Future urban mobility

Berlin High-level Dialogue on Implementing
Rio+20 Decisions on Sustainable Cities and Urban Transport

Carolin REICHERT
Peugeot Citroën Automobiles
Paris, June 21, 2013
Urbanization, real-time connectivity and social networks revolutionizing key business models of the automotive industry

"THE CHANGE"

<table>
<thead>
<tr>
<th>B2C(EV)</th>
<th>Traditional car sharing/public transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2C</td>
<td>Non-profit car-pooling / lift-sharing</td>
</tr>
<tr>
<td>B2C/B</td>
<td>Renting</td>
</tr>
<tr>
<td>B2B</td>
<td>Leasing</td>
</tr>
</tbody>
</table>

Urbanization
causing increasing demand of cities to limit inner-city traffic

Real-time/remote connectivity
allowing higher level of process automation for large fleet operators

Social networks
reinforcing feeling of security in anonymous groups and willingness to share trips and vehicles

New car-sharing
(one-way, no reservation often EV-based)

C2C marketplaces
(lift sharing, private renting)

Renting 24/7
(vehicle access via chip card, automated process)

Car-pooling
(car-sharing within large companies)
### Car manufacturers starting to lead the change

#### BUSINESS MODELS AND BEST PRACTICES

<table>
<thead>
<tr>
<th>Business model</th>
<th>Best practice/motivation</th>
<th>Car manufacturer</th>
<th>Key profit stream</th>
<th>Market size G5, 2016e</th>
</tr>
</thead>
</table>
| New car-sharing (EV focus) | ![CAR2GO](image1)  
Young image/new business intern. (revenue target 2014: € 100 Mio.)  
Life-style image/new business EU and US | DAIMLER          | Renting fee (per minute/hour)                              | 5 Mio users 70k VH    |
| C2C Market-place        | ![RelayRides](image2)  
Invested by GM: CRM/new service business based on on-star  
![cars2go.com](image3)  
Invested by Daimler AG: CRM/access to new customer segments | GM               | Transaction fee  
Sale of customer base/company                              | N.a.                 |
| Renting 24/7            | ![Hertz](image4)  
Process automation/expansion of value creation  
![FORD2GO](image5)  
Vehicles placement/new dealership based business | Ford             | Renting fee (per day)                                     | Replacement (1.5 k EUR/VH add. techn. value) |
| B2B car-pooling         | ![AlphaCity](image6)  
Vehicle sale/expansion of value creation  
![SHARE YOUR FLEET](image7)  
Vehicle sale/customer proximity/expansion of value creation | BMW/CITROEN      | Leasing contract + service fee for car-pooling             | 260k – 360k VH/year   |
To succeed in the "New Mobility"-business a car manufacturer needs to answer 5 strategic questions!

"NEW MOBILITY"-STRATEGY AGENDA FOR PSA

1. Will "New Mobility" become a relevant market?
2. How does the future vehicle generation need to be adapted?
3. How to position along the new value chain?
4. How to set-up and run the "New Mobility"-business successfully?
5. What is the right customer offer?
Will "New Mobility" become a relevant market?

5 Mio. end-users and more than 500k vehicles expected in Europe 2016

MARKET PROJECTION, EUROPE, 2011-2016

Car-sharing/-pooling users [Mio. end-users]

- **2011:**
  - High case: 0.6
  - Base case: 0.6
  - Low case: 0.6

- **2016:**
  - High case: 8.3
  - Base case: 4.8
  - Low case: 1.3

CAGR: 53%

Source: Frost & Sullivan

Car-sharing/-pooling vehicles [‘000 vehicles]

- **2011:**
  - Base case: 280

- **2016:**
  - Base case: >>500

Source: PSA estimate

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## 3 key functionalities will become a MUST!

