FROST & SULLIVAN

Future of Mobility

Future & Visions of Collaborative Mobility

Friday 26th June 2015

Martyn Briggs, Industry Principal, Frost & Sullivan

Converging Mega Trends & Their Impact on Integrated Mobility

Mega trends are shaping demand for Integrated Mobility but **Technology & Big Data** advancements are underpinning future services and business models

Urbanisation and Smart Cities

Generation Y

Infrastructure Spending

Connectivity

Mobile Ticketing & Payment

Vehicle Sharing

On-Demand Transportation

Door to Door Mobility Planning

Disruptive Forces: The Rise of ‘Asset Light’ Business Models

The scale, breath and pace of disruption within global business is huge with the battle being played out by companies connecting sellers with buyers through platform-based intermediary marketplaces

World’s #1 Marketplaces

UBER

facebook

Alibaba.com

airbnb

Owns No Vehicles

Creates No Content

Holds No Stock

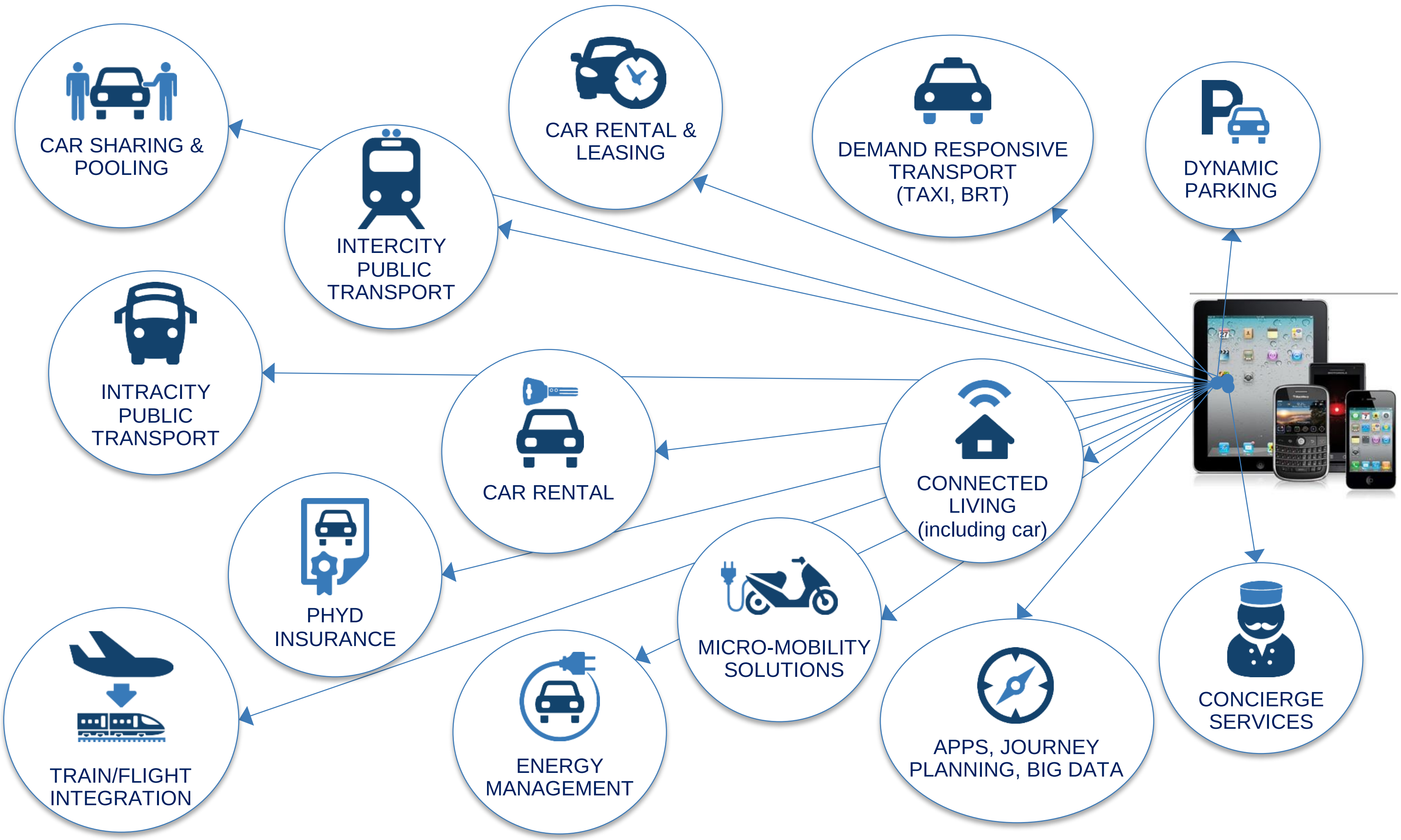
Owns No Real Estate

What does this mean for Mobility?

