

YOUR VIRTUAL SAFETY TEAM: MAKUSAFE + DATA CENTERS

LEADING WITH SAFETY IN MISSION CRITICAL

The Weitz Company has always put safety at the forefront of our projects. With Mission Critical and data centers becoming a bigger focus of our efforts, MakuSafe was an great way to implement new technology and help protect workers. MakuSafe is a data analytics company located in West Des Moines, Iowa. They specialize in equipping workers with wearable safety devices that record data to help safety managers predict and correct potential hazardous issues on the job site.

MakuSafe prides themselves as an award-winning safety, data & analytics solution aimed at improving worker health, safety, and productivity while reducing incidents and mitigating workplace hazards and risk exposures. This innovative wearable technology provides immediate access to real-time EHS data with predictive value.

THE BENEFITS OF PREVENTATIVE TECHNOLOGY

The vast majority of near misses on the job site do not get reported. These small indicators can be huge signs of a potential hazard to come. When you can approach your job site from a proactive stance, you can begin to see a culture be formed.

On our current data center projects, we have teamed up with our trade partners to deploy all devices and are mining data looking for trends that can prevent injuries. We aren't reacting to an injury report - we're preventing the injury from happening. The National Safety Council reports that the average cost for a slip or trip that requires time away from the job costs a company an average of \$46,000.

HOW IT WORKS

With four different types of data collected, these small armbands collect environmental conditions, forceful motions, sound, and location information.

CONTRIBUTORS

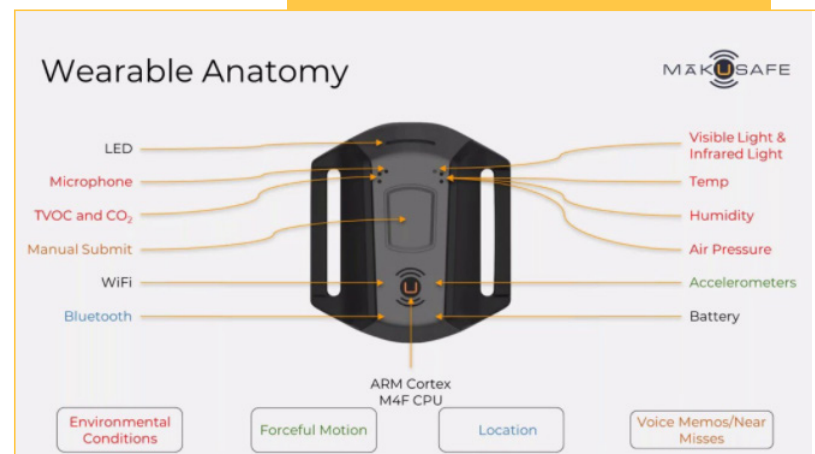
KASSI ZENOR

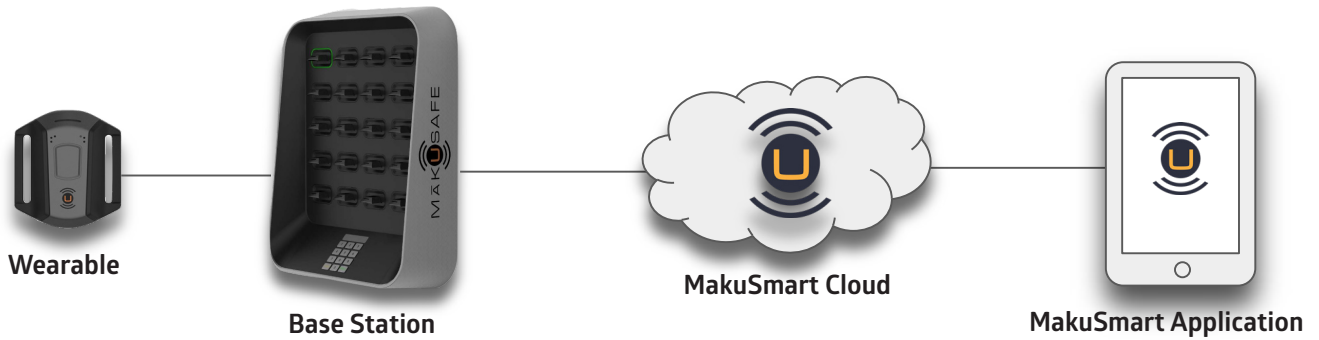
Project Executive
Mission Critical
LEED AP
kassi.zenor@weitz.com