### KEY FUNCTIONS FOR "NEW MOBILITY"-BUSINESS

<table>
<thead>
<tr>
<th>Real-time driving data</th>
<th>Remote vehicle access</th>
<th>Smartphone/office integr.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
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</tr>
<tr>
<td>◆ Vehicle data (e.g. fuel/battery, mileage) for fleet operations</td>
<td>◆ Possibility to open and start vehicle from distance</td>
<td>◆ Plug &amp; play integration of smartphone including personal apps</td>
</tr>
<tr>
<td>◆ Geolocalization of vehicle, parking lots, lift sharers etc.</td>
<td>◆ Possible access via RFID card, LapID or smartphone (NFC)</td>
<td>◆ Connectivity to office system, e-mail and calendar</td>
</tr>
<tr>
<td>◆ End-user related data for insurance (“pay as you drive”)</td>
<td></td>
<td>◆ Connectivity to multimodal transport / travel portals</td>
</tr>
<tr>
<td><strong>Key challenges</strong></td>
<td><strong>Key challenges</strong></td>
<td><strong>Key challenges</strong></td>
</tr>
<tr>
<td>◆ Specification of data-set</td>
<td>◆ Integration of car-sharing technology respecting all safety and legal requirements</td>
<td>◆ Align strategy for embedded telematic (services) with plug &amp; play requirements</td>
</tr>
<tr>
<td>◆ Realization of SW platform</td>
<td>◆ Set-up installation process</td>
<td>◆ Technical realization</td>
</tr>
<tr>
<td>◆ Definition of business models with communication provider, end-consumer and potential business partners</td>
<td>◆ Commercialization of pre-equipped vehicles</td>
<td>◆ Set-up of development process adapted to business dynamic</td>
</tr>
</tbody>
</table>

### How does the future vehicle generation need to be adapted?

- **Real-time driving data**
  - Vehicle data (e.g. fuel/battery, mileage) for fleet operations
  - Geolocalization of vehicle, parking lots, lift sharers etc.
  - End-user related data for insurance (“pay as you drive”)

- **Remote vehicle access**
  - Possibility to open and start vehicle from distance
  - Possible access via RFID card, LapID or smartphone (NFC)

- **Smartphone/office integr.**
  - Plug & play integration of smartphone including personal apps
  - Connectivity to office system, e-mail and calendar
  - Connectivity to multimodal transport / travel portals

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How to position itself along the new value chain?

3 basic business models needs to be considered and potentially covered

### BASIC OPTION FOR VALUE CREATION

<table>
<thead>
<tr>
<th>Business model</th>
<th>Description</th>
<th>Key challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle</strong></td>
<td>Supplier of &quot;pre-equipped&quot; vehicles</td>
<td>Relationship with in-car-technology supplier and protection of intellectual property</td>
</tr>
<tr>
<td><strong>In-car-technology</strong></td>
<td>Supply of car-sharing/car-pooling – &quot;ready&quot; cars with full vehicle guarantee</td>
<td></td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>System supplier</td>
<td>Commercialization of system with existing &quot;B2B sales&quot; organization</td>
</tr>
<tr>
<td><strong>Client service</strong></td>
<td>Provision of complete system/service, incl. central services like call center, billing</td>
<td></td>
</tr>
<tr>
<td><strong>System financing</strong></td>
<td>Service contract with fleet operator (B2B)</td>
<td></td>
</tr>
<tr>
<td><strong>Fleet operations</strong></td>
<td>Operation of car-sharing/car-pooling system using &quot;own brand&quot;</td>
<td>Organizational set-up with operating partner</td>
</tr>
</tbody>
</table>

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How to set-up and run "New Mobility"-business successfully?

3 basic success factors need to be fulfilled

**KEY SUCCESS FACTORS FOR "NEW MOBILITY"-BUSINESS**

<table>
<thead>
<tr>
<th>Time-to-market</th>
<th>System integration</th>
<th>End-customer access</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shorter product lifecycles require an adaptation of existing development processes</td>
<td>Full understanding of value chain including software &amp; operations and very limited number of system partners required for a competitive cost position</td>
<td>B2C-mobility is a very local business requiring local sales partners (e.g. public transport)</td>
</tr>
<tr>
<td><strong>Key challenges</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>◆ Define the &quot;right&quot; interface to product research and planning</td>
<td>◆ Build-up/bundle relevant competences (telematics, car electronics)</td>
<td>◆ Really understand local mobility needs</td>
</tr>
<tr>
<td>◆ Set-up a &quot;fast track&quot; product development and implementation</td>
<td>◆ Define intelligent cooperation models with new system partners (SLAs, P&amp;L sharing)</td>
<td>◆ Define system/product offerings with clear USP and a convincing business case</td>
</tr>
<tr>
<td>◆ Qualify/remunerate sales organization</td>
<td>◆ Define process for partner selection and management</td>
<td>◆ Build-up sales partners network with local market access and system competence</td>
</tr>
</tbody>
</table>
## PSA active in all segments

