Intelligent Public Transport Management System

On Track to Reduced Costs, Enhanced Flexibility, Increased Security, and Improved Ridership Convenience
Today, more than half of the world's population live in cities and surrounding areas – and they increasingly favour public transport as a way to get around.

For the public transport industry, this presents a welcome challenge, and a great opportunity. In short, we need to provide modern public transport systems that focus on customers’ needs and are scalable to increasing demand. And the solution requires close collaboration between public and private sector experts.

For passengers
Passengers’ increasingly multimodal journeys need to be more seamless, interconnected and flexible. Not just in terms of overall experience, but also in terms of fully integrated ticketing and tariff systems, and by sharing real-time information among operators so customers can plan their journeys more effectively and fulfil or pay for them instantly, wherever and however they choose.

For regulators, transport authorities and operators
Providing safe and seamless journeys for fast-growing urban populations is the overriding priority. But behind the all-important customer experience, there are multiple considerations, each necessary for logistic and economic viability:

- Integrating tariff and transport services
- Enhancing audit and control processes
- Sharing standardised information to support planning and systems management strategies for reduced operating costs to help finance incremental improvements
- Staying one step ahead of fare evasion and ticket fraud
- Cashless ticketing for multiple, complex routes
Meeting passengers and operators’ needs
Bioenable Smart Ticketing provides ‘end-to-end’ ticketing with a powerful and fully configurable central system. With Bioenable Smart Ticketing, we give you access to a ticketing standard that applies across all components of the system. It comprises a comprehensive set of features, characteristics and technologies that fulfil the full range of transport operator and passenger requirements.

Full integration
With Bioenable Smart Ticketing, you can add a complete set of fare media, including paper ticketing, contactless smart cards and tokens – as well as different technological alternatives for mobile and ID based ticketing.

Supporting front-office capabilities
Retailing typically covers ticket-office POS solutions, ticket vending machines, and web and mobile virtual channels, among others.

Meeting existing standards while setting new ones
Bioenable Smart Ticketing is also designed to meet a range of international standards.

Cross-compatible with complementary systems
Designed and created with the entire passenger experience in mind, Smart Ticketing works seamlessly with other components.

Conductors
issue tickets in real time through conductor app which is integrated with an hand held terminal to thermal print the tickets onspot.

The data feeds from apps and handheld terminals is fetched on central dashboard automatically through 3G/ GPRS network.

All pnr number can be searched in app and machine if generated for a particular trip to avail the journey.

QR Code Verification:
QR Code verification is done at the time of travelling. We can book the ticket online through mobile app or website and after payment QR code sms alert will send on registered mobile number so that the person can download the link of QR code from sms and verify it by scanner.
Conductor App For Ticketing

**Handheld Ticketing Terminal**
- GPS, 2G/3G, Wifi
- Thermal Printer
- Payment terminal
- NFC for Pass/Fare
- Print from Mobile App
Our proposition is based on a thorough understanding of three key components, and the complex interplay between them:

**Content**
Passengers demand real-time, accurate travel information, available through multiple channels, so they can plan multimodal journeys before they set off. This data should be available online and on the go, on personal hand-held devices and on operator panels.

**Payment**
Travellers look for choice, flexibility and speed when it comes to paying and fulfilling public transport fares – whether by pre-paid travel cards, mobile technology, or by card or cash at stations, or in-travel.

**Access**
People want the freedom to get from A to B using any mode of transport, at any time – locally, nationally or internationally – and have integrated, intermodal ticketing systems to support less fragmented, more seamless journeys. Ideally, they want to pay just once for a journey that requires several changes or modes of transport.

Our Transportation Solutions can ease the transition from proprietary closed-loop fare collection to modern, PCI secure, open payments. Transit agencies will benefit from decreased operating costs and elimination of fare media issuance. Riders will enjoy faster service and support. Customers and partners will choose Bioenable based on innovative features such as GPS bus tracking, quality devices, Automatic fare collection.
Cloud based GPS Tracking platform used in over 25 countries for real-time tracking of People, Cars, Fleet & Assets using GPS trackers & Mobile Apps. We are your one stop partner for GPS tracking business.

- Custom Based Maps
- Mobile Device Compatible
- Geofencing
- Automated Alerts
- Reports
- Vehicle and asset tracking
- Address Location Pins
- Trip/ Task Management

Fleet Management GPS Tracker
- Internal/External antennas
- Temperature Sensor
- Fuel Sensor
- Driver identification
Snapshots

Dashboard

Daily Summary
- Distance: 0.00 kms
- Motion: 00 min
- Stop: 00 min
- Speed: Avg/Sd
- Logs: Valid
- Driver: NA

Alerts
- SOS
- Confidence
- Battery
- Speed
- Seat Belt

Reports
- Start Stop
- Detailed Raw Log
- Begin End Day
- Harsh Acceleration
- Harsh Braking

Maps
- Live Tracking
- Heat Maps
- Play Map

Configure
- Max Speed (in km/h)
- Confidence (1-100)
- Email ID
- Log Filters

Summary Chart Report

Daily Logs Chart

Begin End Day Map

Over Speed Map

Last Status Map

Dedicated Website for Online Live Bus Tracking available
As transit service continues to evolve, passenger information systems are quickly becoming a mainstay in today’s public transit domain. Integrated systems that keep passengers informed along their journey are increasingly in demand, and transit agencies must find a way to keep up with this need.

