Car manufacturers... How to become a mobility services operator?

US - France - Germany - India - China











1. Car makers initiatives



2. Competitive players map



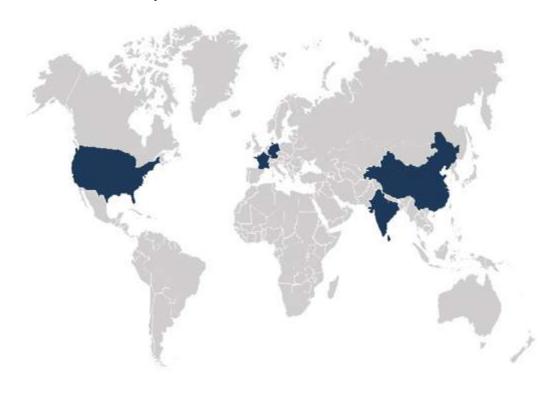


3. Key Success Factors



4. Strategy & Business model

Focus on **Individual urban mobility**And its impact on **Car Manufacturers**





MOBILITY SERVICES OVERVIEW

- → From "Car for freedom" to "Mobility as a lifestyle"
- → Answering the "Mobility as a lifestyle"
- → Are actual players making money?

CAR MAKERS CHALLENGES AND INITIATIVES

- → Car makers facts & futures challenges
- → Car makers in the mobility services business

STRATEGIES FOR THE FUTURE

- → Business Model
- → Key Success factors
- → Strategies for the future
- → Appendix

From "Car for freedom" to "Mobility as a lifestyle"





Mobility Services





60%, would trade their cars for a robo-taxi/innovative mobility service **27%**, even if the total cost were equal or higher than owning a car

Source: From 3,000 responders under 30 y.o. in cities from Germany, China, USA. McKinsey, "Profiling tomorrow's trendsetting car buyers", December 2018

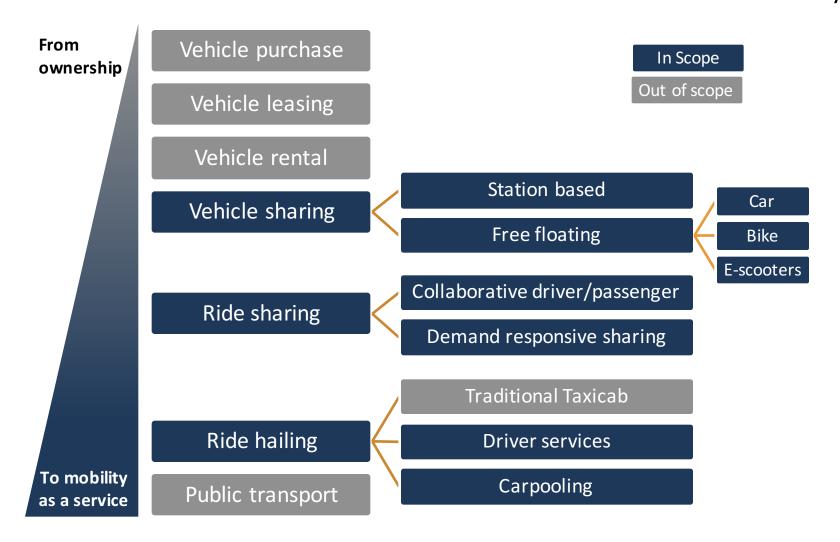
Personal mobility services tree map





Mobility Services

Multiple actors with fragmented offers entered the mobility services business ranging from traditional taxi services to innovative services to answer the urban mobility complexity.



