Case study for an emerging country: PTI introduction in Brazil

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Case study for an emerging country

PTI introduction in Brazil

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Content

- Typical challenges and risks of a PTI introduction
- The initial situation in Brazil
- Partnership with an experienced organization
- Measures for a successful PTI program for Sao Paulo
- Current challenges and outlook
### Typical challenges and risks of a PTI introduction

#### PURPOSE OF VEHICLE INSPECTION

- **Vehicle safety and environmental protection**

#### OBJECTIVES = SUCCESS FACTORS OF VEHICLE INSPECTION

- **High inspection quality**
  - Supervision of quality / Avoidance of a negative quality competition
  - Avoidance of conflicts of interest and corruption
  - Availability of competent staff

- **Acceptance of the public**
  - Understanding the purpose of the system
  - Acceptance of the burden (cost / time)
  - Customer satisfaction / convenience
    - Customer orientation
    - Flexibility (changes of cars)

#### CHALLENGES

- **Staff**
  - Know-how
  - Vulnerability for corruption

- **Competitors**
  - Strategies
  - Fair / unfair competition

- **Customers**
  - Understanding
  - Expectations
  - Trust

- **Press/ media**
  - Relevant issues

- **General public**
  - Understanding

- **Shareholders**
  - Pressure on financial success

- **State authorities**
  - Commitment
  - Know-how

#### STAKEHOLDERS

- **Legal framework**

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PTI introduction in Brazil
The initial situation in Brazil

- **Legislation**
  - Federal legislation for safety and Federal/state/municipal legislation for emission testing
  - Incomplete regulatory standards
    - Emission limits outdated until 2009 (since 1996)
    - Lack of inspection procedures and limits for noise inspection
  - Mistaken Automotive Legislation
    - Decreasing annual licensing taxes (based upon car value)
    - No compulsory insurance against third parties
    - Incentive to indiscriminate ownership and use of private cars
    - Over 30% of tax evaders/illegal fleet
- **Control and supervision**
  - Inefficient Fines and enforcement scheme
  - Unknown licensing status
  - Lack of a Regulatory agency
  - Lack of a fleet renewal and disposal regulation
The initial situation in Brazil

- **Economy**
  - Lack of fleet data
  - Unconscious car usage

- **Car ownership**
  - Lack of a preventive maintenance conscience
  - Unprepared repair industry for growing demand

- **Concession model**
  - Pioneering concession model for this industry
  - Pioneering municipal concession
  - Challenges of communication, public awareness and political support
### Partnership with an experienced organization

<table>
<thead>
<tr>
<th>Competent local operative business company: Controlar S/A, Brazil</th>
<th>Internationally experienced technical partner: TÜV NORD Mobilität, Germany</th>
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</thead>
<tbody>
<tr>
<td><strong>Strong local operative management know-how</strong></td>
<td><strong>Know-how and Experience in vehicle inspections</strong></td>
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<tr>
<td>• Knowledge of specific framework conditions in Brazil</td>
<td>• “State-of-the-art” technical know-how</td>
</tr>
<tr>
<td>• markets</td>
<td>• Quality assurance / supervision by state authorities</td>
</tr>
<tr>
<td>• structures</td>
<td>• Development of inspections following technical progress</td>
</tr>
<tr>
<td>• regulations</td>
<td>(e.g. electronic components)</td>
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<tr>
<td>• political system</td>
<td>• Planning and building of vehicle inspection centers incl.</td>
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<tr>
<td>• media</td>
<td>• Planning and purchase of test equipment</td>
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<tr>
<td>• labour market etc.</td>
<td>• Internal and external process management / optimization of procedures</td>
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<tr>
<td>• “Newcomer” in PTI</td>
<td>• IT-solutions (e.g. electronic information systems / data storage, network and utilization)</td>
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<td></td>
<td>• Participation in international studies and panels</td>
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<td>• Development of adapted conceptions for international partners</td>
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Partnership with an experienced organization

- **Brief description of co-operation**
  - Support during tender phase
  - Deployment of a program manager for the planning and set-up phase serving as a consultant and link to TÜV NORD Mobilität know-how
  - Quality supervision
  - Technical co-operation partnership becomes part of the brand identity

- **Support issues (examples)**
  - Development and implementation of infrastructure, personnel and processes for vehicle inspection
    - Building and design
    - Equipment (requirements)
    - IT systems
    - Staff (selection, training conception)
    - Quality management
Implementation Strategy

First year
- Diesel vehicles – without user payment

Second Year:
- Diesel vehicles + motorcycles + automobiles newer than 2003
- User payment refunded upon approval of vehicle

Third year:
- All fleet – user pays inspection and gets free reinspection if performed within 30 days

Fourth year:
- Approval in noise testing included
Measures for a successful PTI program for Sao Paulo - II

Concessionaire’s commitment to high standards and quality

- Standardization and processes control
- Control and confidentiality of information
- Excellence in customer services
  - Infrastructure
    - Redundancy in vital systems – power supply, communication, contingencies
    - Data security
    - On line information exchange with users, bank accounts, transit authority
  - Accountability and credibility
  - Statistics and analyses
  - Employees training and reward program
    - Technical training
    - Daily on-site procedures update
    - Customers complaints and feedback
    - Education and career development
    - Reward and recognition
3 Steps in building a successful implementation:

#1 – Technical Excellence

#2 – Client is “King”

#3 – Building support among all stakeholders:

- Municipality and environment secretary
- Transit authority
- Public data warehouses
- Users
- Press and opinion leaders
- NGO, associations, class entities
Measures for a successful PTI program for Sao Paulo - IV

Other items

- 16 Centers available throughout the city (map)

- All test previously scheduled
  - On-line (92%)
  - By phone (8%)

- Rigorous anti-fraud procedures
  - Monitoring through cameras
  - Skilled professionals trained in customer services
  - Statistical analysis
  - “CIA” actions

- Certifications
  - ISO 9001
  - ISO 14001
  - OHSAS 18000
Results

- Benefits of exhaust emissions tests on diesel vehicles in 2011
  - US$ 80 million savings in the health system
  - 1,515 admissions avoided
  - 584 lives saved
  - 28% emission reduction

- Environmental gain like removing 1.4 million vehicles from the city
Excellence and high quality services

Assisted in less than 30 minutes

- 2009: 95.27%
- 2010: 97.00%
- 2011: 97.85%
- 2012: 97.94%
Current Challenges and outlook

- **Political Issues:**
  - Populist “no charge” campaign
  - Challenges to reduce “accounts payable”
  - “No benefit evidence”
  - Enforcement = still a hard job!

- **Shelters:**
  - Demonstration of the Program Benefits
    - Studies carried out – “equivalent fleet reduction” and medical evidence
    - Awards received
  - Unbiased midia and oppinion leaders
  - Environmentalists

- **Next steps:**
  - PTI
  - Geographic expansion
  - Technology – OBD, hybrid vehicles