GREG MARTIN

Vice President &
General Manager
Mission Critical
LEED AP
greg.martin@weitz.com





The devices have microphones, temperature, humidity and air pressure indicators, as well as TVOC and Co2 data collection. With an on board accelerometer, MakuSafe detects force in excesses of 2G's coupled with motion. Location services uses Bluetooth in conjunction with beacons placed around the jobsite to triangulate an employee to a defined work zone. Voice memos are able to be recorded by the wearer for up to 15 seconds each. All of the data is then transmitted to a computer or mobile device of choice.

The Base Station allows the employee to key in their unique code and assigns the user to their device. At the end of the day, the employee returns the device for charging and data uploading.

Upon reviewing the data, the dashboard allows the user to quickly glance and get a general idea of how the job site is performing from a safety perspective. You can easily view trends, open hazards, how many workers are wearing devices that day, and more.

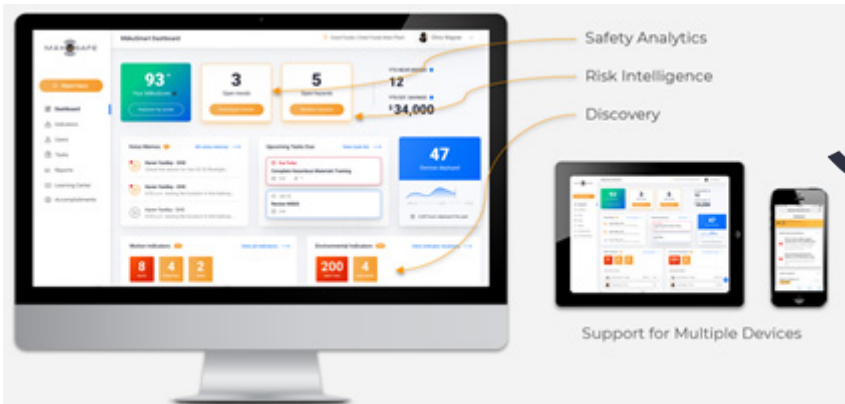
REAL TIME PREVENTATIVE DATA

With so many moving pieces on a job site, workers don't always report small instances such as a minimal trip or a slip due to water. MakuSafe helps prevent an injury from happening, by reporting the instances in real time.

“...WITH THE SEVERAL NOTIFICATIONS WE WENT OVER TO INVESTIGATE AND NOTICED SNOW HAD BLOWN ONTO THE ENTRANCE WALK PATH UP TO THE BLDG. WE THEN HAD OUR SITE LOGISTICS TEAM CLEAR THE PATH AND PUT DOWN ICE MELT. MAKUSAFE ALLOWED US TO RECOGNIZE AND CORRECT A HAZARD PRIOR TO A SLIP OR TRIP OCCURRING.”



Senior project manager Kassi Zenor looks back on some great preventative data that could have changed the course of the day on a project. "MakuSafe notifications showed that there were several slipping motions occurring at the North entrance. Weitz is sent this data whenever an alert occurs. With the several notifications, we went over to investigate and noticed snow had blown onto the entrance walk path up to the building. We then had our site logistics team clear the path and put down ice melt. MakuSafe allowed us to recognize and correct a hazard prior to a slip or trip occurring."



