New Mobility Business Models

Including car sharing, ride sharing, ride hailing, and beyond

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Converging MegaTrends Impact Mobility Solutions

Digital disruption facilitating rise in new mobility business models: App-based, on-demand services

Urbanisation and Smart Cities

Generation Y

Connectivity

$2bn invested in shared mobility services globally* as on H1 2016

> 12 auto OEM’s have launched mobility services* as on 2016

7 out of 14 auto OEM’s have already formed their own mobility sub-brands/subsidiaries* as on 2016

Source: Frost & Sullivan [“Research MC5A, 2016]

Infrastructure Spending

Integrated Transport Solutions

Sharing Economy
### Comparison of OEM’s Mobility Strategies

Focus of target: 25 – 45 years; to improve brand image now; to influence future purchasing decisions

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<tr>
<th>OEM</th>
<th>Separate mobility subsidiary or brand</th>
<th>Independent mobility projects</th>
<th>Set up labs exclusively to research on mobility initiatives</th>
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Only Services and products that are currently operational are considered. Past pilots and future launches are not considered.

Independent mobility projects include owned, collaborated, partnered projects.

Source: Frost & Sullivan [*Research MC5A, 2016*]
New Mobility Business Model Trends – 2016 Highlights*

Biggest trend noticed is OEMs shifting their focus from product based to service based solutions

**New Partnerships**
- Traditionally, OEM’s had defined separate strategies for passenger and fleet vehicles. The lines between the two are getting blurred.
- OEMs such as VW, Toyota, Daimler, Ford, GM have *signed partnerships with mobility companies* to guard against a shift in consumer choice away from vehicle ownership.

**New Branding Methods**
- Carsharing, ride hailing and other mobility services offer an new touch point with prospective customers.
- This gives OEM’s access to a potential future customer base, as familiarity with a brand is likely to positively *influence the purchasing decision*.

**New Mobility Business Models Convergence**
- A key development expected in the short to mid-term in the mobility landscape is the convergence of different mobility business models.
- *Renting out carsharing vehicles for use in the taxi fleet* is already being employed by some of the OEM’s such as GM through Maven

**Integrated Mobility**
- Investments into *one stop shop for all the personal and mobility needs* of the future.
- As a part of unified mobility platforms offered by OEMs
- Addition of services such as on-demand shuttle services is an indication in this direction.

Source: Frost & Sullivan [*Research MC5A, 2016*]
New Mobility Business Models & Partnerships Enable First/Last Mile

B2C, B2B environments customers demanding intuitive services; many players investing significantly
Existing Mobility Business Models

Segmentation: Services where customer has access to a vehicle, a ride, app based support services

- **Drive**
  - One way carsharing
  - Two way carsharing
  - P2P carsharing
  - Corporate carsharing

- **Be Driven**
  - Ridesharing
  - Taxi hailing
  - Bike Sharing
  - Bus/Shuttle Transit

- **App based services**
  - Integrated mobility apps
  - Journey planning apps
  - Smart parking apps
  - Emobility apps

Source: Frost & Sullivan
Integrated Mobility Offers vast potential to offer multiple modes and services, and segment customer types using the same platform.

An ecosystem of partnerships is required to deliver this in multiple cities/countries.

Supporting Services
- Parking
- Financial Services

Emerging Urban Mobility Landscape
Exploring the area between public transport, and private car ownership

- eHailing Taxi (On-Demand)
- Private Car
- Car Rental
- Public Transit
- Dynamic Shuttle (On-Demand)
- Dynamic Carsharing (Dynamic, Corporate)
- One Way Carsharing
- Carpooling
- P2P Carsharing
- Micro-mobility
- Bikesharing

Cost & Convenience
Distance Travelled

Source: Frost & Sullivan
Future Mobility Business Model Evolution

Connected, electric, automated, and shared mobility convergence key to new future business models

Existing Business Models

(-) Car sharing
(-) Ride sharing
(-) Ride Hailing
(-) Mobility as a Service
...

New Mobility Models

- Self-driving Taxis
- Condo Carsharing
- Lease Sharing
- Dynamic Subscriptions
- Free Carsharing
- Waive Car

Lease Sharing

Dealers

Ford

Maven

GM

Hyundai

Volvo

Uber

Cadillac

Book

Source: Frost & Sullivan
Paradigm Shift from Vehicle Ownership to Vehicle Usage

An integrated multi modal mobility network, due to changing demographics, preferences, technology

Converging Trends will lead to a Paradigm Shift from Vehicle Ownership to Vehicle Usage

Transport = Door-to-door Mobility

Transport = Private Vehicle
- Freedom
- Convenience
- Status – Progress
- No Real Alternative

- Gen Y
- Urbanization
- Natural Resources
- Globalization
- Pollution
- Congestion
- Connectivity
- Population Growth
- Air Quality
- Social Responsibility
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