The Common Mobility Card for Delhi
Agenda

1. Project Background and Details
2. Challenges – Closed loop to Semi-Closed loop
3. Growth Trends – Card Usage
4. Project Benefits
5. Agencies/ Local Bodies’ involvement
6. Potential Scalability
DIMTS incorporated as a wholly-owned subsidiary of Transport Department on 19th April, 2006

Need for a partner agency with experience in development of infrastructure projects.

IDFC selected as joint venture partner

Shareholders’ Agreement signed and DIMTS as an SPV created by the Govt. of NCT on 4th July, 2007

Board of Directors meeting: 18th September 2009

- DIMTS would not pay dividend
- Primarily be utilized for strengthening the Company’s transport capital, capital base, capacity building, incubating research, making strategically important investments and exploring new markets.
## Business Divisions

### Transport Planning
- Comprehensive Mobility Planning
- Urban Mass Transit Corridor Planning and Design
- Traffic Simulation
- Route Rationalization
- Planning of pedestrian and NMV Infrastructure

### Engineering
- Design
- Project Management
- Independent Engineering Services

### Transport Technologies
- Automatic Vehicle Location
- Automatic Fare Collection – Payment Solutions
- Passenger Information Systems
- Intelligent Signaling
- Identity Management
- E-Tolling

### Operations
- Bus Concession Management
- BRT Corridor Management
- Smart-card Issuance Management
- Parking Management

### Railways
- Feasibility & Detailed Project Report
- Alignment and Track design
- Railway Siding
- Signaling

### Advisory Services
- Feasibility Analysis
- Project Structuring
- PPP Advisory
- Bid Documentation
- Bid Process Management

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End to End Solutions in Land Based Transportation
Plan-Design-Supply-Installation-Testing-Commissioning-Operations
The Ticketing Journey in Delhi Transit

- **Level 0:** Fare Box Collection
- **Level 1:** Pre-Printed Ticketing
- **Level 2:** Electronic Ticketing: Introduced in buses in 2011
- **Level 3:** Smart Card (Closed Loop): Introduced in Metro in 2002
- **Level 4:** Smart Card (CMC) (Semi-Closed Loop++): Launched in Jan 2018
- **Level 5:** Smart Card (Open Loop): TBD
Closed Loop to Semi Closed Loop v/s Open Loop in Transit

Transit Company
- Level 3: AFCS
- Level 2: Station & Depot
- Level 1: ETM & Validator

Acquirer Bank
- Acquiring - 3
- Acquiring - 2
- Acquiring - 1

Open Loop Settlement
- Issuing Bank 2
- Issuing Bank 1
- Issuing Bank 0

NPCI Switch

Issuing Banks
- Fare Media 0
- Fare Media 1
- Fare Media 2

Closed Loop Card
- Level 4: CCHS
- Level 3: AFCS
- Level 2: Station & Depot
- Level 1: ETM & Validator

Semi Closed Loop Card
- Level 3: AFCS
- Level 2: Station & Depot
- Level 1: ETM & Validator

DMRC

DIMTS

Fare Media

DTC
CMC: Business Rules and Milestones

2 Tap Process.
- TAP IN – Balance Check, TAP OUT – Debit
- Negative balance is allowed at TAP OUT.
- Un-assisted use of e-Purse card
- DMRC got PPI-MTS license in March 2017.
- Closed loop: Sunset happened in April, 2017
- CCHS set up for Semi Closed Loop transactions

- No negative balance is allowed, transaction will only happen if the card has sufficient balance.
- Development & testing completed in Dec 2017
- Pilot done in Jan, 2018
- Roll out completed in June, 2018 (on 1800 buses): The first and only CMC in India!
- One Delhi card and 10% discount on bus travel launched in Dec 2018.
Transactions are send from ETM in real time.

Every hour, 2 schedule process run:
- To convert transactions as per DMRC CCHS protocol.
- To transfer the files to DMRC CCHS

DMRC CCHS sends response, of settled files and transactions, next day by 10:00 AM.

Daily reconciliation of files.
- Monthly reconciliation at the end of Month
- Amount gets credited on T+1 (working day)
Key Challenges Faced

- Awareness (Communication to passenger)
- Use Cases & Benefits
- Creating awareness (BTL)
- Acquiring Stack and process dev
- Operational Challenges
- License of PPI MTS from RBI
- CCHS and Settlement
- SAM outside DMRC N/w

Commuter

Authority (DOT, GNCTD)

• Creating awareness (ATL)
• Economic model
• Co-ordination among ecosystem members
• Budgetary Support

Issuer (DMRC)

Acquirer / Merchant (DIMTS & DTC)

Creating awareness (BTL)
• Acquiring Stack and process dev
• Operational Challenges
Continuous increase in number of people using CMC card on buses. Till now, more than 6.5 Lac unique CMC cards have been used, on cluster buses alone.

Average number of CMC transactions on weekdays is 22,000 and monthly transactions more than 0.5 Mn.

Monthly revenue through CMC is over Rs. 4 Mn.
Growth of CMC Usage in Delhi Cluster buses

Card Usage Pattern vs No. of Tranxn.

- Nearly 95% people have used the card, in bus travel, less than 15 times. They travel in buses rarely but when travel, most likely to use card for ticketing.
- There is significant number of people who used card for complete journey in buses (equitable distribution of ticketing in each slab (Rs 5, 10, 15) through card)

Denomination Wise Ticket Count

- Count (Unique Cards) and SUM(NUM OF TRXN)
Project Benefits

- Quick rollout of the fare media to buses as it was already available through DMRC.
- Promotion of cashless transaction in buses.
- Integration of fare media between buses and metro.
- Check on conductor malpractices as cash is not involved in transaction.
- Opens the path for conductor-less (two-tap) ticketing in buses, in the future.
- By extending this model to other transport-related activities and modes, low value transactions can be digitalized.
- Very minimal or no transaction processing charges (MDR) as compared to conventional open loop card transactions.
Agencies/local bodies involved in the project

- DoT (Department of Transport, GNCTD)
  - Overall regulatory body
- DMRC
  - Metro operating agency (Accepting Merchant and Card Issuer)
  - Transaction acquirer and processor
  - Central Clearing and Settlement agency (CCHS) for other acquirers
- DIMTS
  - Bus operating agency (Accepting Merchant)
  - Transaction acquirer
  - Technology provider (Acquiring, processing and settlement with DMRC CCHS)
- DTC
  - Bus operating agency (accepting merchant) and acquirer
  - Technology outsourced
Scaling Potential across modes within Delhi - NCR

DMRC, NMRC, Gurgaon Rapid Metro

DTC, Cluster, NMRC, GMCBL

E-Rickshaw
(30,000+)

Auto
(1,00,000+)

Parking

Boating/Tourist Buses

Metro Feeder Buses
(500)
THANK YOU