Mobility is rife for disruption! E.g. public transport, taxis, parking, P2P rental, ridesharing

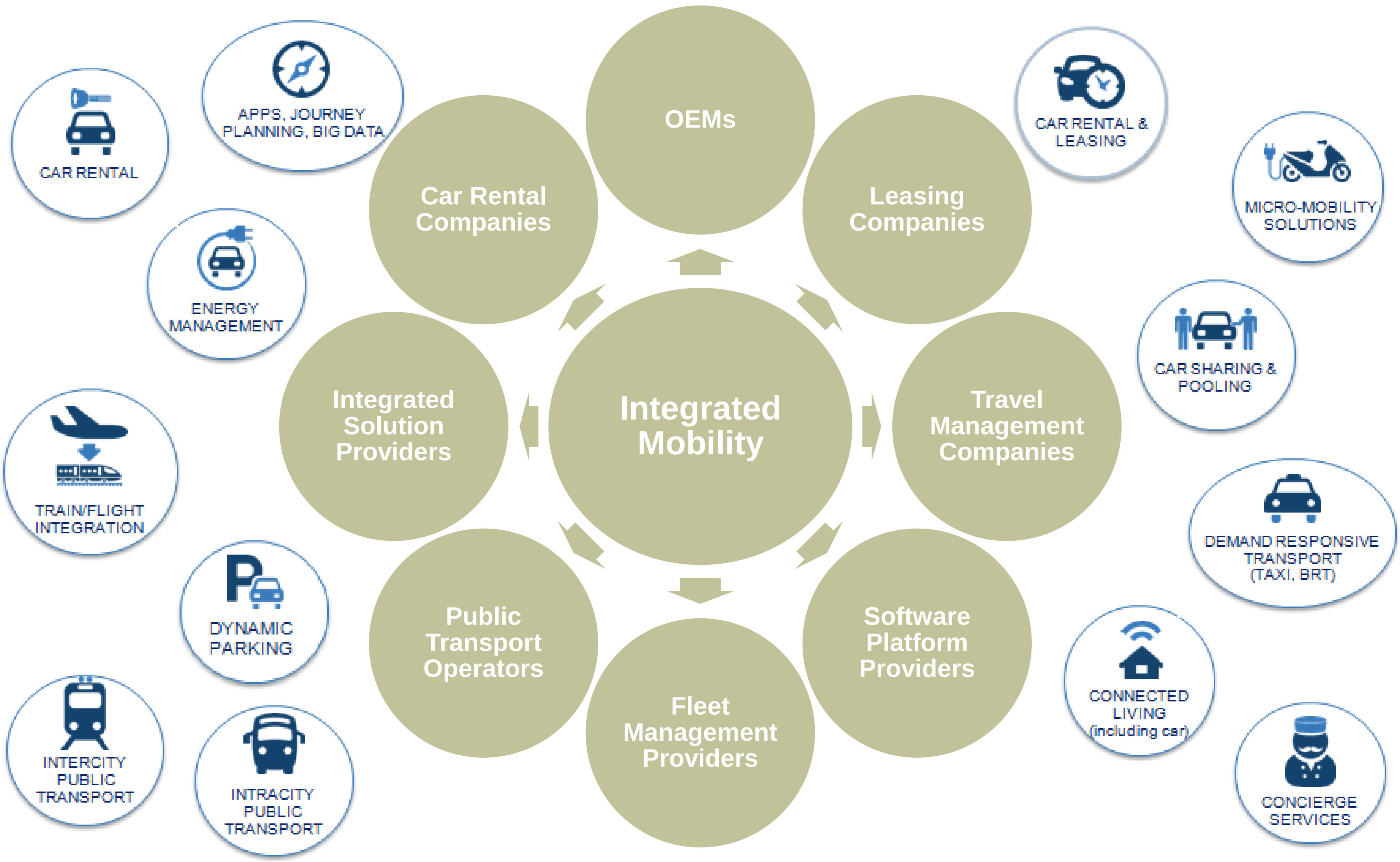
Integrated Mobility Definition

Technology enabled, any device delivery of real-time, door-to-door, multi-modal travel encompassing pre-trip, in-trip and post-trip services bringing Convenience, Time & Cost Savings to the Mobility User



Mobility Landscape – Many Actors, New Partnerships, New Models

In both B2C and B2B environments customers are demanding intuitive services; many actors investing significantly in order to deliver the 'killer' proposition & seamless user experience.



Carsharing Business Models

Several well established vehicle sharing business models catering to specific customer groups / use cases, by the minute, hour or longer term (corporate carsharing and leasing)

Traditional

- Round-trip /station based services – vehicles rented & returned to same location (e.g. Zipcar)
- One-way fixed point to point journeys (e.g. Autolib)
- One Way – Free Floating services; vehicles rented from or two anywhere in a specified zone (e.g. car2go, DriveNow)

90,000 Vehicles **5,300,000** Members

Peer to Peer

- Short rental/a few days
- Insurance - key to the operating model/platforms
- Key Players incl. Getaround, RelayRides, Wheelz, Buzzcar, Tamyca

147,500 Vehicles **1,500,000** Members

Corporate

- Dedicated fleet of vehicles at company premises for the shared use amongst the company's employees.
- Integrated keyless operations, vehicle telematics, and analytics technologies key
- Key Players incl. AlphaCity, Ubeeqo

