

Metro Infrasy The Intelligent Transportation Specialist



Toll Collection System (TCS)



Check Post



HTMS



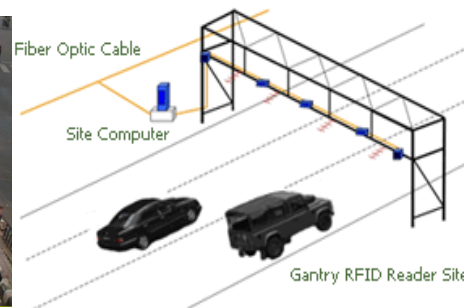
Parking Systems



Bus Fare Collection Systems



Traffic Enforcement



Electronic Vehicle Registration



Variable Msg Signs

Private and Confidential



Company DNA

Strong Corporate DNA focused on Value Creation to stakeholders

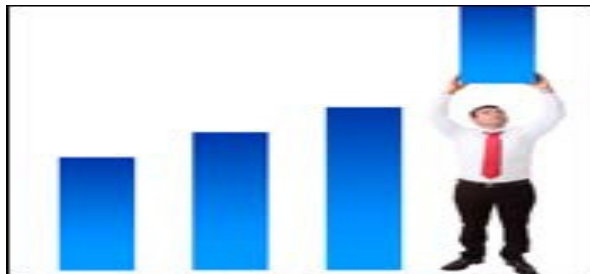
Passion for Engineering Intelligent Transportation Systems



Strong Networking with Decision Makers



Driven by customer satisfaction & shareholder value



Leveraging process based cloud technology



Company Infrastructure



Co-Owned Factory in Manesar

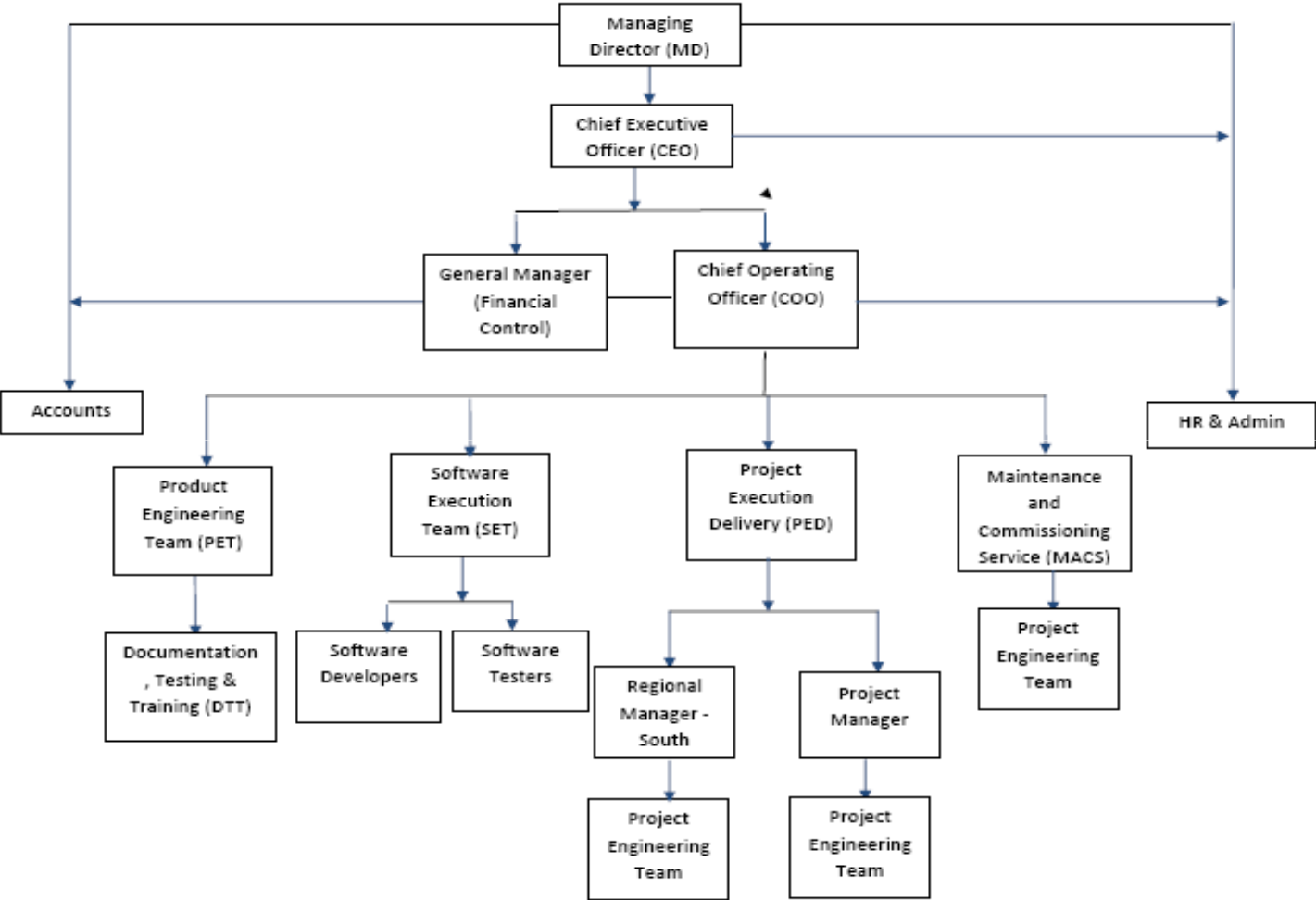
- 1000 sq mtr plot
- 5000 sq ft built-up area
- Software Development Center
- Hardware Assembly Area
- Live Testing Labs
- 6 Design and Project Engineers
- 15 Software Engineers



