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

Infrastructure Spending

Integrated Transport Solutions

Sharing Economy

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

Comparison of OEM's Mobility Strategies

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

OEM		Separate mobility subsidiary or brand	Independent mobility projects	Set up labs exclusively to research on mobility initiatives
Daimler	Luxury	●		●
BMW	Luxury	●		●
Audi	Luxury		●	
Hyundai	Mainstream		●	●
VW	Mainstream	●		●
Ford	Mainstream	●		●
Groupe PSA	Mainstream	●		
Renault Nissan	Mainstream		●	●
Toyota	Mainstream		●	
Honda	Mainstream		●	
GM	Mainstream	●		
FCA	Mainstream		●	
Volvo	Luxury		●	●
JLR	Luxury	●		

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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 Business Models	
Taxi Services	UBER, HAILO, mytaxi
Bike Sharing	nextbike, Santander Cycles, Velib'
Micro-mobility	scoot, TOYOTA i-ROAD, TWIZY
Car Sharing	zipcar, DriveNow, enterprise CarShare
Corporate Car-Sharing	AlphaCity, ubeeqo
Car Rental	Hertz, avis budget
Ridesharing	BlaBlaCar, liftshare.com, goCarShare
Parking	JustPark, Parkopedia
E-Mobility	source LONDON, ChargeNow
Public Transport	DB, oyster
Integrated Mobility	moovel, moovit, Qixxit, Citymapper
Share Logistics	TGMatrix, cargomatic, shutl, ROADIE, tiramizoo Delivery