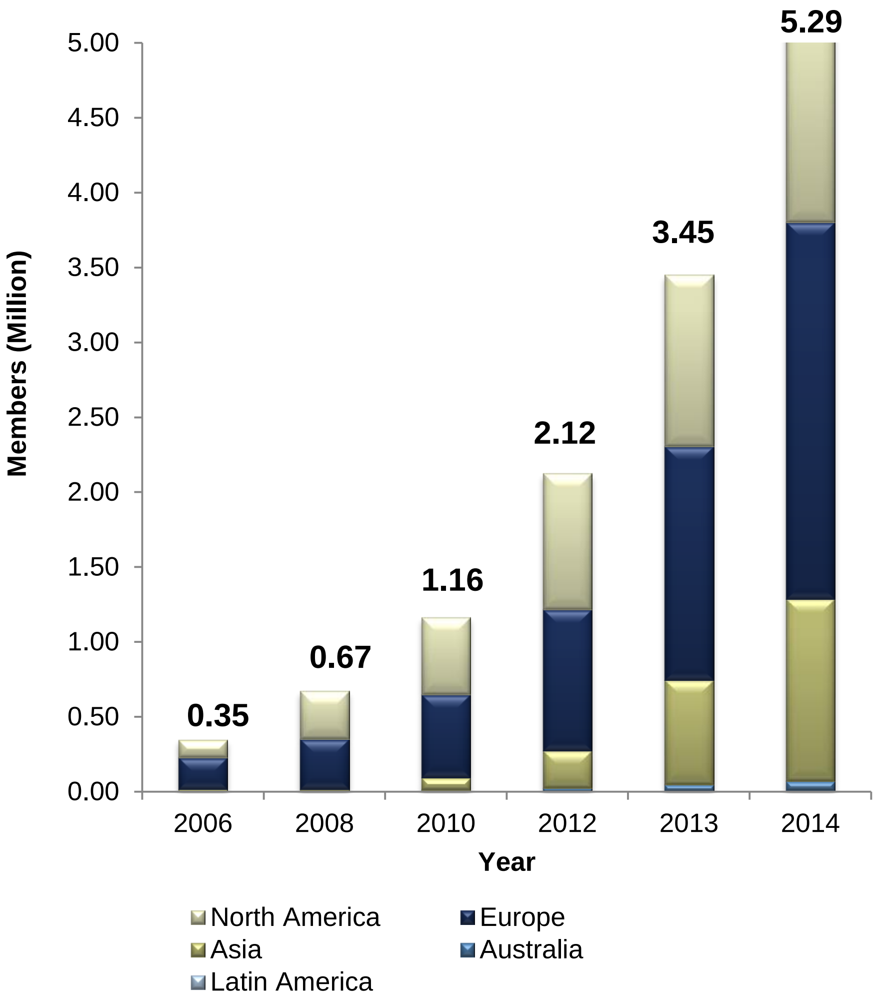
4,000 Vehicles **60,000** Members

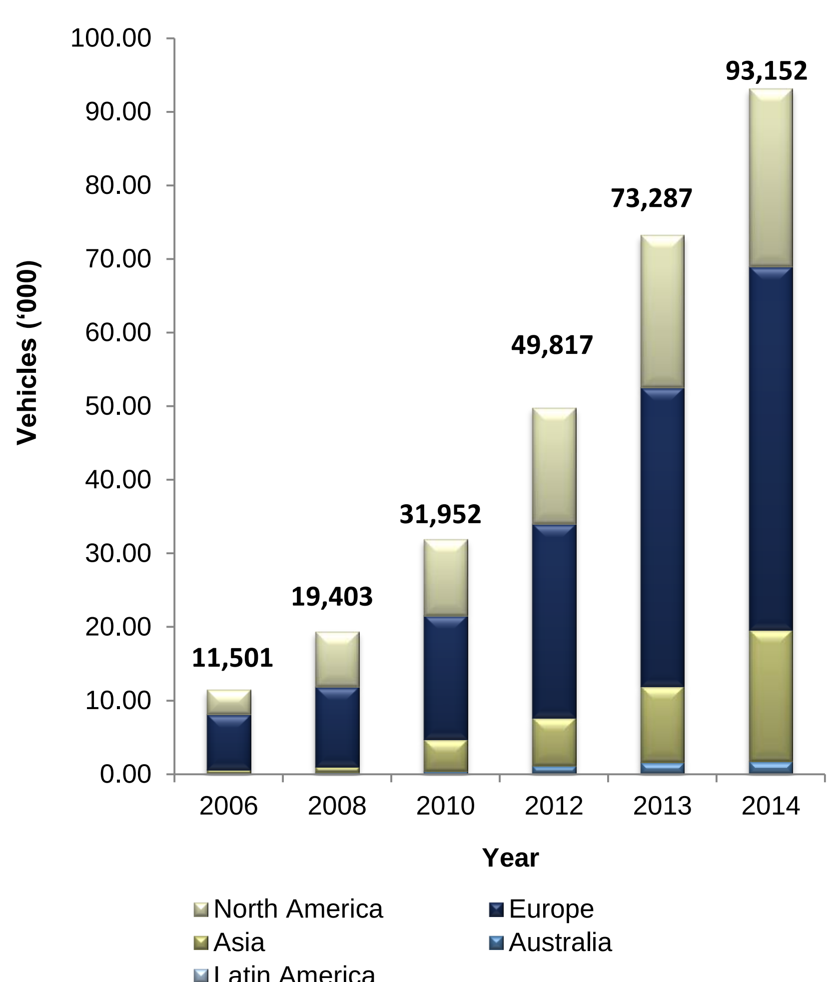
…already nearly 7m people use these shared services globally