### PSA POSITION

<table>
<thead>
<tr>
<th>Business model</th>
<th>Activities PSA/Citroën/Peugeot</th>
<th>Car sales</th>
<th>Image</th>
<th>Op-profit</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New car-sharing (EV focus)</strong></td>
<td>One-way, instant access intermodal car-sharing system in Berlin</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Red" /></td>
<td>German subsidies</td>
</tr>
<tr>
<td></td>
<td>Based on pure EV fleet</td>
<td></td>
<td></td>
<td></td>
<td>Very positive image contribution on national level</td>
</tr>
<tr>
<td></td>
<td>350 C-Zeros from 22 March on</td>
<td></td>
<td></td>
<td></td>
<td>Operational losses</td>
</tr>
<tr>
<td><strong>C2C Market-place</strong></td>
<td>Online mobility portal for door-to-door mobility</td>
<td><img src="#" alt="Red" /></td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Red" /></td>
<td>No direct impact on car sales</td>
</tr>
<tr>
<td></td>
<td>Aggregates 3rd party services, i.e. &quot;Co-voiturage&quot;, C2C, travel planning</td>
<td></td>
<td></td>
<td></td>
<td>Initially positive image contribution, but risk to become &quot;me too&quot;</td>
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<tr>
<td><strong>Renting 24/7</strong></td>
<td>Dealership-based renting system allowing management VD and VR</td>
<td><img src="#" alt="Red" /></td>
<td><img src="#" alt="Red" /></td>
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<td>No direct impact on car sales</td>
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<tr>
<td></td>
<td>Operational mainly in GER/F</td>
<td></td>
<td></td>
<td></td>
<td>Tool to attract new customers to visit dealerships</td>
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<td></td>
<td>Integration of 24/7 option tbd.</td>
<td></td>
<td></td>
<td></td>
<td>Meanwhile, image contribution low</td>
</tr>
<tr>
<td><strong>B2B car-pooling</strong></td>
<td>State-of-the-art car-pooling solution for large enterprises in cooperation with SIXT AG</td>
<td><img src="#" alt="Green" /></td>
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<td><img src="#" alt="Green" /></td>
<td>Car based solution</td>
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<td></td>
<td>Launch in Germany 1 April</td>
<td></td>
<td></td>
<td></td>
<td>Objective for Germany: &gt;3,000 VH p.a.</td>
</tr>
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### Berlin
- **Online mobility portal for door-to-door mobility**
- **Aggregates 3rd party services, i.e. "Co-voiturage", C2C, travel planning**
- **Dealership-based renting system allowing management VD and VR**
- **Operational mainly in GER/F**
- **Integration of 24/7 option tbd.**
- **State-of-the-art car-pooling solution for large enterprises in cooperation with SIXT AG**
- **Launch in Germany 1 April**

### Assessment
- **German subsidies**
- **Very positive image contribution on national level**
- **Operational losses**
- **No direct impact on car sales**
- **Initially positive image contribution, but risk to become "me too"**
- **Profits from transactions not yet covering staff costs**
- **No direct impact on car sales**
- **Tool to attract new customers to visit dealerships**
- **Meanwhile, image contribution low**
- **Car based solution**
- **Objective for Germany: >3,000 VH p.a.**
- **Positive image on PSA level**
- **Positive profit contribution from 1st year on**
What is the right customer offer?

We do not have all answers, but a great offer: **Multicity Berlin**!

**KEY CHARACTERISTICS**

**Sustainable**
- Exclusive use of electric vehicles, i.e. the Citroën C-Zero
- Focus on large cities

**Intermodal**
- Joint ticketing and billing with local public transport and Deutsche Bahn/Flinkster & Call a Bike
- System access points at railway stations and airports

**Intelligent business models**
- B2C: Instant access, free float, tact pricing
- B2B: Dedicated vehicles, flat rates

**Young**
- Smartphone-based access
- Attractive pricing

**New Pricing**
04 April
… and coming soon: SHARE YOUR FLEET®:
An intelligent mobility solution, tailor-made for large enterprises

CONCEPT OUTLINE

Company-related mobility needs

1. Full-day, **professional** trips (round trip)
2. Short **one way** trips between different company sites or to/from public transport hubs
3. **Comuting** (home-work) and lift/cost sharing
4. **Private** trips in the evenings or during the weekends (payed by the employee)

[Diagram showing different types of mobility needs, including full-day trips, short one-way trips, commuting, and private trips.]

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Launch in Germany in April 2013!

THE OFFER

Reservation platform
- Web application
- Reservation 15 min before departure
- Option lift-sharing

Fleet management tool
- Vehicle balancing between company sites
- Advanced reporting of fleet data

Client service
- 24h/7d access
- Help desk for technical problems

Besoins de mobilité couverts
- Premium vehicles
- Financing: 36 months/90,000 km
- Service car-pooling:
  - Onboard unit
  - Garanty for in-car technology
  - RFID cards
  - Software license
  - Hotline/technical support
  - Payment private use
- Fleet management: logistic, immatriculation, insurance, tyres, maintenance, assistance, fuel card, fee for radio use

Citroen DS 3 | XXX €/m | Citroen DS 4 | XXX €/m | Peugeot 308 | XXX €/m | Peugeot 3008 | XXX €/m