Business Model Canvas

Designed via AltexSoft BMC Tool

Key Partnerships

- Requirements:Smart Water Leakage Infrastructure: This involves IoT sensors detecting water leaks, measuring parameters like flow rate, pressure, humidity, etc.Mobile Application: The application will receive and display SMS alerts with the issue's details, including time, location, and severity of the leak.Canvas Integration: Use HTML5 Canvas to display an interactive map or a schematic of the infrastructure and highlight areas where the leak was detected

Key Activities

- Features Overview:SMS Alerts:Real-time Notifications: Mobile app receives SMS alerts when a leak is detected.Alert Information: Each alert contains:Leak Location: Where the leak was detected (e.g., street address, or specific room/building).Time of Detection: When the issue occurred.Severity Level: Critical, Warning, or Information.Map Link: Link to view the location on Google Maps.

Key Resources

- Future Enhancements:Push Notifications: Switch from SMS to push notifications for real-time updates.AI-based Leak Prediction: Integrate machine learning to predict potential leaks based on sensor data and historical trends.User Acknowledgement: Allow users to acknowledge or resolve the issue via SMS or the mobile app.

Value Propositions

- Canvas Visualization (Frontend):You can use HTML5 Canvas to draw a map or schematic of the infrastructure. Here's an example of how to create a simple canvas and highlight a location dynamically when an alert arrives:
- Mobile SMS Alert System:Use an SMS gateway to send alerts with the issue details. Here's how you can set up the SMS notification system using Twilio in Node.js

Customer Relationships

- This architecture allows for real-time monitoring of water infrastructure with visual alerts on a canvas and SMS notifications for mobile users, ensuring quick responses to potential issues.

Channels

- Mobile App Integration (SMS Receiver):React Native or Flutter: Use libraries like react-native-sms or sms in Flutter to read SMS messages.When an SMS is received, parse the message, extract the alert data (location, time, severity), and update the Canvas visualization accordingly.

Customer Segments

- To develop a mobile SMS application to alert and display issues for smart water leakage infrastructure systems, specifically for a Canvas-based application (using HTML5 Canvas), we can structure the solution with both mobile alerts (SMS) and interactive visualizations on a Canvas. Here's how to approach this

Cost Structure

- SMS Gateway: Twilio, Nexmo, or MessageBird for SMS.

Revenue Streams

- Canvas-based Visualization:Map or Schematic View: Show a visual representation of the water infrastructure (building layout, pipelines, or a district map).Dynamic Updates: Highlight the leak location on the canvas and update the status as new alerts arrive.