Example of such mobility players





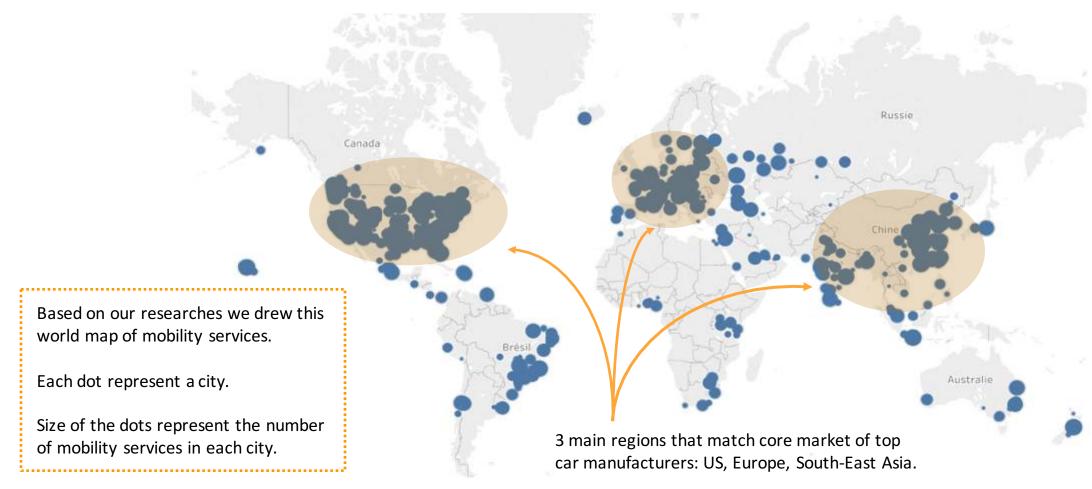
Answering the "Mobility as a lifestyle"





Mobility Services

In response to needs and dreams, multiple actors developed specifics offers, ranging from traditional taxi services to innovative last mile services to answer the urban mobility complexity.



Source: research done by ESCP team, 2018





Mobility Services

Development of mobility service business is fueled by:

- Constant trend of urban development leading to health and urban mobility efficiency concerns
- Technological break through: smartphone, artificial intelligence, big data, wireless networks, batteries...
- Large Funding by VC, Tech companies

	Leader	Profitability	Main challenges	Opportunities
Ride hailing	UBER UNR DIDI	Low or negative due to invest.	Local city regulations/bansDriver labor claim	Autonomous vehicles
Vehicle sharingClosed loopOpen loop	mobility	Negative due to business model scalability	 Fleet investment and scalability Fleet ownership risks: vandalism Partial service failure: Autolib, Ofo Signs of services saturation 	Reduction of personal vehicles in cities
Ride sharing, on demand	Grab Bla Bla Lines	Negative due to actual small scale	Scalability & service levelThird party efficiency	Answer to urban traffic by increasing passenger number per vehicle

Despite tremendous expansion and search of global leadership, most of innovative mobility services are not profitable yet, but some of them will be in the future. At the image of smartphone begins, it took few years to see value in the data flow and leverage it.

Mobility services business perspectives



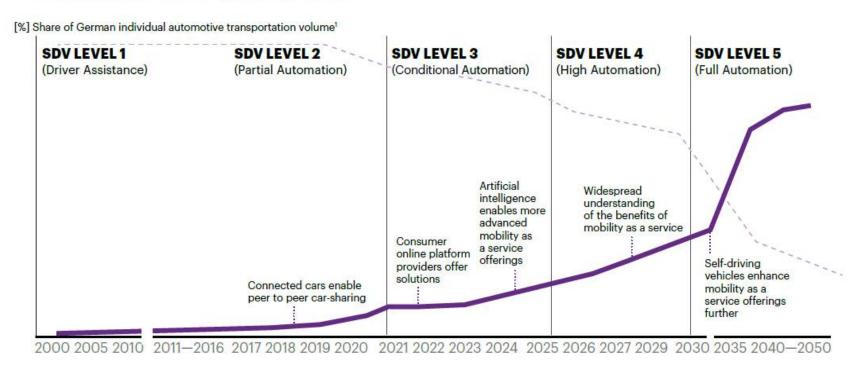


Mobility Services

An important development to be tempered: the ultimate technology 'Self driving vehicle' is not ready yet.

- According to experts previsions autonomous vehicules will more likely enter the mainstream market after 2030 and will have to coexist on road with non-autonomus vehicules.
- Due to urban migrations and wealth increase, Asia is most likely the area where mobility services will increase the most.

