



PRIORITISING WORKPLACE SAFETY WITH IOT

For an Indian Multinational Steel Company

CLIENT BACKGROUND

From the vehicle to house and from the bridges to hand tools, an Indian multinational steel-making company touches the lives of millions of people across the world every day with the steel it produces. This private steel company operates in 26 countries and has a commercial presence in over 50 countries with employees across five continents. And the numbers are growing. What makes these milestones achievable is the passionate and determined ground force of the client company and as much as the workers fulfil their responsibilities towards it is the client’s responsibility to ensure their safety, while on the move.

ACHIEVING NEAR ZERO HAZARD WORKPLACE

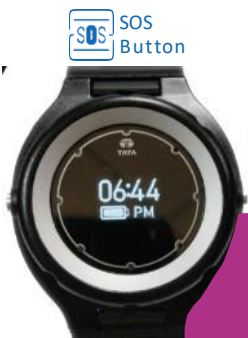
In steel industry operators and workers work in a high-risk environment and face potential dangers every day. As they play a vital role in the safety of man and machine, they work at isolated places and are not under constant supervision.

Keeping in view the occupational and environmental difficulties, Employee Health Safety (EHS) wearables were conceived by the client in partnership with Tata Communications Transformation Services (TCTS). We covered the client’s entire workforce by 2019 with safety wearables. These wearables were extensively tested under actual working conditions and parameter values were authenticated.

“2.78 Million deaths are incurred by occupational accidents and illness each year worldwide”

International Labour Organisation

UNPRECEDENTED LEVEL OF VISIBILITY INTO WORKERS’ HEALTH AND THEIR ENVIRONMENTS



EHS monitors four wellness features constantly throughout the stay of workers inside the plant. The SOS button is provided for any emergency activation.

In case of any alarm either due to parameter variations or SOS emergency, immediately automated alert triggers and send SMS emails to supervisor ensuring timely help reaches to the employee.



FROM SITUATIONAL DATA TO ACTIONABLE INSIGHTS A SMALL INVESTMENT IS WORTH MAKING

One fine day when Sukant was performing regular maintenance in one of the buildings of the client’s plant, his heart rate was more than the normal. He was so involved in the maintenance work that he couldn’t notice his heart rate. EHS wearable came as a rescue to him. As wellness features of Sukant were under constant monitoring through safety watch, deviation in a heartbeat triggered alert to watch team. He gets an immediate call from the watch team and sent for a preliminary check-up. He was put under observation for one week and only after ensuring his fitness he was allowed to work.



Sukant performing regular Maintenance in ISB building of the client



“ I always wear safety watch inside the plant. I feel connected to my supervisors and feel safe. It feels like I have a doctor with me all the time.

SUKANT,
WORKER

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MORE ABOUT THE SOLUTION



Managed Services - Service Delivery and Assurance | Configurable Application | Analytics engine

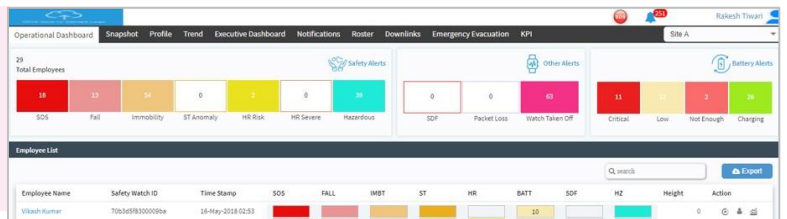
Alert Notifications

Central Admin screen to monitor alerts and acknowledge it.

Employee ID	Employee Name	Plant	Site	Safety Watch ID	Alert Type	Time	Action
SP-0004	Vikash Kumar	Plant A	Site A	706d5f983000090a	Battery Percentag...	16-May-2018 02:03	Acknowledge
SP-0016	Test Fifteen User	Plant A	Site A	706d5f98300009c2	Battery Percentag...	16-May-2018 02:09	Acknowledge
SP-0013	Test Fifteen User	Plant A	Site A	706d5f98300009c1	Battery Percentag...	16-May-2018 02:06	Acknowledge
SP-0003	Dinesh Kumar	Plant A	Site A	706d5f983000090a	Battery Percentag...	16-May-2018 02:03	Acknowledge
SP-0017	Test Seventeen User	Plant A	Site A	706d5f98300009c3	Battery Percentag...	16-May-2018 01:59	Acknowledge
SP-0008	Sandeep Kumar	Plant A	Site A	706d5f9830000908	Battery Percentag...	16-May-2018 02:04	Acknowledge
SP-0020	Test Ten User	Plant A	Site A	706d5f98300009c5	Battery Percentag...	16-May-2018 01:28	Acknowledge

Operational Dashboard

Showcasing status of various users for SOS, fall, Immobility, skin temperature and heartrate.



BENEFITS

- Increased worker safety
- Improved worker productivity
- Quicker emergency response
- Less injuries and liabilities
- Cost Reduction in insurance, litigation and fines
- Improved safety compliance

USE CASES

Mining industry |
 Chemical and hazardous industries |
 Airports, harbours & other large facilities |
 Construction sites

WHY TCTS

TCTS PROVIDES ENTERPRISE GRADE END-TO-END EMPLOYEE HEALTH AND SAFETY SOLUTION

THE PLATFORM
Highly customisable, adaptable for a variety of use cases

WEARABLE IoT FIELD DEVICES/ SENSORS/BEACONS
Wellness, location services, SoS, two-way alerts

THE APPLICATION
Simple, easy to use interface, packed with intelligence and insights

THE NETWORK
LPWA Network powered by LoRa, long range and low power consumption

