

# PUBLIC TRANSPORT FLEET MANAGEMENT SYSTEM

Leading The Future of Mobility



# Public Transport Fleet Management System

Municipals, transport providers and fleet operators face increasing challenges from urbanisation. Leveraging smart technologies, analytics and emerging technologies, our fleet management solutions for public transport optimise and better match the demand and supply of fleet resources to ensure commuters travel swiftly and safely from point to point. Our solutions have managed more than 46,000 vehicles for fleet owners.



## Bus Fleet Management System



The Bus Fleet Management System provides a complete suite of solutions for bus management, automatic fare collection and smart bus stop deployment.

The system encourages the use of public transportation by delivering high quality travel experiences for commuters. It also increases operational efficiency and revenue for fleet operators.

The Bus Fleet Management System offers:

- consistent and reliable bus operations
- demand responsive bus services
- reliable passenger information
- seamless collection of transport fares



### Fleet Management

#### Key Benefits

- Easy visualisation of bus network for real-time monitoring
- Manage ad hoc bus operations including on-demand transportation
- Support centralised management of operations
- Effectively manage and measure performance of bus fleets operated by different service providers

#### Key Solutions







-  **Tracking and Dispatch**
  - Service level monitoring for operation enhancement
  - VoIP communications with bus drivers
  - Intelligent decision support for operators
-  **Key Performance Indicators (KPI) and Report Management**
-  **Centralised Data Management**
  - Manage all bus data (bus-stops, routes, bus profiles, fares, etc.) on a unified platform
-  **Bus Arrival Time**
-  **Event Management**
-  **Device Management**
-  **Passenger Information Display System**

### Automatic Fare Collection

#### Key Benefits

- Provide reliable revenue collection for bus services
- Allow commuters to pay through different modes
- Support cross-modality fare collection
- Analyse collected data to provide valuable insights of bus occupancy for bus service enhancement and better route planning

#### Key Solutions



-  **Bus Validator and Point of Sale (POS) System**
-  **Ticket Vending Machine**
-  **Cashier / POS System**
-  **Central Computer System**
-  **Reconciliation Module**
-  **Report Generation Module**

### Smart Bus Stop

#### Key Benefits

- Increase passenger ridership and revenue
- Improve comfort of commuters waiting at bus stops to encourage more people to use public transport
- Provide useful real-time bus information to commuters to enhance journey planning
- Enhance safety of commuters and crowd management

#### Key Solutions

-  **Infotainment Module**
  - Passenger Information System
  - Electronic advertisement boards
  - WiFi access point
-  **Physical Enhancement Module**
  - Cooler environment and shelter
  - Comfortable and durable bus stop seats
-  **Sensing Module**
  - CCTV surveillance: enhance the safety of commuters
  - Video analytics: people counting and better crowd management

# Taxi Fleet Management System



The Taxi Fleet Management System leverages automated algorithms, analytics and smart technologies to optimise operational efficiency and customer satisfaction for taxi fleet operators. It enables the operators to better compete in a fast-changing ecosystem catalysed by disruptive technologies.

## Key Benefits

- Automated taxi fleet management system to optimise operational efficiency for taxi operators
- Scalable and configurable system for managing single fleet and multiple taxi operators' fleets on a common platform while maintaining independent business operations
- Enhance competitive advantage and revenue generation of taxi operators by better matching the supply and demand of taxis and resources

## Key Solutions



### In-vehicle Systems

- Mobile display terminal with integrated meter
- In-vehicle CCTV surveillance system
- Mobile application for driver
- Booking application for passenger
- Pin-pad / cashless terminal
- Fraud detection



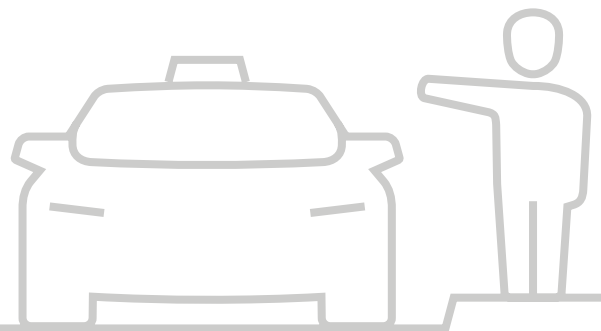
### Taxi Fleet Management and Dispatch System

- Call centre and bureau service operations
- Intelligent dispatch and booking with data analytics
- Driver management
- Vehicle management

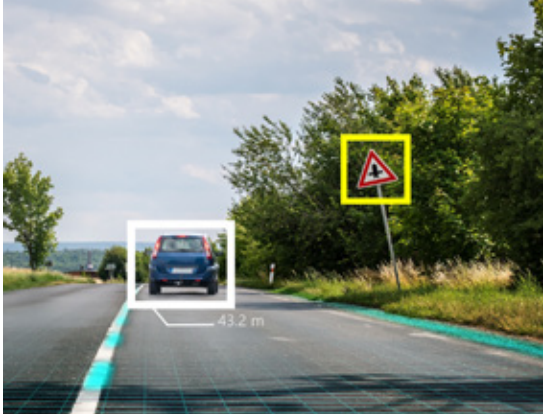


### Cashier Systems

(for revenue management)



# Autonomous Vehicle (AV) Monitoring and Evaluation System








The AV Monitoring and Evaluation System enables real-time monitoring and automated evaluation of AV readiness for various traffic situations and environments. It provides an all-rounded assessment of AV behaviour to ensure its safe deployment on the road.

## Key Benefits

- Robust platform to integrate and make sense of data generated from AV tests
- Increase efficiency and accuracy of AV tests through automated evaluation of performance
- Ensure AV compliance with safety standards and benchmarks
- Enable quick search and scenario re-creation for incident investigation

## Key Solutions

-  AV Tracking and Management Module
  - Configurable geo-fences
-  Evaluation Module
  - Scenario re-creation, review and evaluation
-  Integration Module
  - Integrate with external modules such as Integrated Transport Platform, AV System, Surveillance System and Beacon System
-  Report Generation
  - System health monitoring and anomaly alert
-  Vehicle-to-Everything (V2X) Communications
  - Onboard unit and roadside unit



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