The German mobility as a service market will reach 20% of total individual car transport by 2027



SDV = Self-driving vehicles

Rides in non-shared vehicles

Mobility as a service rides -

Source: "Accenture Mobility as a service:

Mapping a route towards future success in the new automotive ecosystem", 2018





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Challenges for car makers





Car Makers challenges

Buying habits

- From 2007 to 2011, the number of cars purchased by people aged 18 to 34 fell almost 30%, and the
 percentage of Millennials without cars continues to grow.
- With the advent of new ride sharing businesses and practices, consumers are beginning to see cars as a **service**, rather than a prized **possession**.

Safety & emissions

• As the governments and citizens around the world become more **environmentally conscious**, new and challenging **regulations on safety and emissions** are expected to continue to tighten in the future.

Technology

In its strive to produce a more efficient, cost effective and environmentally friendly car which respects
the global norms and standards, a car manufacturer needs to be on the forefront of adopting new
technology. Heavy investments made by car manufacturers in Hydrogen fuel cell based electric car
technology and research is the testament of this new

Added value

Automobile companies are increasingly expected to be part of an ecosystem that merges mobility, communication and information which leads to a higher customer value.
 Future customers are expected to produce greater demand for connected technologies and smarter service experiences to go with their smart cars.

Car sales will still increase in near future

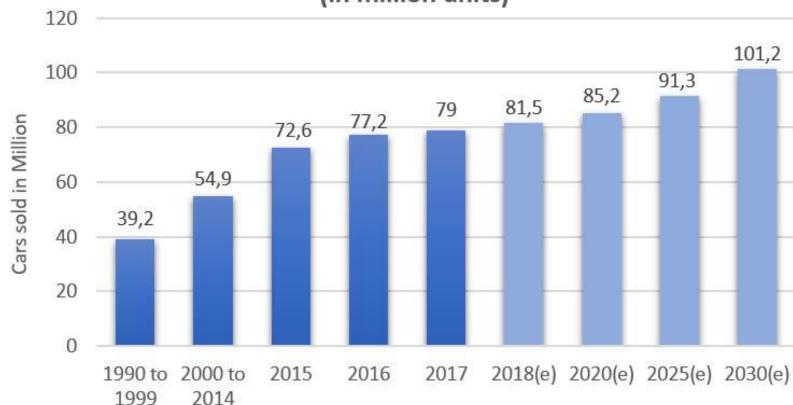




Car Makers challenges

- Cars sold worldwide is increasing over the years, with about 82 millions units in 2018.
- Fast increase from 1990 till 2015 (around 20%)
- A slower increase is seen from 2016 till 2018 (around 2%), and will follow this trend until 2030.
- Car-manufacturers interviews confirm these trends and optimistic projections for sales due to important rural demand and electrical vehicle interest.
- Asia will continue to drive car sales volume increase in the next decade.





Source: ScotiaBank, © Statista 2018

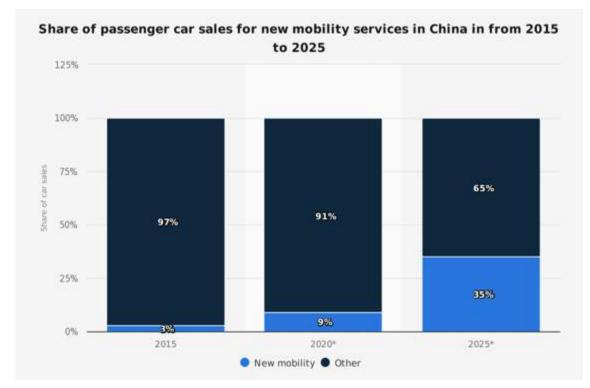
A shift in the target-segment of car manufacturer