Live Testing Lab & Software Development Centre

- One of its kind in India
- Built-in mock lane for live system testing and Demo
- In house Controller Development & Sub-system assembly

Organizational Structure



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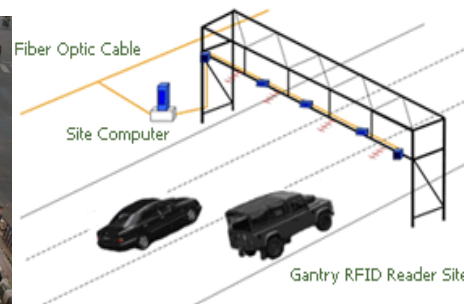
Key Markets & Technologies



Bus Fare Collection Systems



Traffic Enforcement



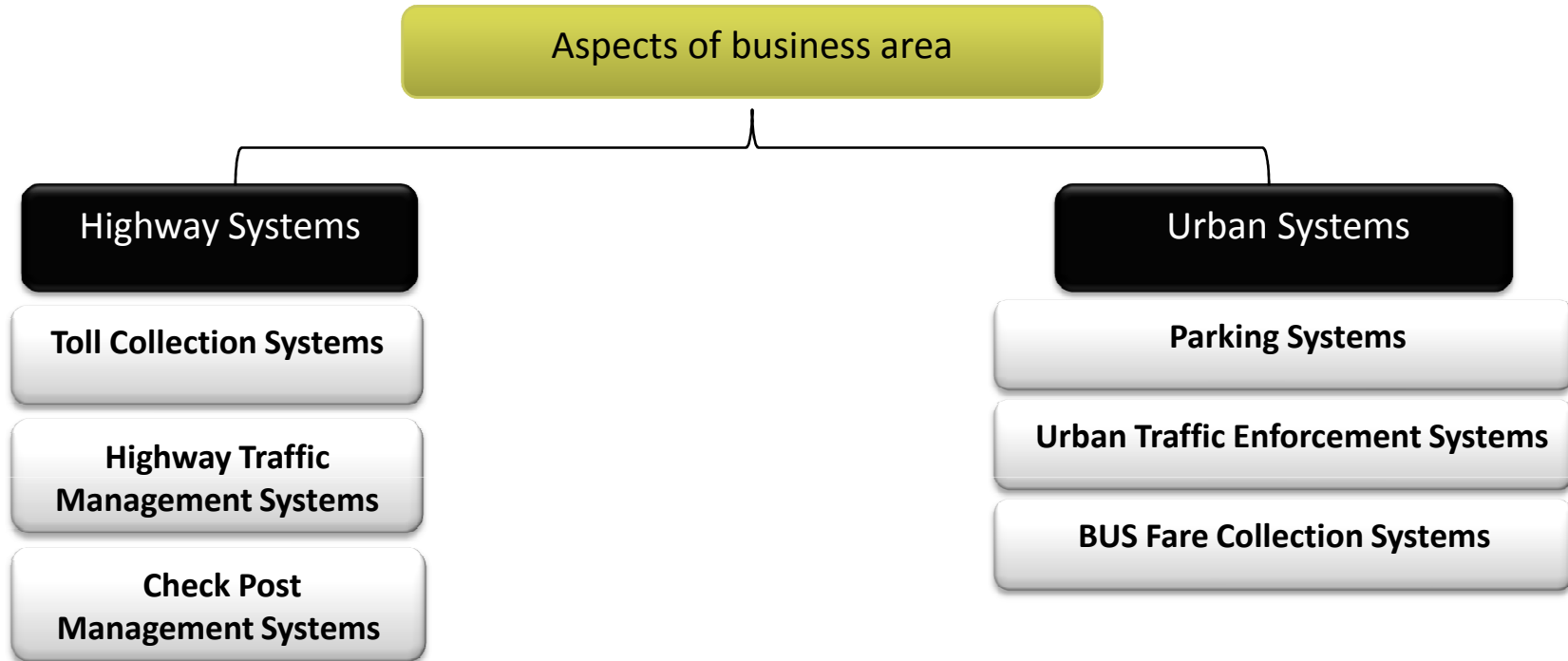
Electronic Vehicle Registration



Variable Msg Signs

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Key Markets



Toll Collection Systems (TCS)

Definition:

- Electronic toll collection systems are designed to assist in the management of toll operations

Use:

- Audit and control over the collection of Revenues
- Faster processing of vehicles in terms of per lane / per hour

An instance: *Madurai Tuticorin Toll Plaza*

- Highlights
 - Launch of Toll System 2.0 which is based on cost-effective indigenous technology
 - Successful Pilot Testing resulting in strong order book creation in South India
- Concessionaire – Madhucon



Key Strengths

- **Proprietary Software Technology**
- **Built-in Device Level Diagnostics**
- **Design for 97% SLA**
- **In-house Controllers & Barriers**
- **Non-Intrusive Technology for Vehicle Identification**

Project Experience - **Biggest Learning Platform**

Completed 4th largest toll plaza in the world – Delhi Gurgaon Expressway



- Proprietary “diagnostic” technology enabling **industry’s only solution with 97% uptime** assurance
