# **Key Partnerships**

- Metro rail network operators and agencies
- Sensor and IoT device manufacturers
- Data analytics and AI technology providers
- Cloud service providers (e.g., AWS, Azure)
- Regulatory bodies and compliance organizations
- Local government and municipal authorities
- Technical support and maintenance partners

# **Key Activities**

- Research and development of the SHM (Structural Health Monitoring) system
- Integration of sensors and IoT devices on metro rail infrastructure
- Development of data collection and processing algorithms
- Creation of the dashboard for real-time monitoring and issue reporting
- Implementation of data analytics and predictive maintenance models
- Continuous system testing and quality assurance

## **Key Resources**

- Skilled R&D team with expertise in sensors, IoT, and data analytics
- Software developers for the dashboard and backend systems
- Partnerships with sensor and IoT device manufacturers
- Cloud infrastructure for data storage and processing
- Financial resources for R&D and marketing
- Data scientists for algorithm development

## Value Propositions

- Real-time monitoring of structural health for metro rail networks
- Early detection and identification of potential issues and failures
- Enhanced safety and reliability of metro rail services
- Cost savings through predictive maintenance and reduced downtime
- Comprehensive dashboard with detailed insights and visualizations
- Integration with existing metro rail infrastructure
- Compliance with regulatory standards and guidelines

### **Customer Relationships**

- Dedicated account managers for metro rail operators
- 24/7 technical support and customer service
- Training programs for metro rail staff
- Regular updates and improvements based on customer feedback
- Service Level Agreements (SLAs) for guaranteed performance and uptime

## **Customer Segments**

- Metro rail network operators and authorities
- Municipal and local government agencies
- Infrastructure maintenance companies
- Safety and regulatory bodies
- Insurance companies involved in public transport

### Channels

- Direct sales to metro rail operators and agencies
- Industry conferences and trade shows
- Partnerships with IoT and sensor manufacturers
- Online marketing and digital campaigns
- Webinars and workshops for industry professionals
- Publications and white papers in relevant iournals

# **Cost Structure**

- Costs for purchasing and integrating sensors and IoT devices
- R&D expenses for system and software development
- Cloud service fees for data storage and processing
- Marketing and sales expenses
- Operational costs for support and maintenance teams
- Training and customer support expenses
- Regulatory compliance costs

#### **Revenue Streams**

- Subscription fees for using the monitoring system and dashboard
- One-time setup fees for initial installation and integration
- Maintenance and support service contracts
- Customization and consultancy fees for tailored solutions
- Data analytics and reporting services for regulatory compliance