

CUSTOMER JOURNEY MAP



METRO RAIL OPERATOR

Scenario

The metro rail network operator wants a comprehensive solution for structural health monitoring on metro rail networks ,including a dash board to display identified issues and corresponding locations

Expectations

- Real - time alerts on structural issues
- easy to understand dashboard interference showing locations and components affected
- Ability to monitor trends over time and predict potential issues

Phase 1

Phase 2

Phase 3

Phase 4

Actions

- Analyze current structural health monitoring gaps.
- Identify critical structural elements that need monitoring (e.g., tracks, bridges, tunnels).
- Research available technologies for real-time monitoring.

- Implement sensors and IoT devices on critical components (e.g., strain gauges, accelerometers).
- Develop data collection framework using edge computing for real-time processing.
- Set up cloud infrastructure for data storage and analytics.

- Install sensors and integrate with metro rail systems.
- Develop a dashboard interface to display real-time data, alerts, and structural health indicators.
- Conduct testing to ensure accuracy and reliability.

- Monitor dashboard for alerts and take action when issues are detected.
- Analyze long-term data to predict structural health trends.
- Regularly update the system to incorporate improvements.

Pains

- High maintenance costs due to unexpected structural failures.
- Limited visibility of real-time structural data.

- Complexity in integrating different sensors and systems.

- Possible technical issues during installation.

- Need for continuous monitoring and maintenance.

Feelings

- 😞 Concerned about potential failures and delays.
- 🤔 Curious about innovative solutions to improve safety.
- 😓 Overwhelmed by the scope of the monitoring requirements.

- 😐 Uncertain about setup costs and integration challenges.
- 😬 Nervous about potential technical hurdles in setup.
- 😊 Optimistic about the potential benefits of the solution.

- 😄 Excited about better visibility and control.
- 😌 Relieved to have real-time data on structural health.
- 🙌 Hopeful that the system will function smoothly without major issues.

- 😊 Confident with increased system reliability and data insights.
- 😌 Reassured by the system's predictive capabilities.
- 😊 Satisfied with the positive impact on maintenance costs and safety.

Opportunities

- Real-time monitoring can reduce maintenance costs and improve safety.

- Unified data platform for better decision-making.

- Dashboard provides a clear overview of structural health for proactive maintenance.

- Predictive maintenance can prevent major failures and reduce costs.