INTELLIGENT PARKING LOT MANAGEMENT SYSTEM

Parking Made Easy with ePark

G. Satheesh
Joint Director

&

K Kiruba
Sr.ProjectEngineer

CDAC Trivandrum

07/09/12
Current Scenario

➢ Insufficient parking space
➢ Inefficient Parking Management
➢ Lack of information
  ➢ Public unaware of the existing facilities
  ➢ Details of Hours the facility is open and its fees
  ➢ Parking space availability until the visitor arrives the parking area

➢ Most of the existing Parking Management Systems are imported
Why ePark?

- Identify the nearest available parking location
  - Through vacancy information at major junctions
- Identify the parking spots quickly within the parking area
  - Through proper signage and navigation systems
- Ensure availability of parking space on arrival
  - Reduce traffic congestions & pollution
  - Driver frustration
  - Enhance overall driving experience
- Provision for advance reservation through SMS & Internet
ePark System Architecture

Intelligent Parking Lot Management System

Automated Entry/Exit Systems
- Boom barriers control
- Token printing
- Cameras

Parking Area System
- Bay sensors for status updation

Web Based Pre Trip Planner
- SMS and internet

Driver Information System
- VMS & Online web

Real time operator information
- Bay status animation
- Reports

Driver Guidance System
- VMS
- Bay indicators

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Entry Gate System

- Suitable for Unmanned & Manned operation
- Automated Boom barrier control
- Barcode based token generation
- Driver & Registration Plate Image capture
- Provision for manual entry of Vehicle Registration Number
- Update the vehicle details to database
PARKING AREA SUB SYSTEM

Vehicle Sensors

Data Concentrator

RS485 bus

SERVER
DRIVER GUIDANCE SUBSYSTEM

Level display - Indoor
# VMS Display boards

<table>
<thead>
<tr>
<th>Haribhau Parking PMC</th>
<th>Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 0</td>
<td>88</td>
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<tr>
<td>Level 1</td>
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<tr>
<td>Level 2</td>
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<tr>
<td>Level 3</td>
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<td>Level 4</td>
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<tr>
<td>Level 5</td>
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<tr>
<td>Total</td>
<td>888</td>
</tr>
</tbody>
</table>

**Entry Gate display - Indoor**

**Level display - Indoor**

**Online Vacancy information - Outdoor**
DRIVER GUIDANCE SUBSYSTEM – Continued..
HMI – OPERATOR CONSOLE BAY STATUS VIEW
Exit Gate System

• Read the Entry token using barcode scanner
• Retrieve vehicle details from database
• Live streaming for verification of vehicle registration plate
• Generate payment receipt
ePark - Highlights

• Scalable to OPEN parking system

• Vacancy Information
  ➢ Bay wise
  ➢ Level wise
  ➢ Total count
ePark - Reports

- ePark Reports
  - Entry/Exit vehicle details
  - Revenue
  - Parking Efficiency
  - Notified Vehicle
  - Vacancy Information

Parking Efficiency Graph
• ePark is readily available for TOT

• Please Visit InTranse Site

http://www.intranse.in/its1/content/intelligent-parking-lot-management-system
QUESTIONS?
THANK YOU