



## DFS Case Study: Mobility Services for Emerging Mega Cities in 2020

*Stricter regulations, sustainability concerns and ever increasing traffic densities are forcing car manufacturers to rethink their long term strategies. Automobile companies are spending considerable time and effort trying to figure out what the future of transport will look like.*

With a mandate of offering innovative mobility solutions to a global audience, the Mobility Services Group of Daimler Financial Services (DFS) is looking for the next big innovation in the individual mobility space. They are looking for a portfolio of solutions to tackle the individual mobility problem along two dimensions – customer user needs and the structure of megacity including city transport infrastructure and typical movement patterns.

The mobility solution group has decided to focus on emerging megacities (like Shanghai, Mumbai, Sao Paulo, Seoul, Jakarta etc.) to pilot this project. The solution could be a combination of existing solutions (carpooling, car sharing etc.) or an entirely new solution altogether. The solution that DFS is targeting should be unique, innovative, scalable and feasible. Specifically, it has the following evaluation criteria for the solution:

- ▶ **Value proposition:** Solution provides a Unique Selling Proposition (USP) that may not be copied easily; services meet and exceed the changing mobility needs of customers; solution should also identify the customer segments that would exist in emerging cities in 2020;
- ▶ **Innovation:** New/pioneering means of individual mobility services;
- ▶ **Growth:** Support growth (revenues, sales, customer base, etc.) by adding new mobility services that contribute to Daimler Group results;
- ▶ **Feasibility:** Realistic content, feasible within a reasonable time period (2020); pilot city should be chosen to demonstrate proof of concept (Mumbai, Shanghai, Mexico City, Sao Paolo, Jakarta, Seoul, etc.)

### DFS and the Mobility Services Group

In 1967, Daimler began leasing activities with Porcher & Meffet GmbH. This was followed by the founding in 1979 of Mercedes-Benz Leasing GmbH. Once it was granted a partial banking license, the company opened its banking business Mercedes-Benz Finanz GmbH in 1987 and Daimler-Benz Inter Services (debis, 1990). This entity was later renamed as Daimler Chrysler Financial Services and then finally Daimler Financial Services.

At present, Daimler Financial Services (DFS) offers a range of automobile-related financial services. Their products include leasing, retail financing and dealer financing. Some of their other services include commercial fleet





management, insurance solutions, banking services and innovative mobility services. With the aim of becoming the leading provider for financial and mobility services, DFS today finances or leases 4 out of every 10 Daimler vehicles worldwide. The company manages approximately EUR 80 billion worth of contracts worldwide across 40 countries. DFS estimates that around 2.8 million cars and trucks are on the road thanks to their services.

In 2011, DFS assumed responsibility of the popular Daimler brand car2go. In 2013, DFS setup Daimler Mobility Services GmbH as a subsidiary. The rapid spread of smartphones had created totally new channels for organizing personal mobility, particularly in large cities. Furthermore there were changes in urbanization and ecological trends that were changing the face of mobility. DFS wanted to play a key role in shaping this new environment and hence the Mobility Services Unit came to being. While DFS is tasked with generating growth along the value chain and providing access to new customer groups for Daimler worldwide, the Mobility Services Unit has the explicit mandate of looking at business innovation for mobile solutions.

### **Mobility Services Group Products**

Innovation has been the backbone of the Mobility Services group. Two noteworthy products from the Mobility Services Group are car2go and moovel.

**car2go**, the flexible car sharing program, is the largest of its kind globally. Piloted in the German university city of Ulm and thereafter rolled out to many cities worldwide, this service gave Daimler a clear head start over competition in an increasingly environmentally conscious world. Customers can rent smart brand vehicles at any time and leave the car anywhere in the area where the service is available once they are done using the car. Customers can use smartphones or computers to find available vehicles and only have to pay for the actual rent period which is charged on a per-minute basis. In addition to saving customers money, the service is also environment friendly - in certain cities the service uses electric vehicles. Over 120,000 customers use car2go across 16 European and North American cities today.

**moovel**, the smartphone app, enables customers to compare various transportation systems with just a tap of the screen in order to find a personalized route that takes them from point A to point B. The app allows customers to compare the costs and travel times of various mobility options such as a car2go, taxis, ridesharing services and local public transportation. The app is currently available for Stuttgart, Berlin and the region Rhine and Ruhr.