Global Carsharing Membership and Fleet Size

By 2014, carsharing (station based + one way) membership crossed 5 million, and the number of vehicles increased to >93,000, thus a member-to-vehicle ratio of 57:1

Traditional Carsharing Market: Membership and Fleet Size, Global, 2006–2014

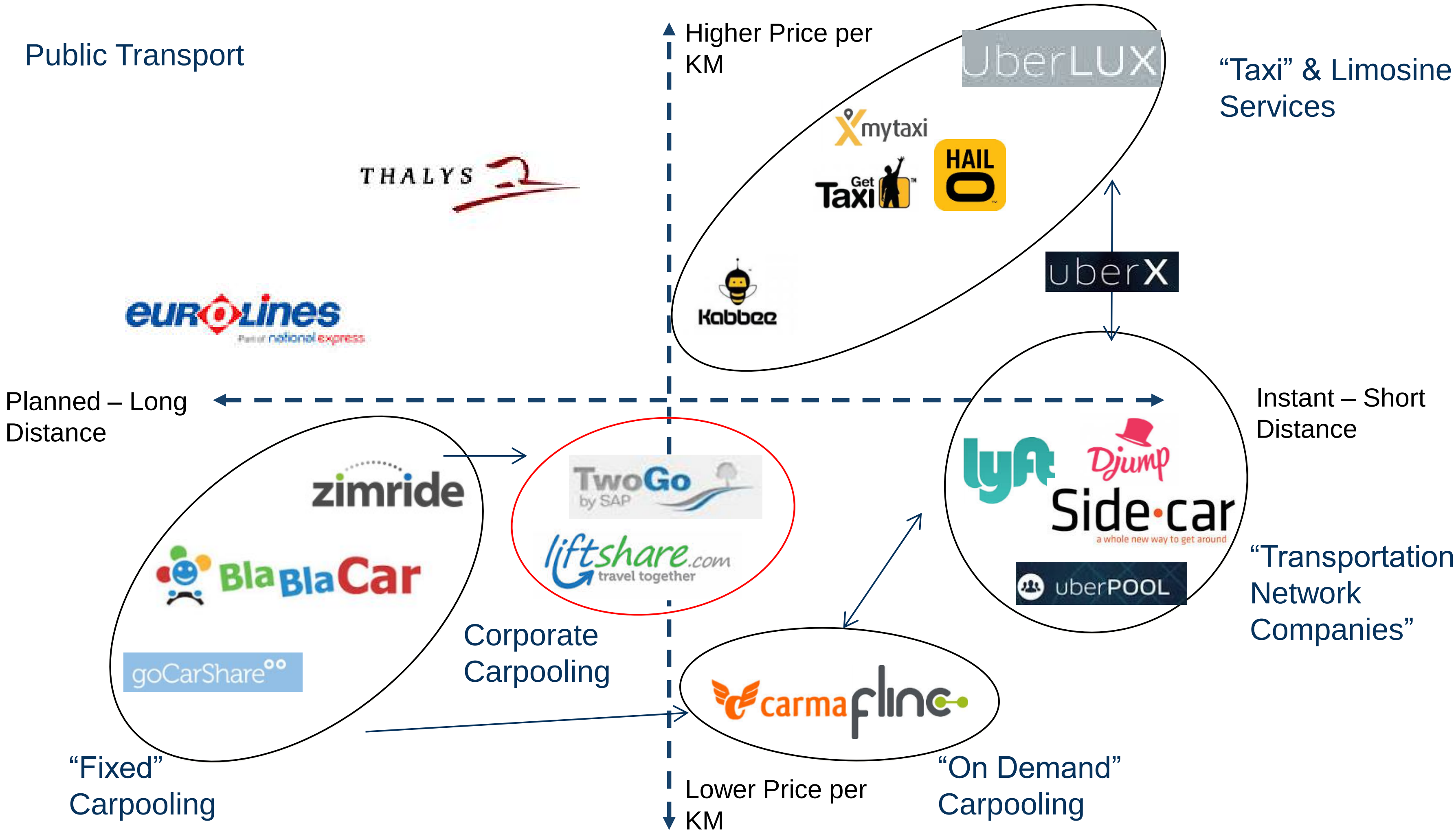




. Source: Frost & Sullivan Analysis

Comparative Market Positioning of Ridesharing business models

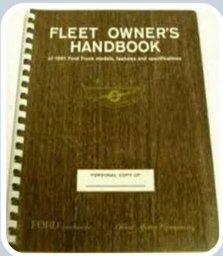
There are already >24m Rideshare members in Europe (excluding TNCs & Car hailing); Frost & Sullivan estimates >132m ridesharing members globally by 2025



Source: Frost & Sullivan.