- **Proven record** with repeat business
- **Partnership with world leader**
- **Design & Test facility** perfected over years with **kapsch >>>**, experienced engineers at Manesar

Highway Traffic Management Systems (HTMS)

Definition:

- A Wide Area Network with a Control Center and various subsystems such as Emergency Call Box, Variable Message Signs, CCTV, Mobile Radio, Traffic Stations, Weather Stations & Data Transmission Systems

Use:

- Highway safety can be increased and Traffic operations improved
- Data Collection for Traffic and weather patterns

Key Strengths

- In-house Manufacturing of emergency call box
- Setting up Variable Message Sign factory
- In-house SCADA and Sub-system software
- Cheapest available effective solution in this domain



CCTV



ECB



Variable Message Signs

References – Toll and HTMS

KMC BSC JV

Supply, Installation & Commissioning of 36 Nos of Electronic Toll Collection Systems & 24 Nos of Slow Speed Weigh in Motion Systems for Project of Six Laning of Chilkaluripet – Nellore Section of NH-5 for 183.620 km in Andhra Pradesh



Navuyuga Engineering Company

Supply Installation Commissioning and Maintenance of Tolling Systems on NH-7



DND FLYWAY:

Automatic Vehicle Classifications Sensors for DND FLYWAY for 27 lanes Toll Plaza at Noida.



HCC LIMITED:

10 Lane Semi Automatic Toll Collection Systems in West Bengal



GMR PROJECTS LTD.:

Supply, Testing & Commissioning, Maintenance of AVC Subsystems & Toll Collection Equipments for 36 Lanes for 3 projects.