## Understanding Personal Mobility

The current transport systems prevalent in megacities today can broadly be classified as below:

- ▶ Public: This encompasses urban railway systems (subway, tube, MRT), rail, bus, etc.
- ▶ Private: cabs, vans, etc.
- ▶ Personal: cars, bikes, etc.

For a number of years now, cars have occupied the preeminent position in the personal mobility value chain. This is not without reason as cars still offer users the most convenient way to get from Point A to Point B. Any personal mobility solution of the future will have to at least match, if not better, the existing modes of transport for both convenience as well as cost.

To frame a workable mobility solution, it is also necessary to understand why people move around. The purpose of travel tends to dictate the mode of transport that people will adopt for a trip. For example, a person commuting to work daily from a suburb might find it acceptable to use the railway network, but a person travelling on leisure during weekends/holidays is more likely to use a personal car.

In an era of rapid urbanization, changing customer needs and preferences, the personal mobility industry has undergone massive change over the past few years. Carpooling, car sharing, the use of smart apps and intelligent parking systems are just some of the solutions that personal mobility companies have come up with.

## The Integrated Mobility Ecosystem

The consulting firm, Ernst & Young, defines the ecosystem in terms of three components – mobility services for end-users, the infrastructure that enables integration and stakeholders that deliver these solutions. The following factors are driving the mobility ecosystem:

- ▶ **Customers' mobility needs:** There has been a shift from vehicle ownership (particularly in megacities) to mobility access that is flexible, affordable and convenient with minimal delays in transit. This is driving real-time mobility and planning, single interface payment systems and connected transport systems.
- ▶ **Infrastructure:** Improvement in data availability, analytics and technology along with better connectivity and the rise of e-commerce are some of the factors that have made real-time mobility solutions a reality.
- ▶ **Stakeholders:** A final cog in the wheel is the collaboration between infrastructure providers (Telecom companies, IT & Payment systems, parking operators etc.), city administrators and transport operators (car





sharing companies, public transport providers and automobile OEMs). Collaboration between these stakeholders is enabling a truly integrated mobility ecosystem for the end user.

## Mobility in Megacities

According to *KPMG's Global Automotive Executive Survey 2013*<sup>1</sup> more and more city dwellers will choose not to own a car, preferring instead to access vehicles and other forms of transport through 'mobility-as-a-service' (MaaS). Congestion, restrictions on driving, charges for road use and parking, and stricter rules on CO<sub>2</sub> emissions are seen as enabling factors for this shift. Auto executives still see cars as part of a wider mobility concept and many anticipate that there will be a rise in alternatives to car ownership, such as car sharing or pay-on-use.

As of 2008, the World Bank estimates that more than half the world's population was now living in urban areas.<sup>2</sup> Research company Frost & Sullivan (F&S) estimates that there will be 30 megacities by 2025 (each with a population of over 10 million).<sup>3</sup> F&S also predicts that car sharing will grow ten-fold in the period from 2010 to 2016.<sup>4</sup> Technology will be a catalyst for this change, ultimately leading to 'smart cities' that place high importance on smart transportation and environment responsibility.

While the need for innovative mobility solutions cannot be overstated, it is also important to note that there is no one size fits all solution for when it comes to megacities. The way the city is designed plays a big part in defining what kind of solutions might work. For example, transportation in Singapore is very different from Tokyo or Chicago. Most people in Tokyo live outside the city and travel into the city to work; Chicago is a donut city with commuters moving along rings; in Singapore people are moving in different directions in a zigzag pattern. So it is important to take into account the city's design while creating a solution for the mobility problem.

## DFS and Personal Mobility

In response to the changes in the personal mobility space and in keeping with the DFS 2020 strategy, the mission statement of DFS was modified - to be the first-choice provider of financial and mobility services for their customers and dealers, in partnership with their automotive brands. To achieve its mission in the mobility services space, it has

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<sup>1</sup>Source: <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/global-automotive-executive-survey/pages/default.aspx>

<sup>2</sup> Source: <http://data.worldbank.org/topic/urban-development>

<sup>3</sup> Source: [http://www.just-auto.com/analysis/mega-cities-and-the-future-opportunities-for-mobility-integrators\\_id123790.aspx](http://www.just-auto.com/analysis/mega-cities-and-the-future-opportunities-for-mobility-integrators_id123790.aspx)

<sup>4</sup> Source: *ibid*





charged the Mobility Services Group with finding a portfolio of game changing solutions that will be tailored for customer use-case and type of megacity.

