How to improve management and increase business efficiency
1. Short presentation
2. Fleet Management
   2.1. Opportunities to improve
   2.2. Solution approach
   2.3. Metrics
   2.4. Integration with navigation devices
3. Fuel Management
4. Case Studies
5. Recommendations
Multifrota presentation

- Multifrota was part of Castrol Group (lubricants) in Portugal till 2001;
- Operates on Fleets (tacograph network, telematic and taxis) and Parking;
- Some brands represented in Portugal: VDO, Mix Telematics and Hectronic (Fleet) and Zeag (Parking).
- Multifrota has 35 employees.
- Headquarters in Porto Salvo, nearby Taguspark – 20 Km far from Lisbon.
Mix Telematics

- Mix Telematics received the **Award for Product Line Strategy by Frost & Sullivan** related to the year 2008. This award is presented each year to the company that has demonstrated the most insight into customer needs and product demands.

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Body builders who we work with

- Optare
- Volvo
- Alexander Dennis
- Mercedes-Benz
- Johnson Security
- Scania
- MAN
- Penman
- MacNeillie

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Fleet Management
Fleet Management: a complete range of solutions

- Navigation plus SMS
- Impact sensor
- Connection to tacograph
- Access to CANbus data
- Wireless communication in complement to GPRS
- Integration with PDAs and other devices that support logistic process
- Fuel Consumption data
- FM Terminal - SMS
- Panic button for emergency situations, including Car Jacking
- Voice Communication

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Oportunities to Improve Business

- Reduce costs
- Improve Fleet management
- Health and Safety
- Improve Customer service
Oportunities to Improve Fleet Management

Management → Driving style

Vehicle information → Trip information

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Live Tracking

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Historical Tracking

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Metrics

Driver Score Ranges for 01 Jan 2006 - 23 Jun 2006

- 20.00% (4 Driver(s))
- 10.00% (2 Driver(s))
- 70.00% (14 Driver(s))

Click on one of the segments to see further details.

20 Driver(s) selected

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Fuel: actual versus target

Vehicle Fuel Consumption Graph (Measured)
For the period 09/03/2009 00:00:00 to 15/03/2009 23:59:59

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# CO2 reporting

## Measured Fuel Report + CO₂

Date Range: 08/03/2009 00:00:00 - 14/03/2009 23:59:59

<table>
<thead>
<tr>
<th>Vehicle / Driver</th>
<th>Date</th>
<th>Target Consumption (Miles/Gallons)</th>
<th>Consumption (Miles/Gallons)</th>
<th>Target Variance (Distance)</th>
<th>Distance</th>
<th>Quantity Used</th>
<th>Total CO₂ - (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle 1</td>
<td>09-Mar-2009</td>
<td>7.5</td>
<td>5.4</td>
<td>-28.1%</td>
<td>186.4</td>
<td>34.760</td>
<td>418.753</td>
</tr>
<tr>
<td></td>
<td>10-Mar-2009</td>
<td>7.5</td>
<td>6.2</td>
<td>-16.9%</td>
<td>126.9</td>
<td>20.477</td>
<td>246.689</td>
</tr>
<tr>
<td></td>
<td>11-Mar-2009</td>
<td>7.5</td>
<td>6.1</td>
<td>-18.5%</td>
<td>181.9</td>
<td>29.918</td>
<td>360.427</td>
</tr>
<tr>
<td></td>
<td>12-Mar-2009</td>
<td>7.5</td>
<td>6.2</td>
<td>-16.6%</td>
<td>190.9</td>
<td>30.690</td>
<td>369.728</td>
</tr>
<tr>
<td></td>
<td>13-Mar-2009</td>
<td>7.5</td>
<td>6.7</td>
<td>-10.6%</td>
<td>255.9</td>
<td>38.391</td>
<td>462.505</td>
</tr>
<tr>
<td>Vehicle 2</td>
<td>09-Mar-2009</td>
<td>7.5</td>
<td>7.7</td>
<td>3.8%</td>
<td>201.9</td>
<td>26.069</td>
<td>314.052</td>
</tr>
<tr>
<td></td>
<td>10-Mar-2009</td>
<td>7.5</td>
<td>7.6</td>
<td>2.1%</td>
<td>158.3</td>
<td>20.789</td>
<td>250.452</td>
</tr>
<tr>
<td></td>
<td>11-Mar-2009</td>
<td>7.5</td>
<td>7.9</td>
<td>5.9%</td>
<td>156.4</td>
<td>19.799</td>
<td>238.527</td>
</tr>
<tr>
<td></td>
<td>12-Mar-2009</td>
<td>7.5</td>
<td>7.0</td>
<td>-6.7%</td>
<td>142.4</td>
<td>20.464</td>
<td>246.530</td>
</tr>
<tr>
<td></td>
<td>13-Mar-2009</td>
<td>7.5</td>
<td>7.9</td>
<td>6.5%</td>
<td>195.7</td>
<td>24.639</td>
<td>296.827</td>
</tr>
</tbody>
</table>

**CO₂ calculation based on 2.65kg of CO₂ generated per 1 litre of diesel used**

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Driving scoring

Driver Scoring Graph
For the period 09/03/2009 00:00:00 to 13/03/2009 23:59:59
Integration with Garmin navigation devices

FUNCTIONS & ADVANTAGES
- Receive job messages with routes attached & send text messages;
- Special functions for trucks: alerts regarding climate conditions and road blocks;
- Plan and optimize routes;
- Economize time and money by using direct navigation;
- Improve delivery planning.

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Fuel Management
Fuel Management: a complete range of solutions

- TA 2331
- CRID Version

- TA 2331
- Mobile

- TA 2331 SlimLine

- TA 2331
- Standalone

- TA 2331
- TrimLine

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Advantages

- Fuelling authority control
- Accurate fuel consumption monitoring
- Processing, analysing and transmission of fuelling data
- Efficient fleet management.