MORE THAN JUST SAFETY MINDED

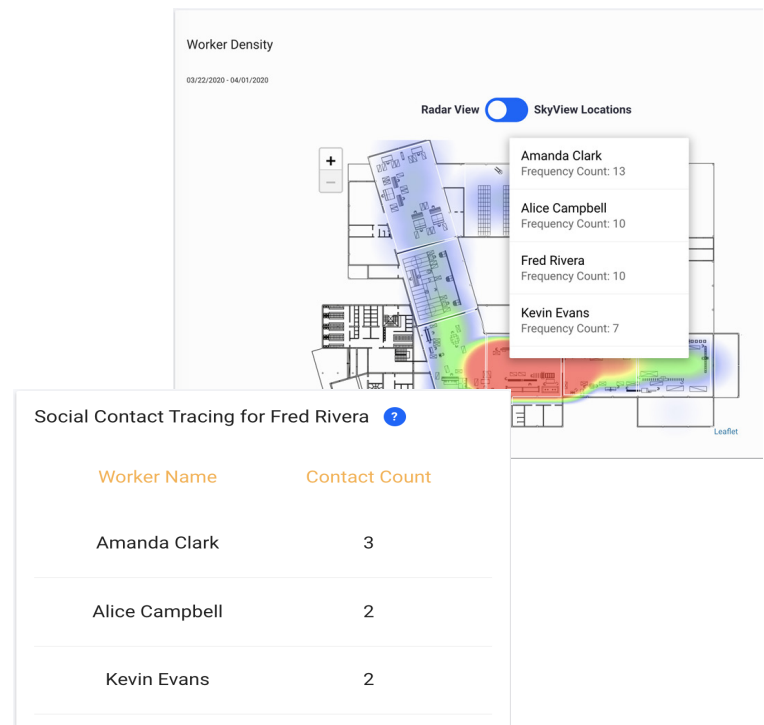
Safety and health go hand in hand with a project. As all jobs had to adjust due to the COVID-19 pandemic, MakuSafe was able to provide useful data to help. Contact tracing and worker density mapping aided us in being able to show which workers were in contact with a potential Covid positive worker, or when the job site was becoming too concentrated with workers in the same area.

MakuSafe allows us to generate a report showing who a worker make have come in contact with over a selected period of time. This aided our job sites with contact tracing, and helped prevent infections from happening.

Worker density mapping displayed our facility's floor plan and the concentration by area. If a location was getting too crowded, we could put in safeguard steps to prevent close contact or move workers to a different area to disperse the workers.

DON'T JUST SAY YOU'RE ABOUT SAFETY

Although we started utilizing this technology with our data center projects first, this technology has already began to filter out to all of our business units at Weitz. Our people are our most valuable piece to any project. We need to protect them and put measures in place to aid that.



We know that culture on the jobsite has as much impact on safety performance as policies and procedures. "When we focus on engaging craft workers and their company leadership, we have seen improvements with respect to recordable injuries. Our EMR and TRIR have improved significantly and we're now poised to achieve our own standards of safety." Greg Martin shares on how safety can become culture. In order to really create that culture of safety, you have to live it. That means having the tools available, and leaders that model that safety culture.

ABOUT THE WEITZ COMPANY

Founded in 1855, The Weitz Company is a full-service construction company, general contractor, design builder and construction manager that serves all 50 U.S. states. Weitz is one of the oldest general contractors in the United States and an industry leader in lean construction; senior living; sustainable building; and virtual design and construction. Headquartered in Des Moines, Iowa, The Weitz Company annually ranks in the top tier of Engineering News-Record (ENR) magazine's Top 400 Contractors and Building Design+Construction's Giants 300 Contractors lists. **For more about Weitz, visit www.weitz.com.**

About Our Contributor(s)

Greg Martin has been with the Weitz company for 15 years and helped develop Weitz's Mission Critical division to be what it is today. He currently leads a team of over 115 employees.

Kassi Zenor has worked with Weitz for 18 years. She leads Data Center teams in Des Moines and Virginia. She successfully implements security protocols, quality control, and safety procedures.

65th
ENR Top 400
U.S. Contractors
Rank

167
Years Weitz
Has Been
Operating