Fare Collection Experience in Africa – A Brief Overview

Justin Coetzee
CEO, GoMetro

17 June, 2020
We improve the way Cities Move.

Planners & technology specialists. Experienced innovators in mobility data generation in emerging markets

Started as a rail timetable app in 2012
Statewide Journey Planner in 2014
Paratransit Data Collection in 2015
Data-driven transport reform in 2018-18
Payments and Fleet Management 2019

South Africa Formal Sector Fare Collection Experience
Award-winning Fare Collection Systems

- **World First** – Europay Mastercard Visa (EMV) anonymous Low Value Payment (LVP) Card with NDoT datastructure incorporated onto the same chip

- 2014 – TDA received the prestige's International Mastercard Award for Category Best Bank Card Ticketing Scheme
Supply Chain Legislation versus Delivery Capacity

The complexity of having to comply with banking rules & regulations as well as with internal City policies and the MFMA (which, have not been updated to cater for this type of modern world first technical system) – is exposing the relevant City Officials managing this implementation/operations to considerable risk due to the conflict between having to comply with internal City Policies and Acts on the one hand (which, have not been accordingly updated to accommodate such modern technical systems) and delivering in compliance with the contract in order to inter alia minimise delay claims, on the other.

Severe Lack of Capacity — MFMA S116(2)(b-c) on Contract Management -
Our Data Principles

Intelligent Transport Systems (ITS) as a % of total indirect operating expenditure
(figures are extracted from 2018/19 - 2020/21 MTEF budget figures)

<table>
<thead>
<tr>
<th>Cities</th>
<th>2018/19</th>
<th>2019/20</th>
<th>2020/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Town</td>
<td>73.2</td>
<td>77.4</td>
<td>121.9</td>
</tr>
<tr>
<td>Johannesburg</td>
<td>90.2</td>
<td>59.4</td>
<td>63.2</td>
</tr>
<tr>
<td>Tshwane</td>
<td>67.8</td>
<td>71.9</td>
<td>76.2</td>
</tr>
</tbody>
</table>

Percentage

0  5  10  15  20  25  30  35  40

0  2018/19  2019/20  2020/21
### National Regulations (‘10) and Public Transport Action Plan (‘07)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Electronic Fare Collection and Information Systems in Public Transport will be implemented as an integrated system to enable the collection of public transport data electronically;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>The impetus for implementation of these systems needs to be provided by Government;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>EFC and Information systems are critical elements to ensure integration in Public Transport, and will be aligned with fare structures and fare subsidy policy;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Data generated by the Electronic Fare Collection Systems, is owned by Government;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>A National Public Transport Data Warehouse as well as regional Public Transport Databases need to be established, with level of access based on requirements and functions of the various stakeholders;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Data structures will be based on International Standards, but adapted to suit the local application and implementation;</td>
<td>Achieved</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>Open systems must be specified for the relevant elements of the EFC &amp; Information systems;</td>
<td>Achieved</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>Electronic Fare Collection and Information Systems in Public Transport is a subset of Intelligent Transport Systems (ITS) and will be planned and implemented holistically to ensure integration and associated efficiencies;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>The Banking system and infrastructure will be utilised where possible to prevent duplication of payment and banking infrastructure and services;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>The role of the Reserve Bank as guiding authority within the payment environment, will be respected and their guidelines adhered to – specifically as it involves electronic money</td>
<td>Achieved</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>The introduction of a low value payment product in Public Transport, needs to be introduced in a way to maximise social benefits to the end-user;</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>12</strong></td>
<td>The Public Transport user must be able to use the electronic payment instrument on any mode of transport anywhere in South Africa. (PTAP, 2007)</td>
<td>Fail</td>
</tr>
</tbody>
</table>
South Africa Informal Sector
Electronic payments: Why?

3rd Parties
- No cash
- Subsidy?
- Employer pays
- Replaceable

Safety
- Safer at end of day
- Direct subsidy?
- Salary

More financing
- More control
- More Nett
- Subsidy?
- Instant

Remove illegals
- More data
- Quality subsidy
- More rides
- MyCiti

Rider

Driver

TOC

Gov
The Core Technology Interventions for an effective TOC

1. Tracking & fleet management
2. Smart Payments – Mobile & Card
3. Staff Transport – New Business
4. Core Service Improvements
5. Finance & leverage

Benchmark Data collected by means of On-board Surveys & Rank Counts & growing pool of tracking, transaction and event data from TOC operations.
Paratransit Reform
City of Cape Town Paratransit Reform

Technology & Institutions
- Consolidate 4 associations
- Improve service quality
- Improve business performance

Key to success: build trust!
GoMetro Pro Mapping
On January 7, 2019, the four associations began operating scheduled fixed-route service!
Service Optimization

City of Cape Town Paratransit Reform
Result: Business Performance Improved

Assets
- 50% fewer vehicles

Labor
- No job losses, better shifts

Fuel & CO2
- 50% less fuel
The Core Technology Interventions for an effective TOC

1. Tracking & fleet management

2. Smart Payments – Mobile & Card

3. Staff Transport – New Business

4. Core Service Improvements

5. Finance & leverage

Benchmark Data collected by means of On-board Surveys & Rank Counts & growing pool of tracking, transaction and event data from TOC operations
COVID-19
COVID Check-in Procedure

USSD
Dial *134*722*TAXI NUMBER#

WhatsApp
Add +27 10 444 0040 to contacts, say “Hi” & select Check-in option

Download free Ukheshe app
To scan QR code

567913

SANTACO
THE ENGINE BEHIND THE NATION
Thank you

Justin Coetzee
CEO, GoMetro
@gometroguy
justin@gometroapp.com