Existing Mobility Business Models

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

New Mobility Business Models

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

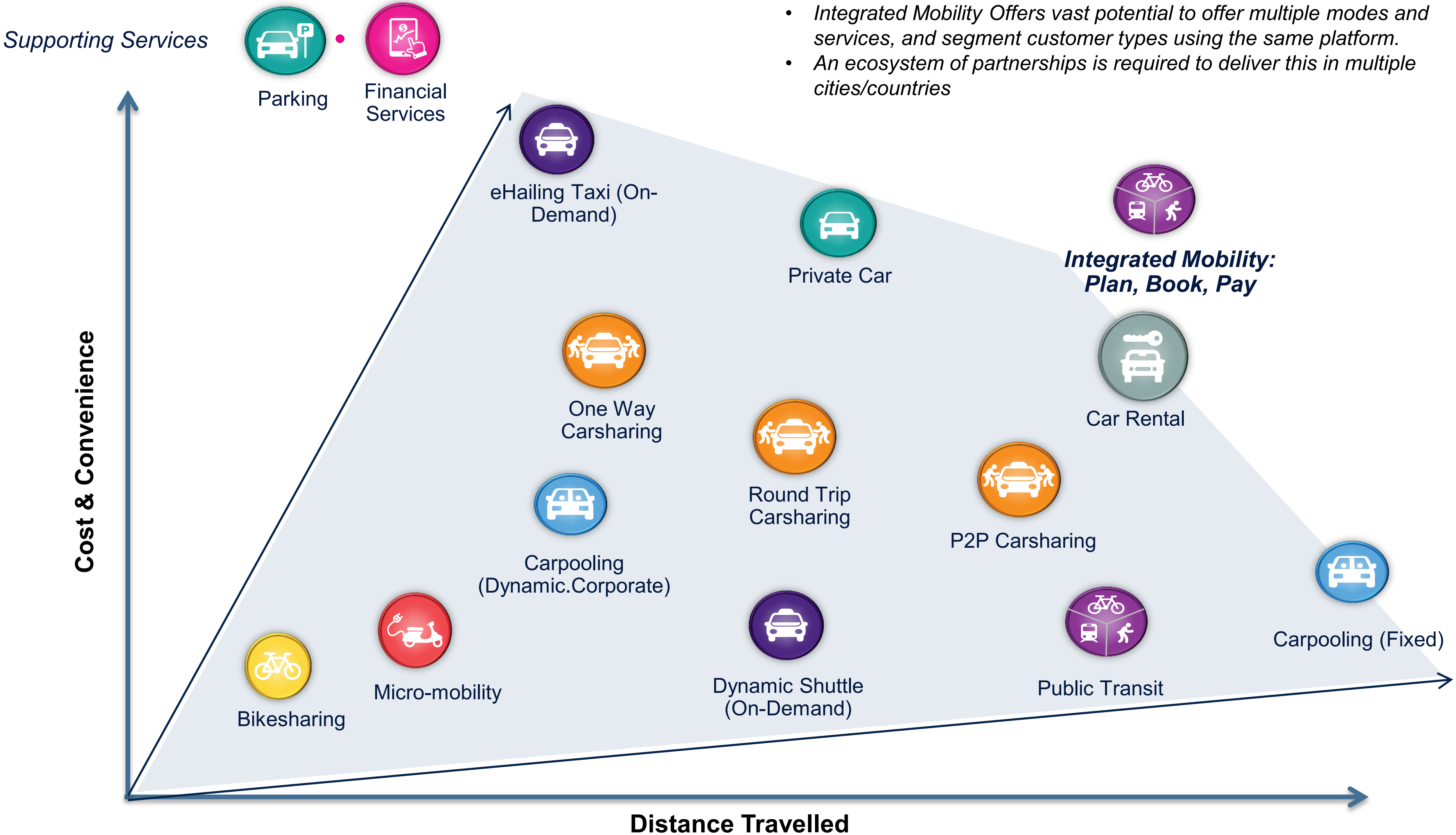
Source: Frost & Sullivan

Emerging Urban Mobility Landscape

To increase convenience, comfort, and coverage/use cases

Exploring the area between public transport, and private car ownership

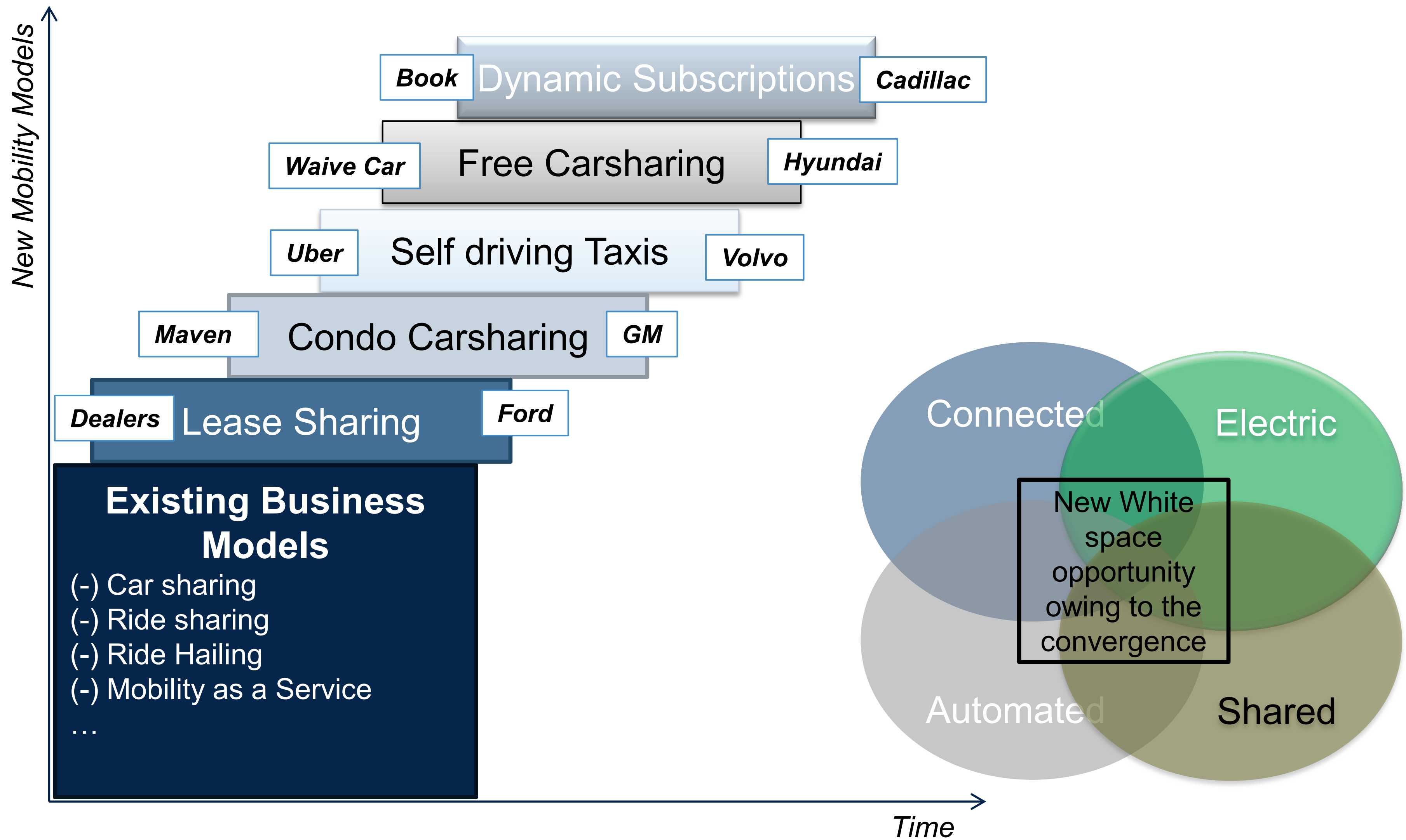
- *Integrated Mobility Offers vast potential to offer multiple modes and services, and segment customer types using the same platform.*
- *An ecosystem of partnerships is required to deliver this in multiple cities/countries*



