Key Partnerships

Sensor and IoT Device
Manufacturers.Metro Rail
Authorities and City
Governments.Civil
Engineering Firms and
Academics.Insurance
Providers for Risk
Analysis.Technology
Providers (Cloud, Al, and Big Data).

Key Activities

Designing and Developing SHM Systems.Installing Sensors on Metro Rail Structures.Data Collection, Processing, and Analysis.Continuous System Maintenance and Upgrades.Training Operators and Maintenance Teams.

Key Resources

Advanced IoT Sensors and Devices.Data Analytics Platforms and Al Algorithms.Skilled Engineers and Technicians.Research and Development Teams.Cloud Infrastructure for Data Storage and Processing.

Value Propositions

Safety and Reliability: Early detection of structural issues to prevent accidents.Cost Efficiency: Reduce maintenance costs with predictive maintenance.Operational Continuity: Minimize downtime by proactively managing risks.Regulatory Compliance: Ensure adherence to safety standards and regulations. Environmental Impact: Extend infrastructure lifespan. reducing waste.

Customer Relationships

Dedicated Account Managers for Metro Rail Operators.24/7 Technical Support and Maintenance.Co-development Initiatives for Custom Solutions.Subscription-based Models for Long-term Engagement.

Customer Segments

Metro Rail Operators (public and private)City Transport
AuthoritiesUrban
PlannersMaintenance
ContractorsInsurance
CompaniesCommuters (indirect beneficiaries)

Channels

Direct Sales to Metro Rail Authorities.Industry Events and Conferences.Partnerships with Engineering Consultancies.Online Platforms and Social Media for Awareness.Government Collaboration Programs.

Cost Structure

R&D for SHM System Development.Manufacturing and Procurement of Sensors.Cloud Infrastructure and Data Storage Costs.Marketing and Customer Acquisition.Staff Salaries for Engineers, Analysts, and Support.

Revenue Streams

Initial Installation Fees for SHM Systems. Subscription-based Predictive Maintenance Services. Data Analytics Services for Long-term Monitoring. Licensing SHM Technology to Other Rail Networks. Consultancy Services for Infrastructure Design and Retrofitting.