Future of Corporate Mobility: From TCO to TCM

The boundaries between Fleet, Travel and Expense Management are blurring; continued convergence and continued focus and adoption of **Mobility Management** is expected



Total Cost of OWNERSHIP

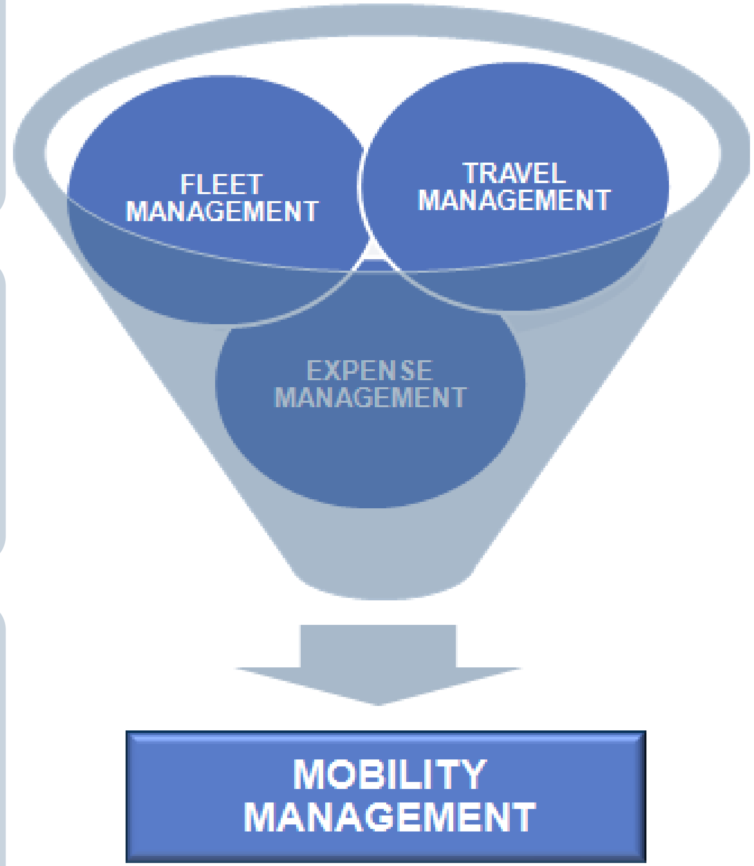
- **Running Core Fleet & Keeping Company Drivers Informed**

Total Cost of USERSHIP

- **Managing Overall Fleet & Educating All Company Drivers**

Total Cost of MOBILITY

- **Delivering Integrated Services & Empowering All Employees**



Increased Business Travel & Technology Disrupting Market Offer

With increasing employee travel, the need for cost control and compliance is being facilitated by IT platforms; several new partnerships are being formed to accommodate this growing market

IT platforms to plan, book, expense travel (integration of IT and TMCs?)

New Partnerships – Social goes Corporate: Concur reports 27X increase in Airbnb expenses and 5X Uber

Business & Leisure merging = "Bleisure" – 30% add leisure days to the trip

New Products & Competitors in all segments – OEMs, leasing, rental, TMC, IT

Who will hold the data in future? Concur have 25million customers

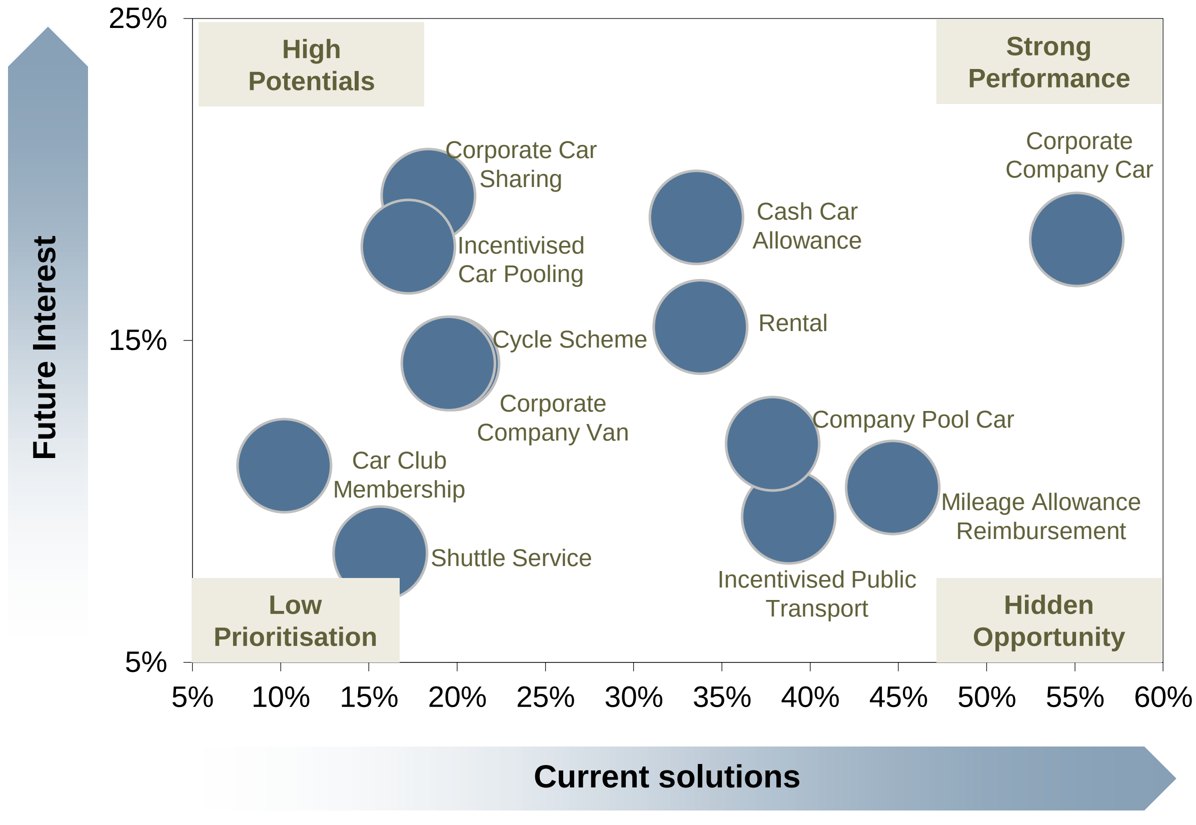
Integration & Curation – Taking intelligence from listings and targeting them to users