A passenger information system is the key communications link between a transit agency and their riders. Passenger information technology lets a transit agency communicate with its passengers to provide them with real-time bus location and status updates, schedule data and timely announcements. It vastly improves the transit experience for riders and streamlines work for agency employees.

The Benefits
The goal of any transit agency is to provide efficient, reliable service to their riders. For this to occur, information about an agency’s service must be effectively distributed to the public. Implementing a Passenger Information System means:

- Reduced Perceived Wait Time: The negative impact of transit delays is minimized, leading to increased ridership numbers and the perception of better customer service.
- Increased Dispatch Efficiency: Dispatchers and call takers won’t have to deal with as many ‘where’s my bus’? calls, which means more time for everything else.
- No More Guesswork: Passengers won’t have to guess when their bus will arrive—they’ll know

Wayside and Transfer Station Signs
Wayside signs stand at a bus stop or terminals and inform passengers of the Estimated Time of Departure of upcoming vehicles. They are a useful way for transit agencies to dynamically manage and distribute their information. They can also provide information such as time, temperature and news updates. Wayside signs use the real-time data generated by the CAD/AVL software to tell riders when buses are expected.

Here are a few Return on Investment (ROI) figures that demonstrate the impact that passenger information technology has made on transit operations.

- 65% of passengers felt they ‘waited for a shorter period of time’
- 64% thought service had improved (it had actually decreased)
- Generated greater than 1.5% new revenue
- 5% increase in bus riders
- Benefit:cost ratio in excess of 2:1
This inbuilt Bus display system will have front display board, rear display board, side display board each.

The next arrival bus stop information and the current bus stop information will be displayed inside the bus for the passengers based on the location information collected by bus control unit. This information will be sent from the control unit to display system. The display will automatically display the bus stop name and produce audio announcement when the bus reaches a particular stop based on the signal derived from the AVL.
Customer Applications

Customer website
- Informational website with complete details of routes, fares, timings
- Online ticket booking
- Online Payment gateways

Mobile App
- Routes & Fares
- Schedules & Timings
- Realtime Bus tracking
- Buy Tickets & Pass
- Social connect

Real-Time SMS/Whatsapp No.
Being able to get real-time bus information using SMS is a very useful option for passengers. Passengers waiting at a bus stop can text message the agency using a designated phone number and the bus stop code found on the bus stop sign they are at. The system will automatically return the departure times of the next few buses leaving that stop in real-time.
CityAir Bus is an official Bus service from Pune City to Pune Airport launched by PMPML and operated by GeoDirect.

Pune Darshan is official full day sightseeing tour of Pune, planned by Pune Municipal Corporation & PMPML (Bus Transport body).

- Smart AC buses, push back seats & luggage space
- Onetime performance & tracking
- InBus entertainment system
- GPS & Traffic management system
- Flight & Weather Information
- CCTV Surveillance

Case Study: PMPML Pune - Airport & Tour Bus Service
### Monitor Bookings Summary

- **Pune Darshan Bookings** (6 Jan - 23 Jan, Total Travellers: 23)
- **Airport Bookings** (6 Jan - 31 Jan, 238 bookings)

#### Daily Details
- **Hemanshu Singh**: New
  - Winal Naka To Pune Airport: Rs. 125.00 (Cash on Pickup, Unpaid)
  - Boarding Point: Winal Naka
  - Quick Add: Payment Rejected
- **Shahid Ali**: New
  - Hirana Phase III To Pune Airport: Rs. 180.00 (Cash on Pickup, Unpaid)
  - Boarding Point: Hirana Phase III
  - Quick Add: Payment Rejected
- **Smt. Sunil Dardillar**: New
  - Hirana Phase III To Pune Airport: Rs. 100.00 (Cash on Pickup, Unpaid)
  - Boarding Point: Hirana Phase III

### Monitor Trips & Staff

- **Search**
- **Playback**
- **Details**
- **Search**
- **Search**

### Monitor Booking Details

#### Booking Details
- **PNR**: KLFZ3
  - **From**: Hirana Phase III
  - **To**: Pune Airport
  - **Trip**: Pune to Airport
  - **Date**: 09/01/2017
  - **Amount**: Rs. 125.00
  - **Cash on Pickup**: Yes
  - **Paid**: No

