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Scenario

The Site Manager and Safety Officer recognize increasing incidents of safety breaches, including workers not adhering to PPE guidelines in high-risk zones. They notice that tracking workers' real-time location and compliance is difficult, leading to concerns about potential accidents and non-compliance with regulations.

Expectations

- **Site Manager/Safety Officer:** Expecting a solution to improve monitoring and enhance compliance in safety-critical areas. They hope to reduce accidents and increase productivity through better oversight.
- **Workers:** Generally unaware of the specific challenges, but they expect that the introduction of safety protocols will be aimed at protecting them and improving worksite conditions.

	Awareness	Research & Setup	Onboarding	Operational	Evaluation
Actions	• Site managers and safety officers identify the challenges in monitoring worker locations in real-time. • Recognize unsafe behavior, such as PPE non-compliance, in high-risk zones.	• Meet with stakeholders (managers, safety officers, developers) to discuss and define needs. • Select the necessary hardware (smartphones, wearables, GPS trackers) and define safety zones (high-risk, restricted, general areas). • Install beacons, QR codes, or geofencing infrastructure.	• Workers download and register on the app. • Admins assign roles and permissions, ensuring supervisors have full access to dashboards. • Provide training for workers and supervisors on using QR codes, GPS tracking, and responding to safety alerts.	• Workers check in/out at designated site zones. • PPE scanning is required at entry points to high-risk zones. • Supervisors monitor real-time dashboards for compliance and labor movement.	• Workers check in/out at designated site zones. • PPE scanning is required at entry points to high-risk zones. • Supervisors monitor real-time dashboards for compliance and labor movement.
Pains	• Difficulty in tracking workers effectively in real-time due to limited resources or technology. • Increased risk of accidents due to unmonitored PPE usage in hazardous areas.	• High upfront costs for hardware and software setup. • Potential difficulty in integrating the new system with existing infrastructure like attendance or safety management systems. • Time-consuming process to ensure all equipment and software are fully functional.	• Resistance from workers who are unfamiliar with or resistant to new technologies. • Training may not be comprehensive or consistent across all workers, leading to errors in system usage. • Initial setup may lead to confusion and delays, especially if workers are not tech-savvy.	• Reliance on constant connectivity, which can be a challenge in remote or low-connectivity areas. • False alarms or incomplete data (e.g., GPS inaccuracies) may cause confusion or reduce trust in the system. • Worker resistance to constant monitoring and privacy concerns may arise.	• Reliance on constant connectivity, which can be a challenge in remote or low-connectivity areas. • False alarms or incomplete data (e.g., GPS inaccuracies) may cause confusion or reduce trust in the system. • Worker resistance to constant monitoring and privacy concerns may arise.
Feelings	Frustration, Concern, Urgency	Optimistic, Cautious, Overwhelmed	Hopeful, Anxious, Cautious	Alert, Responsible, Frustrated	Reflective, Relieved, Proud
Opportunities	• Highlight the importance of real-time tracking and safety compliance, providing a chance to implement solutions. • Develop a proactive safety culture by addressing the root causes of non-compliance.	• Collaboration with stakeholders can foster better alignment of goals and expectations. • Selecting the right technology can enhance site efficiency, safety, and compliance. • Early investment in robust infrastructure can prevent costly rework later in the project.	• Onboarding is a great opportunity to build familiarity with new systems and engage workers early. • Proper training can increase worker buy-in and system adoption. • Clear role definitions improve accountability and make sure the right people are in charge of safety.	• Real-time monitoring can significantly enhance compliance and quickly address safety risks. • Automated reminders for PPE compliance can reduce the chances of human error. • Continuous feedback from dashboards enables swift action and better management of safety practices.	• Real-time monitoring can significantly enhance compliance and quickly address safety risks. • Automated reminders for PPE compliance can reduce the chances of human error. • Continuous feedback from dashboards enables swift action and better management of safety practices.