

AI AND WEARABLE DEVICES HELP TRAVIS PERKINS EMPLOYEES REDUCE THEIR RISK OF INJURY



120 employees, 40 devices
10 weeks, July 2018

Soter Analytics is helping Travis Perkins reduce one of their largest injury problems - musculoskeletal injuries. They do this with their SoterSpine solution: a wearable light weight sensor worn on the back of a vest or shirt, which identifies & quantifies at-risk working movements, and then provides the worker personalised coaching via the app, powered by AI and Machine Learning.

CLIENT



Travis Perkins

Travis Perkins is the UK's largest distributor of building materials. With 20+ businesses in the group, they've grown to approximately 29,000+ colleagues across more than 2,000 branches, stores, and sites across the UK. Logistics efficiency is key to ensuring their customer satisfaction as well as profit margins.

Travis Perkins and Soter Analytics began their collaboration 10-months ago. While originally focusing on the BSS division with a warehouse

in Leicester and 5 distribution branches, the innovation is now being rolled out to other divisions/companies within the group, with the employees' support.

CHALLENGE

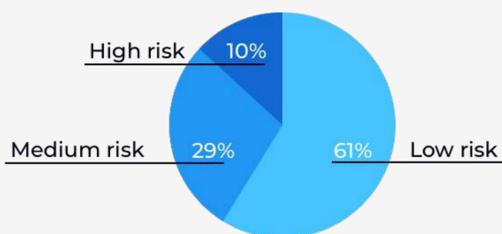


Travis Perkins has recognised the value of prevention for years and it's central to their efforts in reducing musculoskeletal injury risks and costs. Before testing the SoterSpine solution, they ran their LIFT program for 2 years which consisted of a combination of videos and in-field training of 'lift champions' that would then coach their colleagues. This was an effective program that delivered significant risk reduction, but after 2 years results started to plateau.

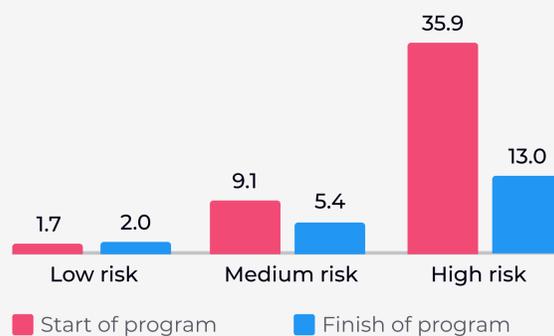
That's when Soter Analytics and Travis Perkins collaborated. The original idea behind Soter's formation was that more could be done in Health & Safety by combining industry best practices with new technologies like mobile Apps, Wearable devices, and Artificial Intelligence.

RESULTS

RATIO OF WORKERS IN EACH RISK GROUP



HIGH-RISK MOVEMENTS PER HOUR AT START AND FINISH OF 12-DAY PROGRAM



AVERAGE REDUCTION OF HIGH RISK MOVEMENTS IN:

64%

in the High Risk group

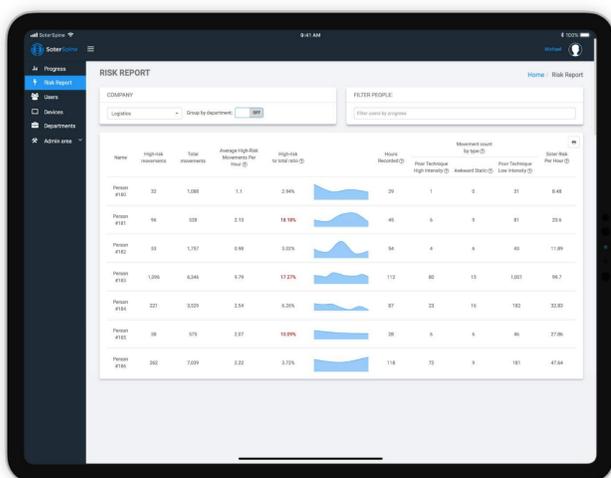
41%

in the Medium Risk group

The High risk and Medium risk groups showed significant improvements, this accounted for 48 employees (39% of all employees testing the solution).

Overall, workers using the SoterSpine device provided very good feedback to the management on how "easy and accurate the device was" and how it "made them aware of what they were doing".

DATA



From the end of the first day, data became accessible to management via the online dashboard tool. Team managers were able to follow and have access to every employees' progress through the program.

This data was analysed by Travis Perkins management and the Soter Analytics team. This helped to identify

issues with differences in workers' risk profiles between branches. It also identified that 60% of warehouse workers had repetitive work patterns, while in the branches, repetitive tasks were not often identified (<15%). Frequent repetition of movements is one of the main causes of lower back problems and with the results from the data, Travis Perkins is looking at implementing more regular job rotation in the warehouse to ensure diversity of tasks and avoid repetition risk.

FUTURE

Soter Analytics is now supporting Travis Perkins in rolling out the solution nationally with 3 of the Travis Perkins divisions, with the plan to cover 3,600 employees in 2019. Reaching so many employees is possible due to the ease of implementation of the device and each employee manages their own progress and program completion.

Soter Analytics has developed data analytics software tools. They empower ergonomists and Health & Safety professionals to leverage their expertise by relying on the power of data. During the 12-day coaching program, up to or in excess of 3,000 movements are captured by each worker's device. All this data is processed, organised, and displayed in an easy to comprehend format enabling experts to understand more about employees in less time and help significantly in keeping them safe.