- **PNR**: UK2Z65
  - **From**: Hirana Phase III
  - **To**: Pune Airport
  - **Trip**: Pune to Airport
  - **Date**: 09/01/2017
  - **Amount**: Rs. 180.00
  - **Cash on Pickup**: Yes
  - **Paid**: Yes

- **PNR**: ZJXX7
  - **From**: Hirana Phase III
  - **To**: Pune Airport
  - **Trip**: Pune to Airport
  - **Date**: 09/01/2017
  - **Amount**: Rs. 100.00
  - **Cash on Pickup**: Yes
  - **Paid**: Yes
<table>
<thead>
<tr>
<th>Route</th>
<th>Fare (in Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune Airport</td>
<td>50</td>
</tr>
<tr>
<td>Corporation Bank</td>
<td>50</td>
</tr>
<tr>
<td>Shriram Nagar Bus Stop</td>
<td>50</td>
</tr>
<tr>
<td>Ganjip Talies</td>
<td>50</td>
</tr>
<tr>
<td>Baput Garden</td>
<td>50</td>
</tr>
<tr>
<td>Pune Science City</td>
<td>50</td>
</tr>
<tr>
<td>Lohangna (Shrivaji)</td>
<td>50</td>
</tr>
<tr>
<td>Pune University Gate</td>
<td>50</td>
</tr>
<tr>
<td>Aishwarya</td>
<td>50</td>
</tr>
<tr>
<td>Srongat Phase</td>
<td>50</td>
</tr>
<tr>
<td>Radhika Chowk</td>
<td>50</td>
</tr>
<tr>
<td>Vidyanagar</td>
<td>50</td>
</tr>
</tbody>
</table>

**Manage Payment Gateways**

<table>
<thead>
<tr>
<th>Transaction Id</th>
<th>FidNo</th>
<th>Status</th>
<th>Amount (in Rs)</th>
<th>Customer Name</th>
<th>Email</th>
<th>Description</th>
<th>ip Address</th>
<th>Browser</th>
<th>Created On</th>
</tr>
</thead>
<tbody>
<tr>
<td>616204715</td>
<td>AE01</td>
<td>TXN_SUCCESS</td>
<td>1000.00</td>
<td>Ten Successful</td>
<td>Rajendra Modak</td>
<td>Deccan Gymkhana NCPML</td>
<td>40.35.5.43</td>
<td>Apache/4.2.13 (Ubuntu)</td>
<td>11/11/2016</td>
</tr>
<tr>
<td>610770374</td>
<td>MOC10</td>
<td>TXN_SUCCESS</td>
<td>1500.00</td>
<td>Ten Successful</td>
<td>Rajesh Pandey</td>
<td>Deccan Gymkhana NCPML</td>
<td>40.35.13.177</td>
<td>Apache/4.2.13 (Ubuntu)</td>
<td>11/11/2016</td>
</tr>
<tr>
<td>617000376</td>
<td>8840</td>
<td>TXN_SUCCESS</td>
<td>2000.00</td>
<td>Ten Successful</td>
<td>Abhijit Mahajan</td>
<td>Deccan Gymkhana NCPML</td>
<td>1.30.0.0.214</td>
<td>Apache/4.2.13 (Ubuntu)</td>
<td>11/11/2016</td>
</tr>
</tbody>
</table>

**Contact Us**

BioEnable Technologies Pvt. Ltd.

Corporate Office: PUNE
Office No 203, 2nd Level Cyber City Tower S-4, Magarpatta City, Hadapsar, Pune- 411013 MH, India

Tel: +91-20-66813668
Mobile: +91-8600-102176
software@bioenabletech.com
www.BioEnabletech.com
Mobile & Web based Real Time Ticket Bookings

- The Bus Schedule & Real Time status is visible before the ticket booking
- Book ticket for any stop to any stop and catch your bus by tracking it on Maps.
- Self service ticket purchase inside the Bus
- Online Payment Gateways Integrated
Buy Travel Pass also online

- Buy or renew Weekly, Monthly & Quarterly Passes online
- Mobile Number & Email verification system
- Online Payment Gateway Integration

Submit

Pass Type
Quarterly - Return - Long

Start Date
2017-01-10

Submit

Quarterly - Return - Long
Start Date: 10th Jan 2017
Valid Days: 90
Max Trips: 180 / Max Trips per day: 5
No limits on Kms for oneway travel per day
Total Fare: ₹7650.00

Personal Details

Customer Name
Name

Email ID
Email Id

Mobile Number
Mobile No

Continue...

A SMS text message with your code has been sent to:
9899918671

45454

Didn’t get your code? Sometimes it can take up to 15 minutes. If it’s been longer than that, Resend Code.