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References

- Our Projects

- 25 years of experience in fleet fuelling systems
- Thousands of successful installations world-wide
- Many applications and corporate concepts for fleet fuelling

... and many other sectors

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Case Studies

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GISFROT

PAST CONCERNS

PASSAGENGER REDUCTION

INCREASE OF FUEL COST AND CONSUMPTION PER KM

ACTUAL CONCERNS

KYOTO PROTOCOL

DIRECTIVE 2003/59/EC OF 15.07.2003 – INITIAL QUALIFICATION AND PERIODIC TRAINING OF DRIVERS

Improve driver’s qualification and quality of service

Δ + ROAD SAFETY
Δ + CONFORT TO PASSENGERS
Δ - GAS EMISSIONS
Δ - FUEL CONSUMPTION

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GISFROT

Main Objectives

- Drivers monitorization in a working context
- Promote individual performance assessment
- GISFROT certification and compatibilization regarding Directive 2003/59/EC
- Obtaining an replicable tool for the sector
- Integration of Fleet Manager system with Rodoviária’s ERP and Real-Time Transportation Management System.

Process

- Integration of Fleet Manager system with Rodoviária’s ERP and Real-Time Transportation System Management (TSM).

Advantages

- Improve Cost Control;
- Reduction on Kms of vehicles driving empty;
- Real-Time Incident Management;
- Support to Case Management Claims;
- Improve Human Resource Abilities.

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SIGRE – Integrated Remote Fleet Management System

**Results:** relevant management information on time that allows to make decisions

**Challenge:** structure costs reduction and effective control of fuel supply and consumption

**Solution:**
6 Modules: help desk, preventive maintenance, contract management, fuel management, people and trip management, accident and fine management

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The IDC EMEA 2006 Award for ICT Innovation and Business Transformation

By Frank Gens, Senior Vice President, Research, IDC and Chairman of the IDC/IDG Expert Committee

For this, the second year that IDC has presented this award, we assessed dozens of projects across Europe — all showcasing highly innovative use of IT in business and government. To identify the winners — and there were three excellent ones this year — our panel of judges looked for projects that measured up best against the key criteria for the award, namely that they:

- Demonstrated innovative use of ICT
- Transformed important parts of the business, delivering significantly improved value-delivery and improved efficiency of the organization, with strong, measurable ROI
- Went "live" within the last 6-18 months

Here are snapshots of each of our winners ...

**Grupo Mota-Engil** is one of the largest business groups in Portugal, with much of its work in construction, engineering, and transportation. A lot of its costs are tied up in trucks and other heavy equipment, and in the use of those expensive assets and the fuel management required for its fleet (the company spends over €15 million on fuel per year). Grupo Mota-Engil stood out for its innovative use of wireless technologies. The company uses GSM/GPRS and GPS for real-time remote fleet management (with wireless technology in the vehicles) and fuel consumption management (with wireless technology in the fueling sites). The company’s results were very positive, as it reduced equipment management costs by 40%, achieved more efficient use of their vehicles and drivers, and reduced fuel losses by...
Reference: Scania Worldwide

- Partnership with key OEM
- Preferred supplier world-wide
- Bespoke developed website
- Supporting Scania sales team
- Singapore Bus – 1,000 vehicles.
Reference: Strabag

- Pan-European Contract
- Objectives:
  - Fuel efficiency
  - Reduce internal shrinkage
  - Improve asset utilisation
- Framework agreement for 1,600 vehicles
- Service provided across 19 countries and 8 languages
- Bespoke solution
- Broad range of vehicle types
- Currently installing vehicles in Poland, Romania and starting project in Hungary.

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G4S - measuring the benefits

Diesel Usage By Week 2008 vs 2007

All vehicles FM fitted and drivers informed, 10/09/2008
420 Employees Trained. 100%

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G4S - measuring the benefits

- Improve fuel economy
- Improve driver efficiency
- Increase customer travelling comfort
- Reduce ‘wear and tear’ within your fleet
- Reduce your accident rates
- Monitor your fleet in real-time from anywhere in the world
- Use the system to measure the effectiveness of your driver training
- Optimise your fleet numbers

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Sector: Energy and Mining
Present in over 70 countries
1,600 vehicles installed in North America

Objectives:
- Control driving and stopping times
- Control driving violations
- Driver identification
- Second by second accident analysis.

Results
- Driver scoring trends
- Determine training needs
- View vehicle usage patterns
- Monitor compliance with safety patterns.
Reference: Multiple Hauliers

- Market Leader in the Transport Industry in East Africa
- Fleet size: 400+ vehicles
- Objectives
  - Effective monitoring and efficient usage of fleet
  - Maximize number of trips in a safest manner
- Solution
  - Allows to effectively monitor safety & security
  - Empowers to deliver products on time
- Results
  - Competitive advantage over competitors
  - QHSE Compliance.

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Reference: Go-Ahead Group PLC

- National Contract
- Objectives:
  - Fuel economy
  - CO₂ emissions
  - Passenger safety
- 4,000 vehicles
- Bespoke engineering development
- 7 Operating companies / 31 sites
- 24/7 installation
- Flexible Approach: Accelerated deployment.

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Recommendations
Fleet Manager monitors CO2 emissions, allowing companies to implement plans for reducing carbon emissions. This answers to market’s growing need for more energetic efficiency in fleet management.

“Reduce your carbon footprint and fleet operating costs.”

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Why EcoRouting

Greater driver interaction

- Live feedback
- Driver style
- Fuel Consumption
- Fuel Efficiency
- Lower Carbon Footprint
- Corporate Eco responsibility
THANK YOU