Case Study: Revolutionizing Safety and Productivity in Warehousing and Distribution

Client Profile

A high-volume warehousing and distribution business in the food and beverage industry, covering most of the western U.S. This company employs thousands across multiple sites and includes a large workforce of route drivers.

The Challenge

Managing safety risks across a vast territory and workforce posed significant challenges. Strain and exertion injuries were a recurring issue, along with concerns about worker productivity and high operational costs. Leadership needed actionable data to reduce injuries, improve safety culture, and enhance operational efficiency.

The Solution

The company adopted MākuSafe's connected worker wearable and safety data analytics platform to monitor physicality data, environmental hazards, and worker safety trends. Starting with a pilot at a location in the Western U.S. with 40 workers over 90 days, the program rapidly scaled as results became evident. Today, MākuSafe is deployed at eight sites, with plans to cover all facilities company-wide.

The Results

Zero Strain & Exertion Injuries

- Sites have reduced strain and exertion injuries in the worker population who are wearing MākuSafe.
- No back and shoulder injuries were reported through peak business periods during the first year of implementation. This continued through year two and remains true at the sites where MākuSafe is in use.

- Workers in key roles now wear MākuSafe across all three shifts daily. By using data from MākuSafe Motion AI, high-risk push/pull, forceful, and repetitive motions have been progressively reduced, while productivity has steadily increased.
- Workers using MākuSafe at these sites have had zero workers' compensation claims for back or shoulder injuries which had historically occurred frequently.

Improved Environmental Safety

- MākuSafe's environmental sensors provided insights to optimize facility conditions, such as identifying volatile organic compound (TVOC) concentrations in air quality and mitigating heat exposure risks.
- Heat mitigation actions were taken based on data from MākuSafe wearables, leading to safer conditions.

Productivity Gains

- Using data from MākuSafe's Motion AI, leadership identified optimal physicality levels for tasks, reducing fatigue and increasing worker output.
- Average productivity gains of 6% translated to an estimated $700,000 in annual labor savings.
- Labor savings alone resulted in more than a 3X return compared to the investment in the MākuSafe solution.

Cultural Shift

- Leadership now describes sites without MākuSafe as "operating blind," accelerating plans to deploy to all locations and fostering a data-driven culture of safety and performance.

Hazard Identification

- During the initial six-month pilot, 22 near misses were documented by workers, helping prevent future incidents.
- Workers actively use MākuSafe's MyVoice push-to-talk communication feature to document safety hazards (e.g., spills, pallet rack collapse risks, etc.) and track quality and productivity issues.
- Leaders use MākuSmart data to follow-up on worker communicated hazards, and also utilize MyVoice communication to document audit and observation messages.

Employee Engagement

- Over the past 12 months, MākuSafe was worn during 86% of total hours worked by employees.
- In October 2024, the company launched the "MākuSafe Challenge," a competition to reduce ergonomic risk and worker physicality across multiple sites.
- KPIs measured hours worked in an "acceptable" range of physicality, with every site achieving reduced ergonomic risk and increased productivity.
- Leaders reported higher team engagement due to the challenge.

Remote Workers

- Trials with MākuSafe's remote worker functionality for route drivers show promising results, prompting expansion to more sites for this workforce segment.
    - Environmental condition awareness (Heat exposure in the field)
    - Ergonomic risks by employee and by delivery location.
    - Improved communication between delivery drivers, their supervisors, the sales team, and ultimately the client to report and improve adverse work conditions.

Continued Innovation

- Beta trials with MākuSafe Scout, a forklift safety solution utilizing wearables, began at this company.
- Since the beginning, the trial has delivered a more than 80% decrease in interactions between forklifts running Scout and pedestrians.
- Data on worker/pedestrian density and congestion enabled leaders to reassign PIT drivers, re-engineer traffic patterns, and identify risk by facility area and time of day.
- The client is planning to scale the solution to multiple sites for improved safety and efficiency enhancements.

Industry Recognition

- A key Health and Safety Manager who championed MākuSafe technology was named one of the National Safety Council's Rising Stars in Safety for 2023, reflecting leadership in implementing innovative safety solutions.

Why It Matters

This client has demonstrated that safety and productivity go hand-in-hand. By eliminating high-risk movements, they've reduced workplace injuries, minimized claims, and proven the financial impact of safer work environments. MākuSafe's platform is helping them achieve a safer, more productive future while setting a new standard in workplace safety innovation.

For more information on MākuSafe's wearable technology and analytics platform, visit makusafe.com.