Source: Frost & Sullivan

Future Mobility Business Model Evolution

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

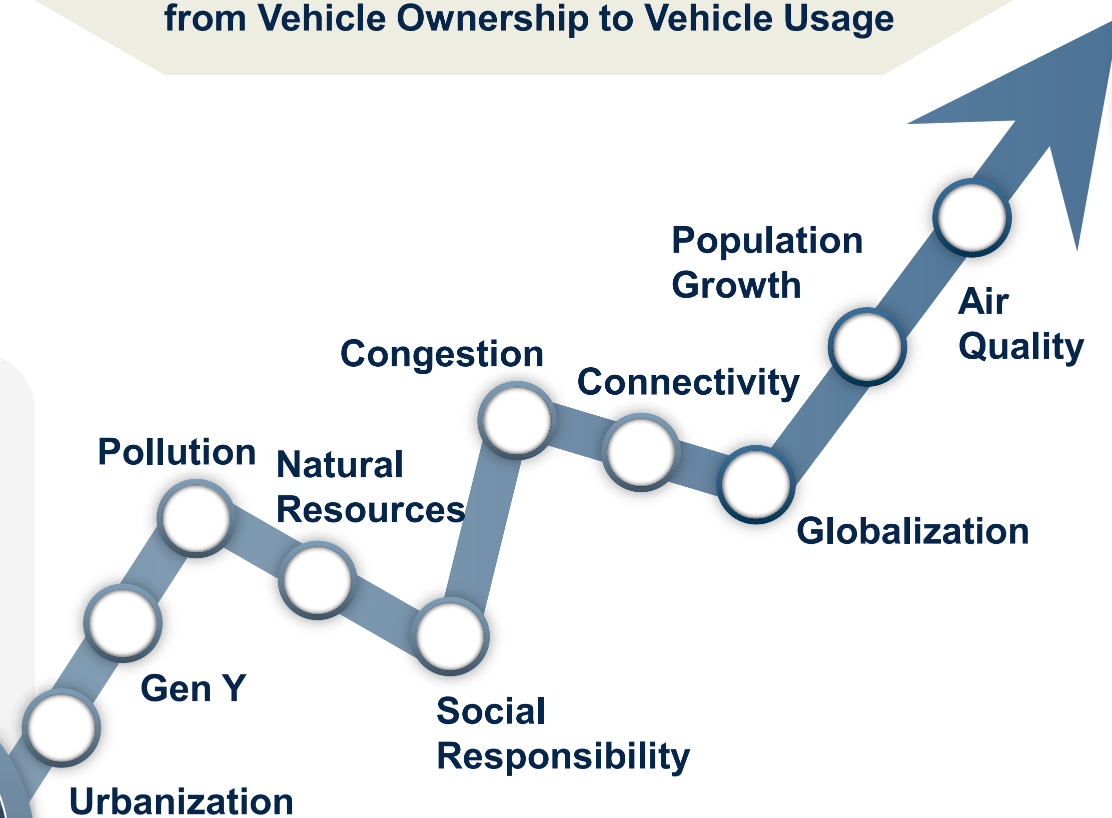


Source: Frost & Sullivan

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 = Private Vehicle

- Freedom
- Convenience
- Status – Progress
- No Real Alternative

Transport = Door-to-door Mobility

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