Background

Persona Name: Suresh Yadav

Job Title: Construction Site Supervisor

Age: 38

Location: Urban area with large-scale construction projects

Technology Proficiency: Moderate (comfortable with smartphones, but not

necessarily tech-savvy)

Background:

- John has been working as a supervisor on construction sites for over 10 years.
- •Responsible for overseeing worker safety, ensuring compliance with safety protocols, and managing the workflow on site.
- •Frequently faces issues related to worker movement within safety zones and the consistent use of PPE (Personal Protective Equipment).

Goals:

- •Ensure workers stay within designated safety zones at all times.
- Verify that all workers are wearing the required PPE before entering the site.
- •Respond quickly to safety violations and non-compliance.
- Maintain accurate records of worker movements and PPE compliance.
- •Generate safety reports for management or regulatory purposes.

Pain Points:

- Manual monitoring of workers is time-consuming and prone to error.
- Difficulty in ensuring that all workers are compliant with PPE regulations.
- •Limited ability to track workers in real-time, leading to potential safety risks.
- •Inefficient reporting system for compliance and incidents.

Needs:

- •Real-time tracking of worker-location within the safety zones.
- Automated alerts for PPE violations or when workers leave safety zones.
- Easy-to-use app with a simple interface for quick checks and reporting.
- •Integration with IoT sensors to verify PPE usage and track movement accurately.
- •Streamlined reporting tools for generating compliance reports.

Behavior:

- •Works in high-paced environments with multiple workers across large sites.
- •Relies heavily on mobile technology to improve efficiency and reduce manual tasks.
- •Responds quickly to safety violations but requires tools to act swiftly.
- •Needs tools that are easy to set up and use on-site without extensive technical knowledge.

	USER ACTIONS	SYSTEM ACTION	EMOTIONS	PAIN POINTS	POSSIBLE SOLUTIONS
WORKER ARRIVAL	Worker arrives at construction site and logs in via mobile app.	The app detects the worker's ID (via QR code, NFC, or facial recognition) and logs the entry time and location.	"The worker is on-site now, ready to start."	Manual tracking of worker entry time System errors during login.	Streamline the login process for quicker access.
PPE CHECK	Supervisor checks if the worker has the proper PPE before entering the site.	The app prompts the supervisor to confirm whether the worker is wearing the required PPE (helmet, vest, gloves, etc.).	"Is the worker wearing all required PPE?"	Inconsistent PPE checks Difficulty in confirming PPE details.	Use the app to scan PPE items (e.g., QR code on PPE).
MOVEMENT	Track the worker's movement as they move through the site.	The app uses GPS or RFID technology to track the worker's location within the designated zones in real-time.	"Are they in a safe zone?"	Not all areas covered by GPS Delays in movement tracking.	Integrate with real-time location tracking (e.g., geo-fencing).
SAFETY ZONE MONITORING	Check if the worker is within a designated safety zone or restricted area.	The app alerts if the worker moves outside the safe zones or enters restricted areas without proper permissions.	"Is the worker in a high-risk area?"	Overlap in safety zones Manual alerts causing delays.	Trigger automatic alerts when workers leave safety zones.
PORT GENERATION	Generate daily or weekly reports on labor movement and PPE compliance.	The app automatically compiles the data on labor movement, PPE compliance, and safety zone adherence into a report.	"I need to generate a report for safety audits."	Complex reporting Lack of historical data for analysis.	Provide downloadable, easy-to-read reports with visual analytics.