

How a Mobility Operator Cut Recurring Faults Using Centralized Maintenance & Fault Logs

CLIENT PROFILE

A leading EV fleet operator managing hundreds of electric two-wheelers, three-wheelers, and last-mile delivery vehicles across multiple city clusters. Their fleet forms the backbone of daily logistics operations for e-commerce, food delivery, and on-demand mobility services.

With each vehicle completing several duty cycles a day, the operator needed a reliable system for fault reporting, root-cause analysis, and preventive maintenance to avoid disruptions in fleet availability.

CHALLENGE

The operator faced persistent issues causing repeated failures across the fleet:

- Recurring motor, controller, and battery-related faults with no consolidated root-cause insights.
- Missing or inconsistent vehicle service logs, making pattern identification difficult.
- Technicians diagnosing issues differently across locations, leading to inconsistent repairs.
- Lack of standardized checklists for scheduled maintenance.
- No central dashboard to track which vehicles were failing frequently.
- Vehicles repeatedly sent back to service bays without solving the underlying issue.





Solution Provided by Asset Infinity

Asset Infinity helped the client build a centralized fleet maintenance intelligence system, bringing all fault, service, and repair data under one unified platform.

Centralized Fault Logging System

- Drivers logged issues through a mobile app with fault categories, descriptions, and photos.
- Faults auto-assigned to the correct depot technician.
- Repeated fault instances flagged automatically.

Unified Technician Repair Logs

- All repairs logged digitally with parts replaced, labour, and diagnostic details.
- Mandatory fields ensured standardized reporting.
- Geo-tagged entries confirmed repairs happened at the correct service location.

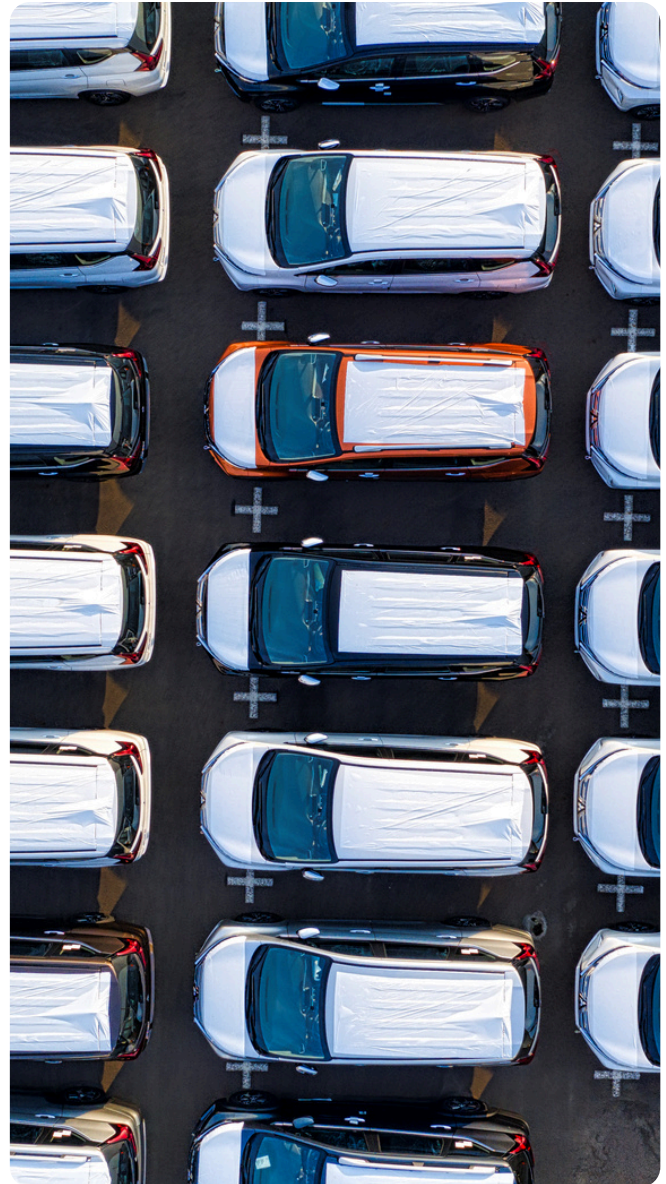
Root Cause Identification Dashboard

- System grouped recurring faults (e.g., controller overheating, BMS errors, loose connections).
- Highlighted vehicle IDs with unusually high fault frequency.
- Provided fault heatmaps by zone, depot, technician, and vehicle model.



Standardized Preventive Maintenance Schedules

- PM checklists created for each vehicle type.
- Maintenance triggered automatically by odometer, runtime hours, or time period.
- Escalations raised when PM was overdue.



Spares & Replacement Tracking

- Visibility into spare parts consumption helped identify faulty components or poor-quality suppliers.
- Highlighted technicians repeatedly replacing the same part.

MEASURABLE BENEFITS

67% reduction in repeated failures within 120 days.

Improved quality of repairs through standardized technician logs.

Clear insights into component-level failure trends allowed better supply-chain decisions.

Higher fleet availability and fewer mid-route breakdowns.

Better route planning because vehicles stayed operational longer.

IMPLEMENTATION & ROLLOUT

- Rolled out across all depots in a phased manner.
- Drivers, dispatch leads, and depot technicians trained with hands-on sessions.
- Integration with the fleet's telematics provider for synchronized fault alerts.
- No disruption to daily routes or delivery operations.

OUTCOME & IMPACT

The operator gained:

- A single source of truth for all faults, repairs, and fleet health.
- Higher vehicle uptime, improving delivery SLAs and customer satisfaction.
- Reduction in maintenance overheads and repeated part replacements.
- Faster decision-making through fault-pattern visualization.
- Strong collaboration between operations, maintenance, and vendor teams.



CONCLUSION

By centralizing fault logs, standardizing technician reporting, and digitizing preventive maintenance, Asset Infinity enabled the mobility operator to cut recurring vehicle failures by 67%, ensuring a more reliable, predictable, and scalable fleet operation.