Madhucon Projects Limited:

Supply Installation Commissioning and Maintenance of 24 lanes of Tolling Systems on NH-45B



KNR PATEL:

Supply Installation Commissioning and Maintenance of Tolling System



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Opportunity:

- New infrastructure to be set up at the entry of each State
- Integrated Checking & Law Enforcement done on every Commercial Vehicle entering a State

Key Subsystems:

- RFID Based Lane Application: Restricted Lane Entry of Each Passing Vehicle with RFID Based Vehicle Identification Systems
- Sub Systems consist of Automatic Vehicle Classification systems, Weigh in Motion Systems, Barriers & other lane accessories



Parking Systems

Definition:

- A robust parking management system build from the ground up to provide maximum security, reliability and convenience

Types:

- Parking Management Systems - Systems for Control of Revenue in Car parks
- Parking Guidance Systems - Systems for control of Traffic in Car parks by guiding the cars to the empty slots

An instance: *Municipal Council Common Wealth Building*

Key Highlights

- Ultrasonic sensor based state Intelligent guidance system
- 1st Project of its kind to be implemented in India
- 700 parking slots across 3 basements
- Fully Automated Entry lanes
- No. of Entry & Exit lanes: 2



Key Strengths

- Most Cost effective solution in the market
- Completed large project having bid 40% lower than L2
- Strong Value Engineering and Product knowhow from Tolling domain

Traffic Enforcement & Control Systems

Definition:

- Metro Infrasy provides the complete solution for Highway Traffic Management System

Subsystems:

- Variable Message Signs
 - Capable of producing real time messages for alarms/ advisories
- Red Light & Speed Enforcement
 - Detect Traffic Infringements
- Automatic Incident Detection Systems
 - Video based detection of defined incidents such as Pedestrian walking, Congestion detection etc



Launching soon :Automatic Fare Collection Systems

Definition:

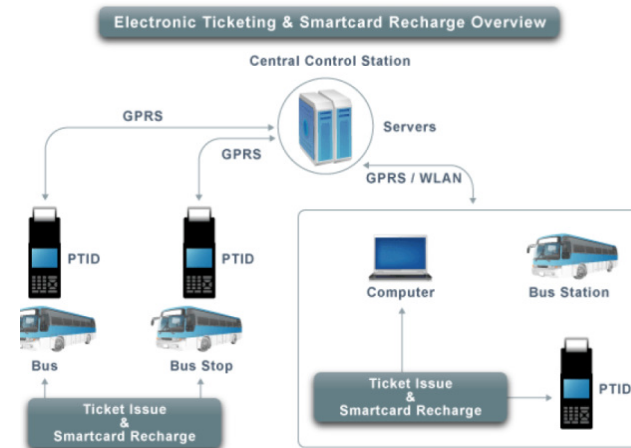
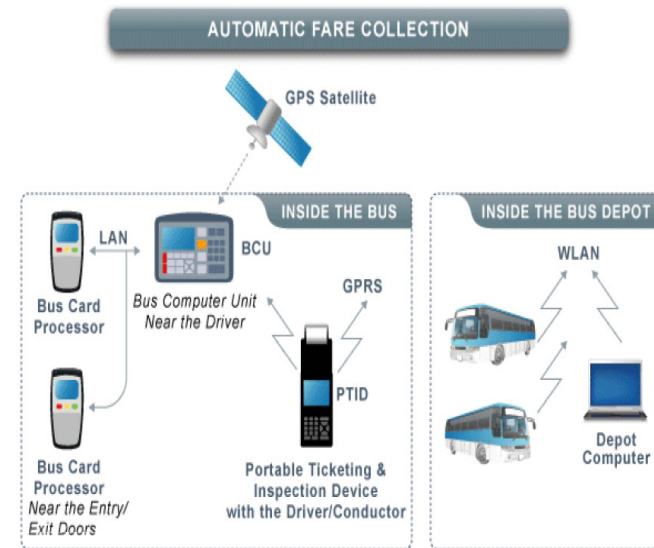
- Advanced System for collection of fare for in Buses

Subsystems:

- Bus AFC:** Payment of fare in Buses through & secure system.
- Automatic Pay Stations, Collection of payments & issue of tickets in Buses, Trains, Parking & Tolls

Breakthrough Technology :

- Metro** has got technology for vehicle tracking without GPS, through mobiles .



THANK YOU!

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