Customer journey Map

Introduction to the Application

The initial stage of the user journey involves the acquisition and setup of the application. Users are required to download the application from the appropriate mobile app store and complete the necessary registration processes, including the creation of accounts and the granting of permissions which are essential for optimal functionality.

Touchpoints

Mobile App Store The application can be accessed by site workers, safety officers, and managers via Google Play or the App

 - **Sign-Up/Login**: Users are prompted to create an account utilizing their email or workplace credentials. They may also need to upload personal identification for safety compliance and verify their roles. - **Permissions**: Permissions requested by the application include location services, camera access for PPE verification, and Bluetooth connectivity for proximity detection of PPE and personnel.

App Feature:

- The application facilitates account creation and the designation of user roles (Worker, Safety Officer, Manager).

- An introductory screen is included to guide users in utilizing the application for the purpose of safety tracking.

PPE & Safety Zone Setup

In this stage, the responsibility lies with Safety Officers and Site Managers to delineate and establish safety zones within the construction site, along with the requisite PPE specifications.

Touchpoints:

- **Safety Zone Mapping**: The app's mapping interface enables safety officers or site managers to identify and mark safety zones within the construction site.

- **PPE Requirement Assignment**: It is incumbent upon managers to specify the mandatory PPE types for each safety zone, which may include hard hats, gloves, boots, and vests.

- **Notifications & Alerts**: Configurable notifications provide reminders to workers regarding PPE requirements upon their entry into designated zones.

App Features:

- Integration of GPS and mapping capabilities allows for the definition of geographical safety zones.

- The option exists for uploading site drawings or floor plans. - Specific PPE types can be assigned to individual zones.

- Data regarding zones and PPE requirements syncs in real-time with the central database.

Worker Arrival at Site & PPE Check

Upon arrival at the construction site, the application conducts a verification process to ensure that workers possess the requisite PPE prior to entering designated safety zones. **Touchpoints**

- **Login Verification**: Workers initiate the process by logging into the app, which authenticates their identity.

- **PPE Check**: The application checks the PPE compliance of workers when they attempt to access safety zones, utilizing Bluetooth proximity for smart PPE or employing camera-based verification through image recognition technology.

- **Barcode Scanning**: Workers have the capability to scan QR codes on PPE items to confirm proper equipment.

- **Notifications**: Workers are alerted if they are found to be lacking any required PPE.

App Features:

- **Real-time PPE Monitoring**: The application employs Bluetooth and/or QR scanning to detect the presence of PPE.

- **Geofencing**: Upon entry into a safety zone, the app cross-verifies the compliance of PPE requirements for workers.

- **Real-time Alerts**: Alerts are dispatched to both the worker and the safety officer in cases where a worker enters a safety zone without the requisite PPE.

Tracking Labor Movement in Safety Zones

The tracking of worker movements within designated safety zones is essential for ensuring compliance with safety regulations. **Touchpoints**

- **GPS/Geofencing Tracking**: The application monitors the geographical movement of workers throughout the construction site, ensuring adherence to safety zone requirements.

- **Safety Zone Alerts**: Notifications are generated when workers enter non-designated areas without appropriate PPE.

- **Movement Logs**: The application maintains a log of worker entries and exits within safety zones, thereby providing a timeline of movements.

App Features:

- **Real-time GPS Tracking**: Continuous tracking capabilities allow for monitoring of workers within safety zones.

- **Alerts**: Notifications are established to inform of safety violations related to PPE compliance.

- **Analytics Dashboard**: Managers have access to historical data regarding labor movements and PPE compliance metrics.

Incident Reporting (If PPE is Missing)

This stage focuses on documenting and reporting incidents involving PPE non-compliance for subsequent corrective action. Touchpoints:

- **Incident Reporting**: In instances where a worker does not comply with PPE requirements, the supervisor or safety officer can report the violation through the application.

- **Photos and Notes**: Supervisors are equipped to capture photographs or annotate violations for submission and review.

- **Penalty & Compliance Tracking**: The application records any penalties imposed or training mandated following reported violations.

App Features:

- **Incident Form**: A dedicated in-app form allows for the systematic reporting of issues by supervisors.

- **Penalty Log**: The application maintains a log of repeat offenders and generates pertinent reports for human resources or safety audits.

Reporting and Compliance Check

The final stages involve the generation of compliance reports by Site Managers and Safety Officers to assess adherence to safety protocols and worker compliance.

Touchpoints:

enabled to view real-time metrics concerning worker usage of PPE

- **Daily/Weekly Reports**: Comprehensive reports detailing worker

movements, PPE compliance, and any incidents or violations are

- **Regulatory Audits**: These reports can be disseminated to

construction authorities or regulatory entities for safety audits.

App Features:

analyze compliance data and monitor safety statistics.

Excel formats facilitates audit processes.

Reporting Tools: Dashboards are available for managers to

- **Exportable Reports**: The option to export reports in PDF or

and adherence to safety zone regulations

- **Compliance Dashboard**: Site managers and safety officers are

- **Feedback Collection**: Users are invited to provide evaluative

App Updates: Based on the gathered feedback, updates to the

App Features:

- **Updates & New Features**: Regular updates are conducted to refine application functionality, improve accuracy in PPE tracking,

Worker Feedback & Continuous Improvement

This final stage prioritizes the solicitation of feedback from workers regarding the effectiveness of the application and existing safety protocols.

Touchpoints:

feedback concerning the app's usability and any safety issues that may require attention.

application can be implemented to enhance functionality.

- **In-app Survey**: Mechanisms for collecting user feedback on performance, usability, and suggestions for enhancements are integrated within the app.

and elevate overall site safety.