BUSINESS MODEL CANVAS: SMART DAMAGE/LEAKAGE DETECTION SYSTEM

Key Partners

- IoT Sensor Manufacturers: To integrate compatible sensors in the water pipeline infrastructure
- Telecom Providers (e.g., Twilio, local carriers): To send automated SMS notifications to field staff and engineers
- Cloud Hosting Providers (e.g., AWS, Azure): For backend server hosting, data storage, and real-time processing
- Local Governments: For funding, regulatory compliance, and access to city infrastructure

Key Activities

- Develop APIs to connect with different water sensors
- Create logic to detect abnormal patterns (e.g., pressure drops)
- Build admin dashboard for city officials
- Set up SMS automation rules (e.g., alert escalation based on severity or zone)
- Train city employees on how to respond to alerts

Key Resources

- Software developers (mobile & backend)
- Data engineers to handle sensor data streams
- IoT integration specialists
- SMS Gateway APIs and credits
- Sensor testbed and labs for validation
- GIS tools to map locations of leaks

Value Proposition

- Immediate detection and alert when a water leak occurs
- Reduces water loss and infrastructure damage
- Pinpoint location via SMS and dashboard
- Helps prioritize response (e.g., based on zone or impact)
- Low-tech, SMS-based system works without internet

Customer Relationship

- Dedicated municipal onboarding support
- Regular check-ins and performance reports
- Alert customization support (language, frequency, priority levels)
- 24/7 technical support for outage handling

Channels

Direct sales to municipalities via public tenders
- Partnerships with water management system providers
- Demo presentations at smart city expos
- Pilot programs with local government support

Customer Segments

- City Municipal Water Departments
- Public Utilities Infrastructure Maintenance Teams
- Disaster/Environment Management Departments

Cost Structure

- App development and maintenance
- SMS gateway charges (per message or monthly bulk package)
- Cloud server hosting and data management
- IoT sensor testing and integration
- Support staff and training programs

Revenue Stream

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur laoreet odio lectus, at - Monthly subscription from municipality (based on area covered or number of zones)
- Custom setup/installation fee per site or pipeline section
- Consultation and support services
- Grants and public funding for infrastructure tech solutions
accumsan purus tincidunt eu. Cras tincidunt sit amet velit ut viverra. Suspendisse eget pulvinar ante.