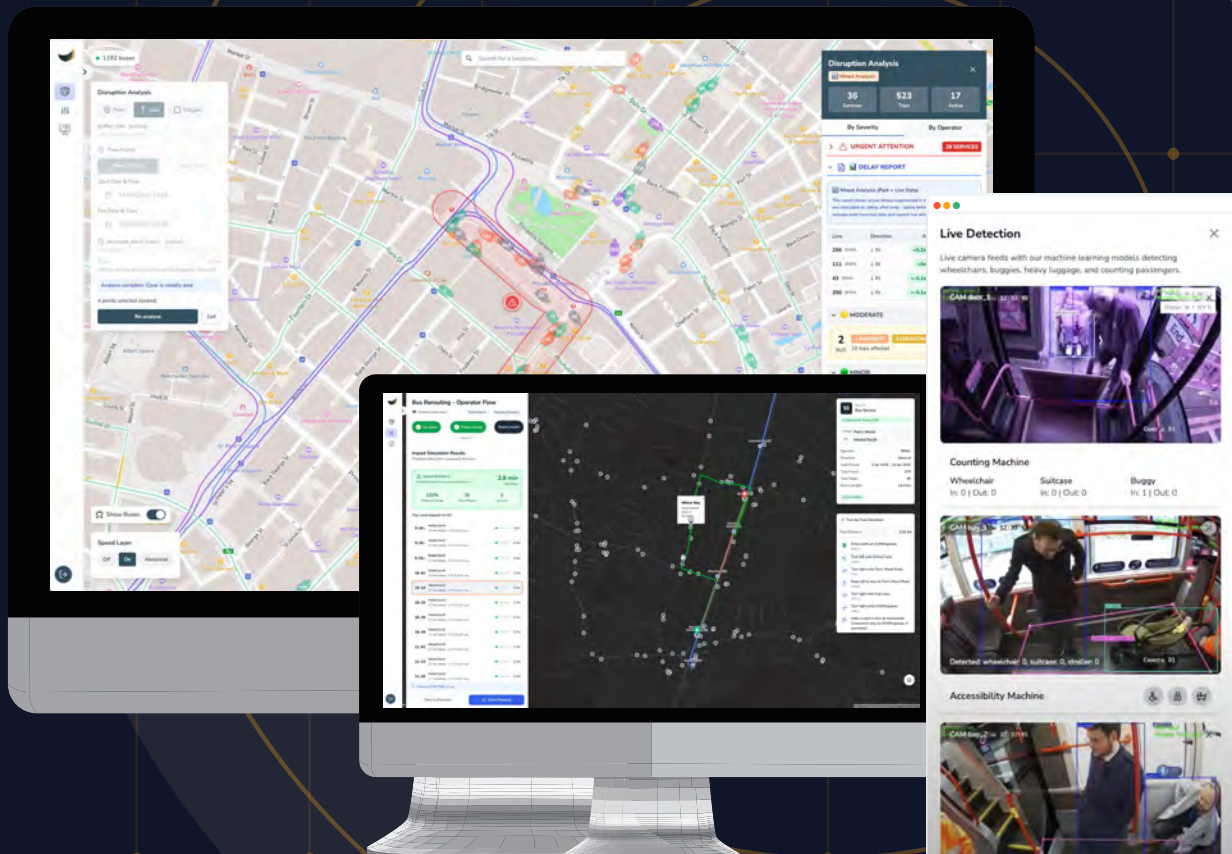


Moonbility

Service Definition

Moonbility Multi-Modal Disruption Impact Platform



G-Cloud 15

Lot 2a: Infrastructure Software as a Service (iSaaS)

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About Moonbility

The Future of Intermodal Disruption Intelligence

Moonbility provides a disruption impact platform designed to support operational decision-making across public transport and logistics networks, including bus, rail, and freight operations. The service enables control rooms and operational teams to understand where disruption is occurring, how it is likely to evolve, and which services or users may be affected. By combining real-time operational signals into a single, network-level view, Moonbility supports clearer situational awareness and more consistent communication during disruption. Moonbility is used across a range of transport contexts, including intercity rail, bus networks, and vehicle-level accessibility monitoring. The platform is designed to work alongside existing operational systems and to support both day-to-day service management and disruption response.

The Challenge Addressed

The Ripple Effect of Network Disruptions

Whether moving people or goods, the efficiency of modern transport networks depends on seamless synchronisation across multiple modes. However, transport authorities and logistics operators remain trapped in "Information Silos." When a major road artery fails, a rail line is suspended, or a hub becomes congested, decision-makers often lack the real-time visibility to judge the ripple effect across the entire network. This intelligence gap leads to delayed responses, increased operational costs, and avoidable carbon emissions.