Providers are moving towards Integrated, Self Service, Corporate Mobility solutions

Mobility Solutions Overview

Company Car will remain a core component of corporate mobility however interest in new mobility solutions certainly exists and is growing particularly in car pooling and car sharing

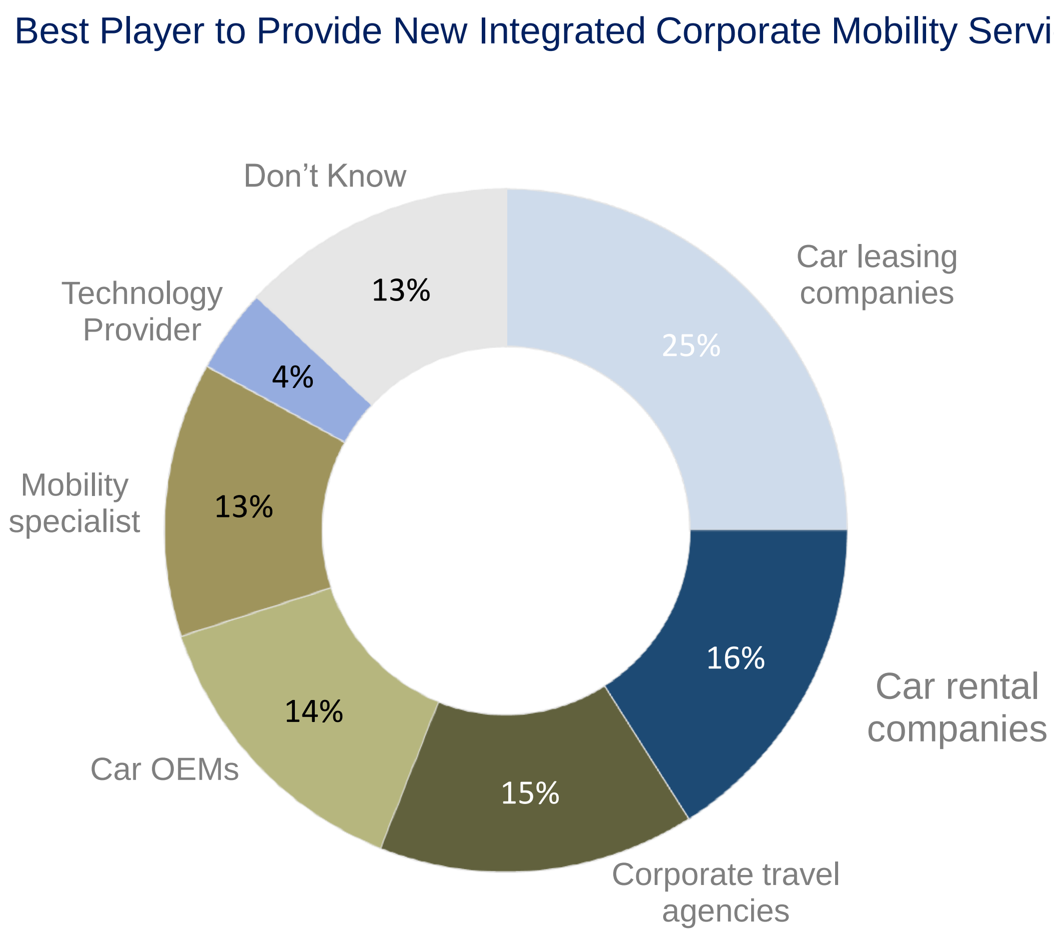
Mobility Solutions **– Currently in use vs Future Interest**



Q1. type of mobility solutions in use (n=441); Q19. Mobility solutions interested in 5 years (n=441).

Key Findings – Integrated Mobility Service Provider

Leasing companies considered by decision-makers to be best placed to deliver Integrated Mobility services albeit picture is mixed confirming the fragmented nature of the market



Q32 Best player to deliver integrated mobility solution service. Base : total n=465.
Top results highlighted in red

Key Findings – Desired Products in an Integrated Solution

Services typically integrated by a Travel Management Company are the most preferred.
Payment options feature prominently; an any device strategy is integral to Future Mobility

