows up for work.

Crowdkeep's geofencing and map customization can create safety zones with restrictions on who can work in a location and how many workers can be there at a time, facilitating safer working conditions. OSHA estimates construction companies save between \$4-\$6 for every \$1 spent on safety systems.

According to Forbes, imprecise timekeeping is common, with 69% of employees admitting to inaccurately tracking their hours. Crowdkeep's live and validated time tracking solution reduces productivity leaks by 80%^[1]. Powered by Veeva, Crowdkeep's smart time tracking system not only ensures automatic time stamping, but validates employee presence through AI-powered analytics, counteracting any timestamp fraud.