Business Model Canvas

Key Partnerships

- 1. Sensor Manufactures: Companies that produce the physical sensor for damage and leakage detection.
- 2. Mobile Network Providers: Partnership with telecom companies to ensure reliable SMS alert services.
- 3.0il And Gas Industry Consultants: Industry expert who can help in product development and market penetration.
- 4. Regulatory Bodies: Collaborating with governmental and environmental agencies to ensure compliance with safety and environmental standards.
- 5. Pipeline Service Providers:
 Collaboration with companies that maintain and operate pipelines to integrate the detection system into their services.

Key Activities

- 1. Research And Development: Ongoing development of the damage detection algorithms ,SMS notification system ,and mobile app.
- 2. Sensor Integration: Installing and integrating IOT sensor into pipelines for real-time data collection.
- 3. Software Development: Developing and maintaining the mobile app and cloud platform that sends alert, provides analytics, and tracks maintenance history.

Key Resources

- 1. Data Analytics platform: For processing sensor data, analyzing patterns, and generating actionable insights.
- 2. Costomer Support Team: To provide ongoing technical support and service to clients.
- 3. Research And Development: Engineers and developers to continuously the detection technology, app features and predictive algorithms.

Value Propositions

- -1. Real-Time Alerts: Instant SMS alerts
 about pipeline damage or leakage with exact
 location and time, minimizing delays in
 action.
- 2. Predictive Maintenance: Proactive identification of potential issues before they lead to catastrophic failures, reducing unplanned downtime.
- 3. Environmental Safety: Minimize the risk of environmental disaster (e.g., spills .gas leaks) by enabling rapid detection and response.
- **4. Coast Saving :** Reduced operational costs through preventive measures, minimizing repairs and insurance claims.
- 5. Regulatory Compliance: Helps companies meet safety and environmental regulations more effectively.

Customer Relationships

- -1. Dedicated Support: 24/7 Customer services to address any technical issues or alarms raised by system.
- 2. Maintenance And Updates: Regular system updates and monitoring services to ensure the system is always functioning optimally.
- 3. Training: Offering training for end-user (maintenance teams, operators) on how to respond alarms and use the system effectively.

Channels

- 1. Mobile apps (SMS-Based): The primary method of alerting pipeline operators and maintenance crews in real-time.
- **2. web Portal :** For more detailed analytics and reporting (including heat maps, trend analysis and historical data).
- 3. Direct Sales: Sales team reaching out to potential customers such as oil gas companies.
- 4. Industry Conferences & Trade Shows: Demonstrating the solution to potential clients.

Customer Segments

- 1. Oil and Gas Companies: Operators of pipelines, refineries and distribution network.
- 2. Pipeline Management Terms: Terms responsible for monitoring, maintaining and ensuring the integrity of pipelines.
- 3. Environmental Agencies: Regulators and environmental bodies concerned with safety, environmental impact and sustainability.
- 4. Insurance Companies: Interested in reducing claims related to leakage damage and increasing pipeline safety.
- **5. Equipment Manufactures/Distributors :**Companies that manufacture pipeline related equipment, sensors and monitoring technology.
- 6. Government/Regulatory Bodies: Those enforcing compliances with safety standards.

Cost Structure

- 1. Technology Development: Costs related to software development, sensor technology and R&D.
- 2. Sensor Manufacturing & Integration: Costs of purchasing and integrating sensor into pipeline infrastructure.
- 3. Cloud Services And Hosting: Cost of cloud storage, data processing and mobile app hosting.
- 4. Marketing And Sales: Costs associated with marketing campaigns, sales team salaries and customer acquisition.
- 5. Customer Support And Training: Staff costs for providing technical support, training and consultation services.
- **6. Regulatory Compliance :** Costs associated with ensuring that the system meets local and international regulatory standards.

Revenue Streams

- 1.Subscription Model: Monthly or annual subscription fees for access to the SMS alert system and mobile app.
- 2. Pre-Alarm fees: Charging for each detection or alert dent out (i.e., pay-per-use model).
- 3. Installation Fees: Charging for the setup of sensor, integration with pipeline systems, and app installation.
- **4. Consulting & Customization Fees :** Offering tailored services to meet the specific needs of large clients (e.g., customization of alerts, integration with proprietary systems).
- **5. Data Analytics And Reporting Services :** Selling additional insights and analytics to customers for operational improvement.