The Service & Core Capabilities

Moonbility:

The Centralised Intelligence Hub for Intermodal Networks

Moonbility provides a next-generation SaaS-based Intermodal Disruption Impact Platform. Positioned as a strategic "Umbrella," our platform harmonises disparate infrastructure, movement, and behavioural data into a single, actionable decision-support environment.

We empower organisations to eliminate network uncertainty and turn data into decisions through:

1. Holistic Disruption Monitoring

Unified visibility across the movement of people and goods. Moonbility integrates disparate data streams—including road flow (GPS), rail status (live feeds), and key logistics nodes such as ports and distribution hubs. By identifying anomalies automatically, we provide a unified network view that eliminates "blind spots," ensuring operators are alerted to incidents the moment they occur, rather than discovering them through delayed manual reports.

2. Real-time Impact Quantification

Understanding the ripple effect on intermodal connectivity. Beyond simple incident detection, our platform quantifies the immediate consequences of a disruption. By analysing connectivity in real-time, Moonbility predicts potential delays and assesses capacity loss across the network. This enables authorities and operators to understand not just that a route is blocked, but how that blockage will degrade bus reliability or freight throughput over the subsequent hours.

3. Predictive Scenario Simulation

Testing interventions in a virtual environment before deployment. Our platform enables managers to run "What-if" simulations on the fly. By modelling various intervention strategies—such as re-routing freight or adjusting public transport frequencies—operators can evaluate the projected outcome of their decisions. This digital twin capability ensures that the chosen mitigation strategy is the most effective way to restore network stability.

4. Proactive Strategic Orchestration

Shifting from reactive response to anticipatory management. We convert raw data into "Disruption Intelligence." Our platform provides the foresight needed to mitigate service gaps before they escalate. By offering actionable insights and simulated outcomes, Moonbility allows for the proactive reallocation of resources, ensuring that the movement of people and goods remains resilient even **under adverse conditions**.

Proven Impact

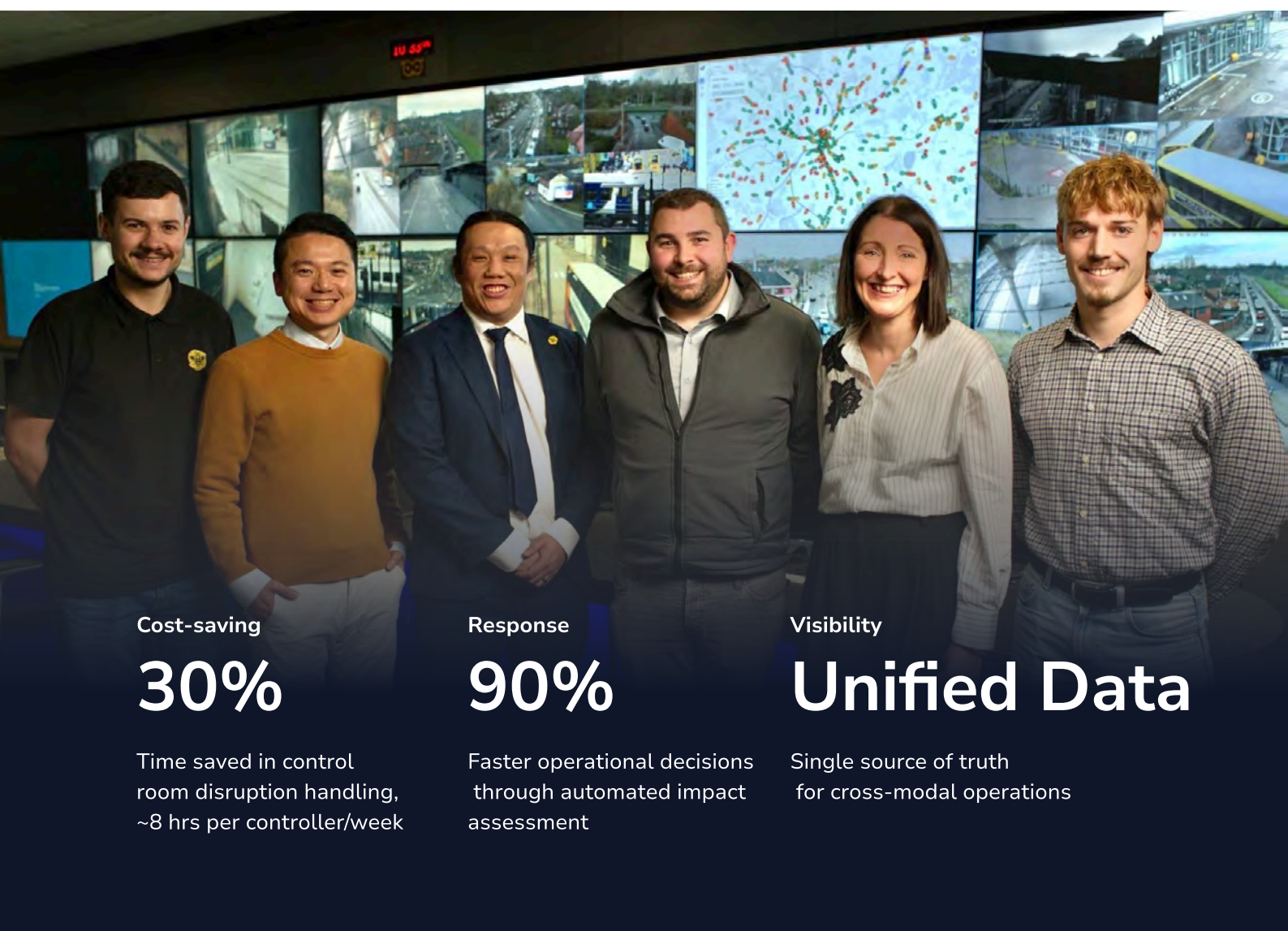
Case Study 1:

Transport for Greater Manchester - Network Resilience



Managing one of the UK's most complex networks with 2,000+ buses, TfGM faced the industry-wide struggle of coordinating cross-modal disruptions using fragmented, manual data streams.

Moonbility deployed its AI-driven twin to integrate real-time network data, replacing manual guesswork with automated impact simulations and unified visibility for the Operational Control Centre team.



Cost-saving

30%

Time saved in control room disruption handling, ~8 hrs per controller/week

Response

90%

Faster operational decisions through automated impact assessment

Visibility

Unified Data

Single source of truth for cross-modal operations

Proven Impact

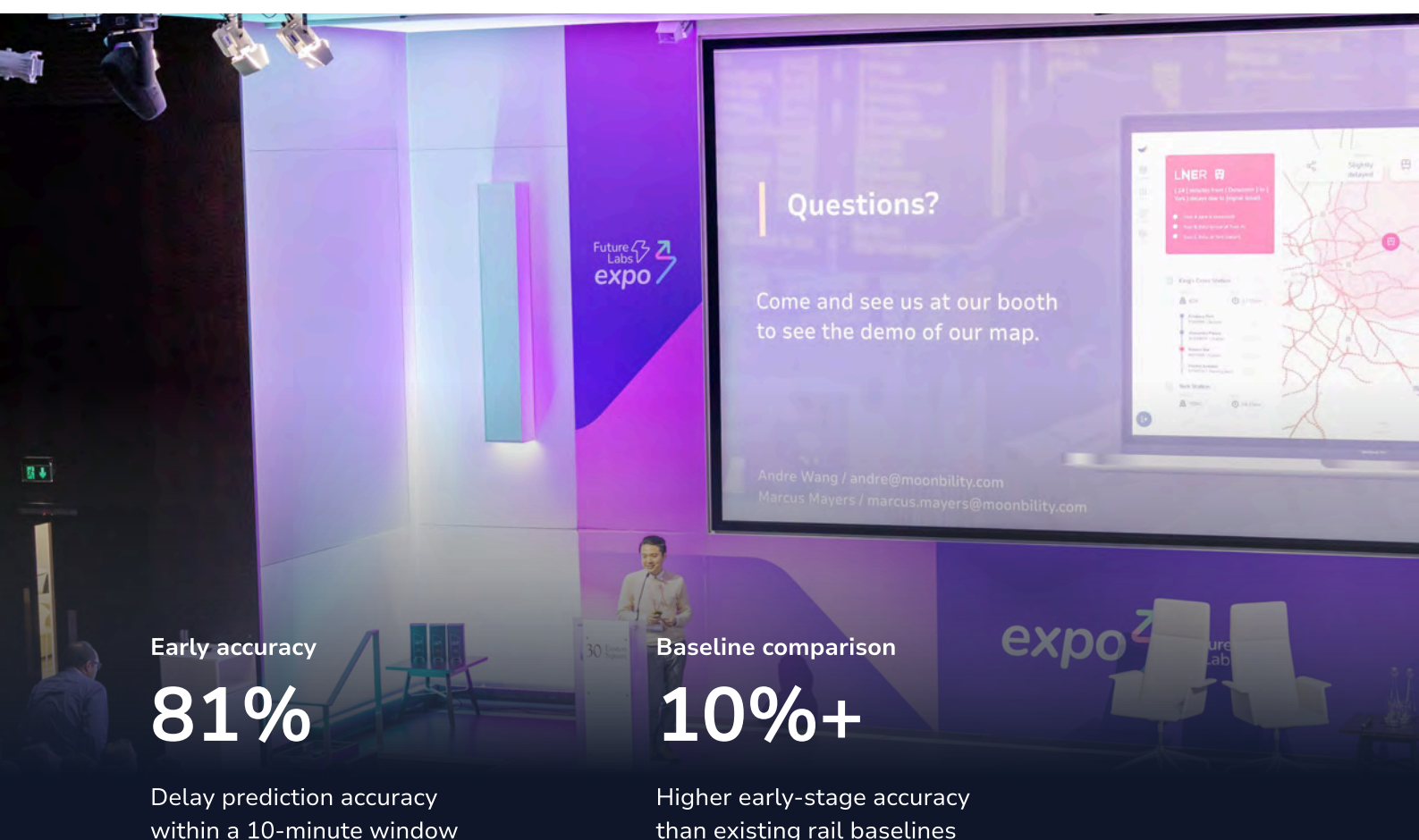
Case Study 2:

LNER - Rail Disruption Intelligence and Passenger Information

LNER

Operating intercity rail services where disruption messaging must be updated frequently under uncertainty, LNER faces the challenge of interpreting how delays will evolve over time, with historic analysis showing that over 65% of incidents require 10 or more updates to refine passenger information.

This work was conducted in collaboration with operational teams at LNER's York Rail Operating Centre (ROC), reflecting real-world decision-making conditions within an intercity rail operating environment and illustrating how enhanced disruption insight could inform future passenger information approaches within Great British Railways (GBR).



Proven Impact

Case Study 3 : National Express - Onboard Disruption Intelligence



Across its UK bus network, National Express faces limited real-time visibility of onboard accessibility and capacity, particularly wheelchair bay availability, creating uncertainty during disruption or peak demand. This challenge is amplified by a mixed vehicle fleet, where consistent accessibility monitoring is difficult to achieve.

Moonbility's platform was extended with vehicle-level accessibility and occupancy intelligence (WheelsOnBoard), applied within selected Birmingham bus routes to surface real-time capacity signals and integrate them into the central disruption intelligence environment. This improved awareness of accessibility constraints and supported clearer decision-making and passenger information across a large-scale bus network.



Signal Accuracy

93%

Reliable detection of onboard accessibility and capacity signals

Response Speed

<1s

Near real-time awareness of wheelchair bay availability

Decision Confidence

Policy-aligned

Supports accessibility-led decisions and compliance reporting.

Onboarding & Offboarding

Onboarding

Moonbility is onboarded through a configuration-led process designed to work alongside existing systems, without requiring changes to current operational tools or workflows. Onboarding focuses on aligning the platform with local operating practices rather than bespoke development.

A typical onboarding approach includes:

- Initial scoping (typically ~1 week) to confirm network coverage, data sources, and intended use cases
- Configuration (typically ~1 week) to establish secure data connections, user access, and system settings
- Calibration and validation of disruption thresholds (typically ~2 weeks), supported by a focused on-site or virtual workshop with relevant teams to ensure outputs reflect real-world disruption patterns and decision needs

Onboarding can be phased, allowing organisations to start with defined areas or use cases and expand over time.

Offboarding

Moonbility supports structured offboarding to ensure customers retain control of their data and operational continuity. Offboarding includes the termination of data integrations and user access, alongside secure export or deletion of customer data in line with agreed data handling policies. The service is designed to avoid dependency on proprietary formats, enabling organisations to transition away without disruption to their wider operational environment.

Support & Service Management

Support hours

We provide a standard response time of within 4 hours for high-priority operational issues and within 1 working day for general enquiries. Support is accessible via our dedicated support email and online portal from 09:00 to 17:00 (UK time), Monday to Friday, excluding UK public holidays. During major planned transport events or critical disruptions, extended support windows can be pre-arranged to ensure continuous monitoring. All enquiries are formally logged and tracked to ensure transparent resolution. This dual-channel approach ensures that stakeholders can always reach our technical team during critical incidents.

Availability and Resilience

Moonbility is designed to deliver high service availability through a resilient, multi-zone cloud architecture and continuous platform monitoring. The service is built on enterprise-grade infrastructure to support reliable operation during core operational hours and to minimise disruption to users.

Service availability is supported by proactive incident management and planned maintenance processes, with any scheduled maintenance communicated in advance wherever possible. The platform is operated in line with defined service levels, which are agreed with buyers at call-off stage to reflect their specific operational requirements and deployment context.

Where service levels are not met, a service credit mechanism applies in accordance with the agreed service levels and Terms and Conditions, with credits applied against future invoices.

How we charge

Pricing Model

Pricing is calculated on a per-asset, per-month basis. An asset may refer to a vehicle, station, stop, or other operational unit, depending on the transport mode and deployment scope.

The service is typically contracted on an annual basis, reflecting its role as a core operational intelligence platform. Shorter initial terms or time-limited deployments can be agreed at call-off stage where appropriate, for example to support phased roll-outs or early operational adoption. Pricing levels vary based on the capabilities enabled and the technical configuration required for each asset.

Contact Details

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