Employee monitoring solution to ensure safety and availability at a nuclear power plant

A Mindtree Case Study
Challenge

Some of the business challenges faced by the client included monitoring a huge workforce spread across a vast area. Also, the different phases of a project necessitated repeated modification in the attendance roster, and it also involved restricting personnel movement across different zones. The client also faced the challenge of planning worker re-allocation within the site in line with project criticality without accurate availability of information.

To overcome these challenges, the client wanted a solution, which could help them:

- Track the inward and outward movement of personnel from all exit and entry points
- Provide on-demand visibility of personnel across all zones
- Gain visibility of the time spent by an employee in a particular work zone and their total count along with inter-zone movement records

Mindtree solution

Our connected worker solution consisted of the below components:

- Active RFID tags - All workers entering the site were issued an active RFID tag, which fits in their helmet
- Active RFID Reader - Each zone was demarcated with one or more RFID readers capable of reading all the tags in its vicinity
- Mindtree-NxT’s connected worker solution - This solution enabled the assignment of tags to the personnel, creation of work zones, mapping of readers to work zones, monitoring the health of the tags and readers, and provided dashboards for actionable insights

Benefits

Our solution helped the client gain visibility regarding zone-wise workforce availability and enabled them to effectively utilize their workforce. The attendance capture process became smooth, and virtual fencing of no-go zones restricted worker movement that helped improve safety at the site. They could even benchmark the performance of sub-contractor agencies based on worker availability, and this led to a drastic improvement in working efficiency.

About Mindtree

Mindtree (NSE: MINDTREE) is a global technology consulting and services company, helping enterprises marry scale with agility to achieve competitive advantage. "Born digital," in 1999 and now a Larsen & Toubro Group Company, Mindtree applies its deep domain knowledge to 270 enterprise client engagements to break down silos, make sense of digital complexity and bring new initiatives to market faster. We enable IT to move at the speed of business, leveraging emerging technologies and the efficiencies of Continuous Delivery to spur business innovation. Operating in 24 countries across the world, we are consistently regarded as one of the best places to work, embodied every day by our winning culture made up of over 23,800 entrepreneurial, collaborative and dedicated "Mindtree Minds."