Most Preferred Services (top 5 ranking) - Europe

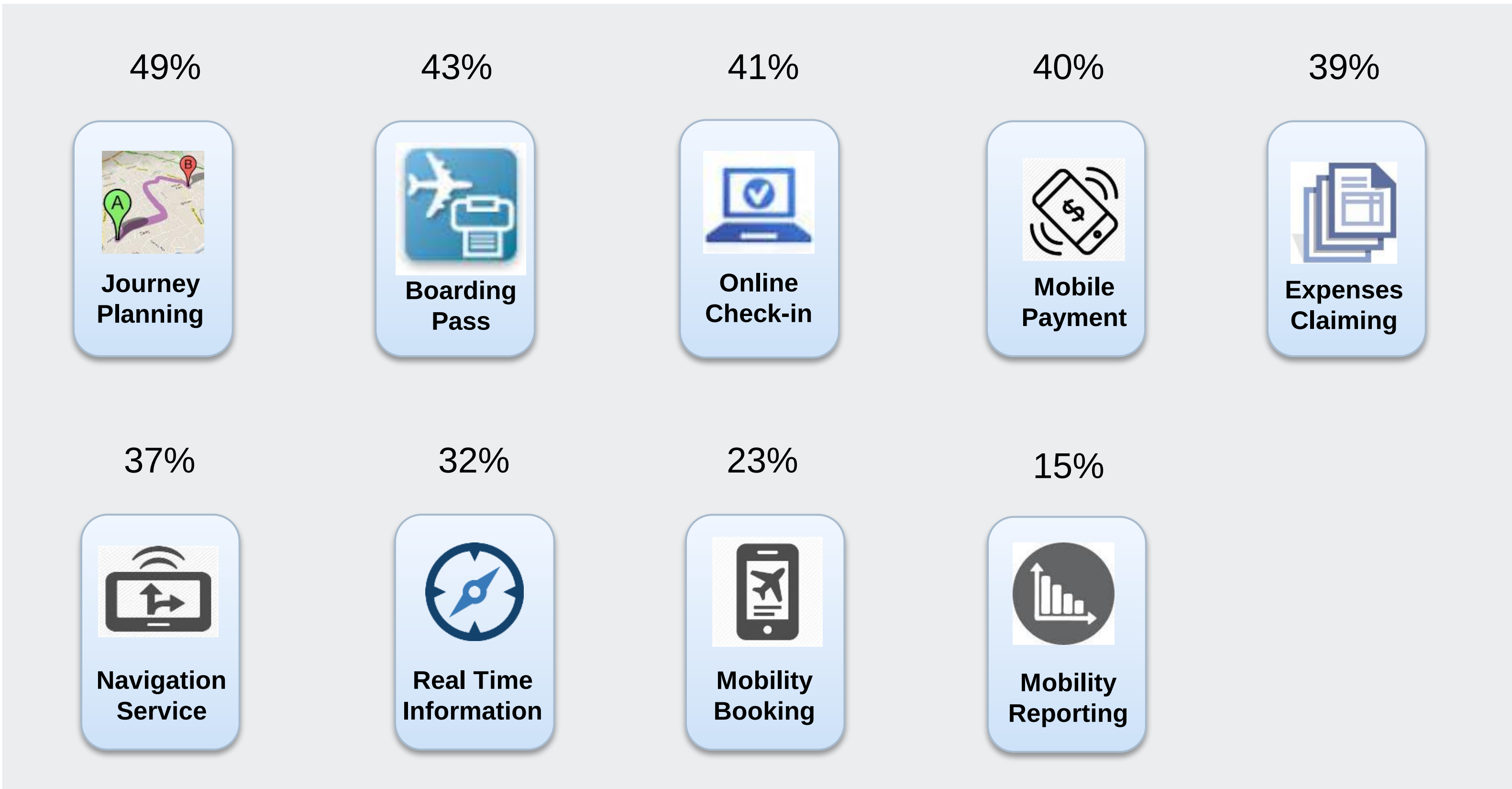
Hotel/Flight Booking	55%
Car Rental	53%
Train ticketing	44%
‘Fuel’ Payment*	41%
Trip Planner	38%
Parking Payment	29%
Taxi Payment	23%
Taxi Booking	23%
Car Sharing + Membership	22%
Airport Lounge	22%
Tube/Bus Ticketing	22%
Hourly Office Rental	17%
Car Pooling	16%
Cycle Rental	11%
Navigation Service	8%

Q31. Most preferred services in an integrated solution n=465
Preferences were selected by respondents from a pre-defined list of services as opposed to a free format / free choice approach
* Covering payment of traditional fuel, energy and other services available from fuelling / charging stations e.g. cleaning / valeting
+ On-demand access to vehicles through services such as DriveNow, Car2Go, Zipcar, etc.

Key Findings – Desired Products in an Integrated Solution (Mobile)

Journey Planning the most desirable service so must be a priority component of an Integrated Mobility service