Having successfully launched products like car2go and moovel, DFS is now looking for an ecosystem based solution in the personal mobility space. Much like how Apple's iTunes software and Nestle's Nespresso redefined their industries, DFS is seeking to do the same with personal mobility. This could involve integrating multiple areas along the current value chain of Daimler group products (including financing, software and Daimler vehicles).

### The Way Forward

DFS is looking for a portfolio of tailor-made solutions that will cement its status as pioneering innovator in the personal mobility space as well as deliver growth to the overall Daimler Group. Participants are expected to analyze different use-cases (customer segmentation) and megacity types to come up with a portfolio of solutions that can be used for a combination of scenarios. An emerging megacity should then be picked to develop the full integrated mobility ecosystem based solution. It is important to note that the solution should be realistic within the timeframe of the solution (2020). Ideas involving the use of personal jetpacks, personal hovercrafts, etc. are strongly discouraged.

The Mobility Services group is no stranger to crowd sourcing. The group regularly conducts idea competitions and then pilots the best ones. As the group searches for the next game changing innovation in the individual mobility space, it has partnered with Cerebration 2013. With the competition's wide reach and unquestionable talent pool, Daimler is looking for the leaders of tomorrow to come up with a solution that could change the concept of how we view mobility forever.



**Exhibit**

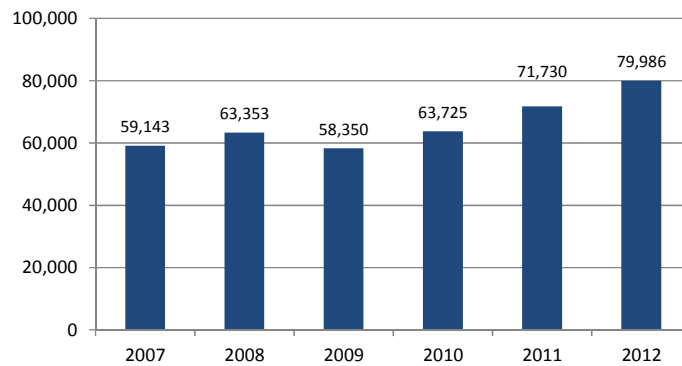
**Exhibit 1: Daimler Financial Services key figures**

Daimler Financial Services

(in millions of euros)	2012	2011	12/11 % change
EBIT	1,292	1,312	-2
Revenues	13,550	12,080	+ 12
New business	38,076	33,521	+ 14
Total Portfolio	79,986	71,730	+ 12
Europe	34,536	31,173	+ 11
Americas	34,060	30,605	+ 11
Africa & Asia Pacific	11,337	9,936	+ 14
Portfolio (in units)	2,837,267	2,612,000	+ 9
Employees (Dec. 31)	7,779	7,065	+ 10

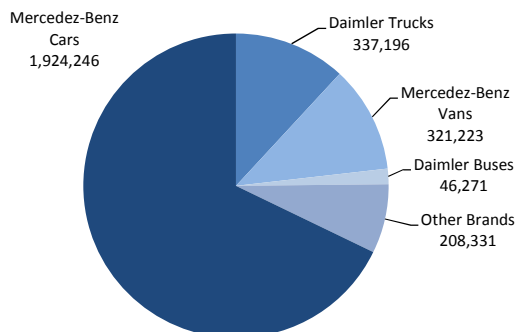
**Exhibit 2: Daimler Financial Services contract volume**

Daimler Financial Services contract volume (in millions of euros)

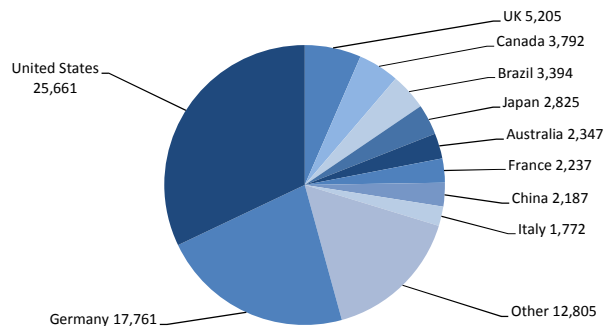


Contract volume in 2012 by vehicle segment (in units)

All segments 2,837,267



Contract volume in 2012 by market (in million of euros)



**Exhibit 3:** Daimler Financial Services world wide presence