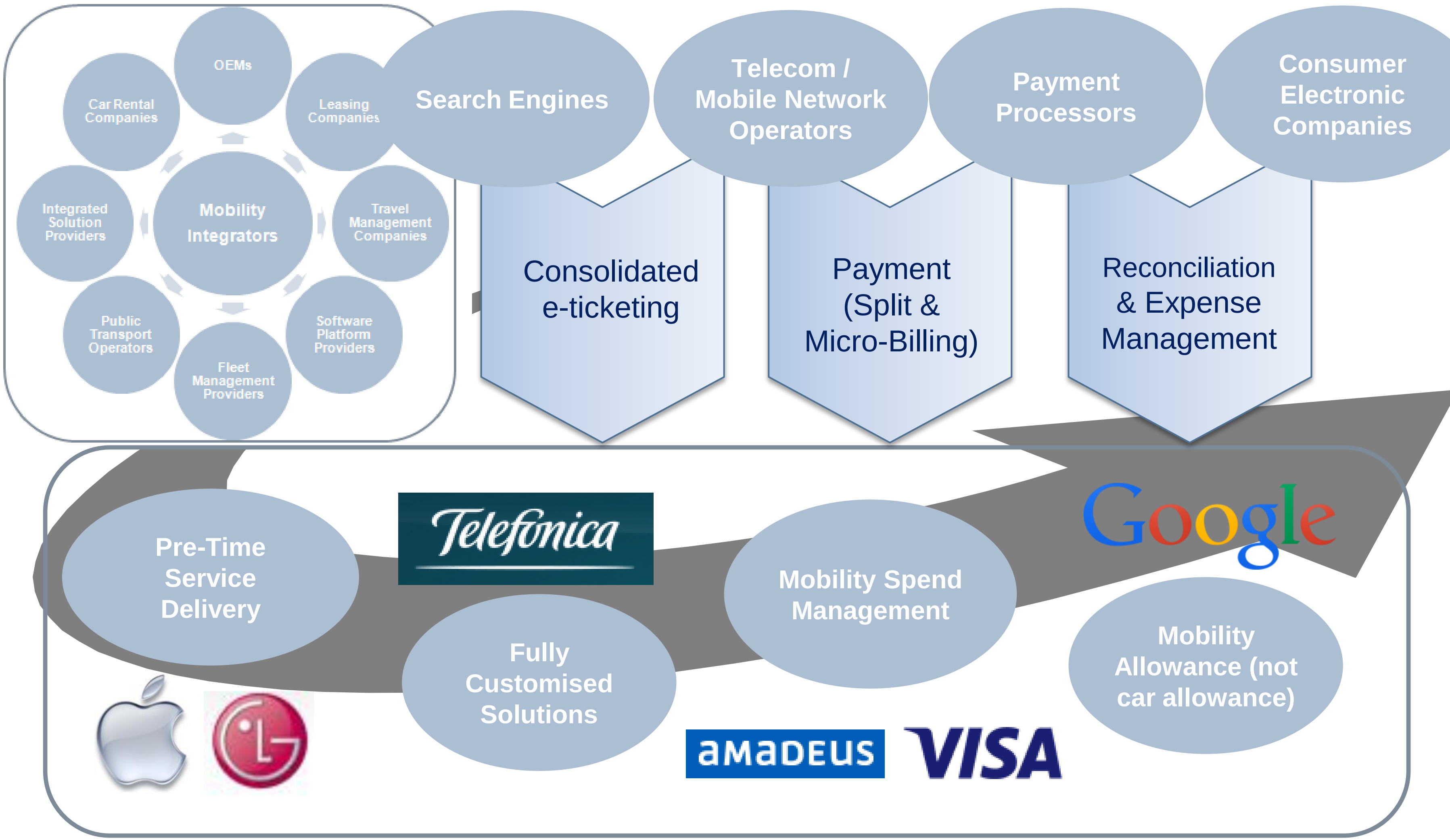
Mobility Integration Service in Mobile Application - Europe



Q33. Interest on mobile applications for the new mobility solution. Base: Total n=465
Preferences were selected by respondents from a pre-defined list of services as opposed to a free format / free choice approach

Future of Integrated Mobility – Summary

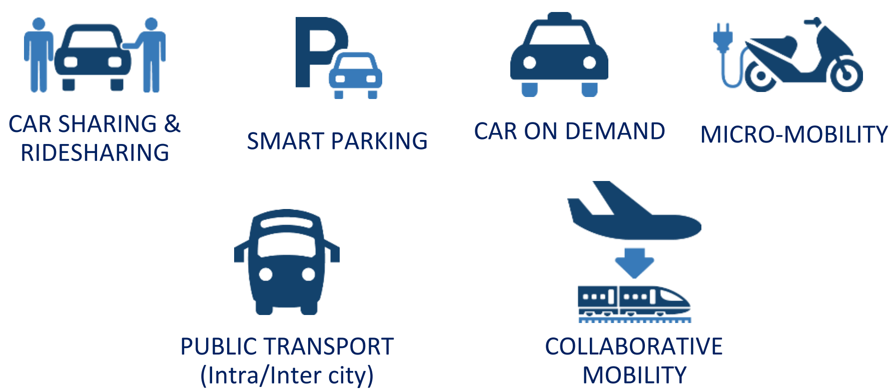
A sophisticated partnership-based mobility ecosystem; ongoing technology investment and brand marketing will be key in determining the future leaders in integrated mobility service delivery



What's Required to deliver the future of Collaborative Mobility?

A combination of New Business Models, supportive policy and technology led innovation are required to achieve fully collaborative mobility; longer term – connected & automated mobility are the next disruptors

New Business Models



Smart Policy & Governance

- **Open Data**
- **Framework for New Mobility**
- **Integrated Platforms**
- **Technology Incubation**
- **Incentives**

Technology & Innovation

- **Big Data**
- **Analytics**
- **Door to Door**

- **Smart Ticket/Payment**
- **Reporting/Reconciliation**
- **Everything Mobile!**

Thank You & Keep in Touch!

Future of Mobility Video

Watch our latest Video on the Future of Mobility, filmed live at Frost & Sullivan's Annual Mobility Workshop

FROST & SULLIVAN

Martyn Briggs
Industry Principal, Mobility,

Direct: (+44) 2079157830
Mobile: +44 (0) 753 428 2371
martyn.briggs@frost.com

Join our discussions on LinkedIn and connect with us on @FS_automotive @BriggsMartyn