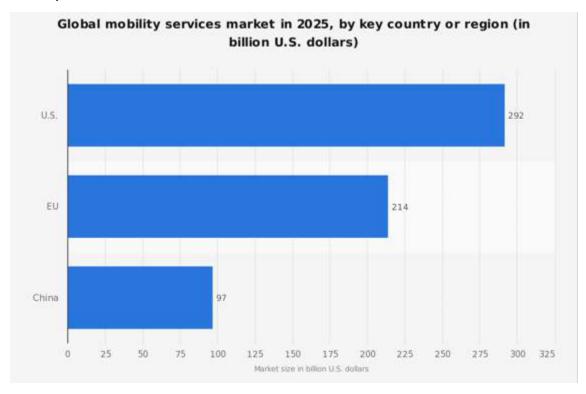
Car Makers challenges

Mastering mobility services can be a leverage for car manufacturer considering that an estimation of **35**% of sales will be for new mobility services* in 2025 in China



Source: Roland Berger, Lazard, 2015

U.S with the biggest market of mobility services after Europe and China



Source: PwC, Strategy&, Business Insider, 2017

^{* &}quot;New mobility services" include car sharing, ride hailing, and Robocabs, but not conventional taxis or rental car services.

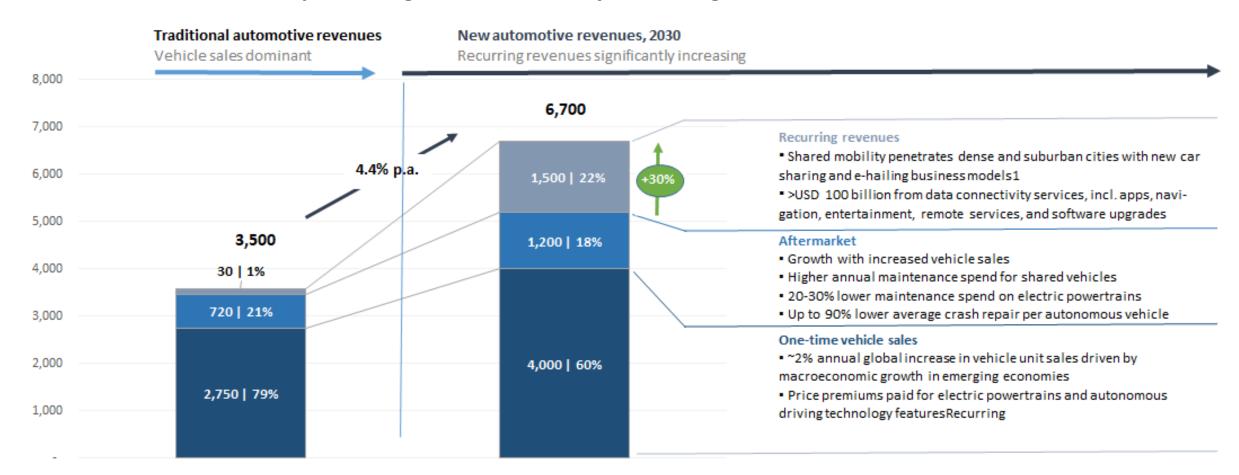
Car makers to include mobility services in their activities





Car Makers challenges

The automotive revenue pool will grow and diversify becoming a ~USD 1.5 trillion market in 2030.



Estimated global automotive revenue based on consumer spending in 2016, by segment (in USD billions). Does not include traditional taxi and rentals.

Source: McKinsey, January 2016

Entering the mobility services is crucial





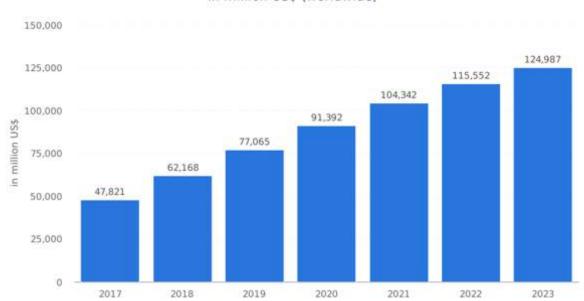
Car Makers challenges



Source: Statista – November 2018







Source: Statista – November 2018

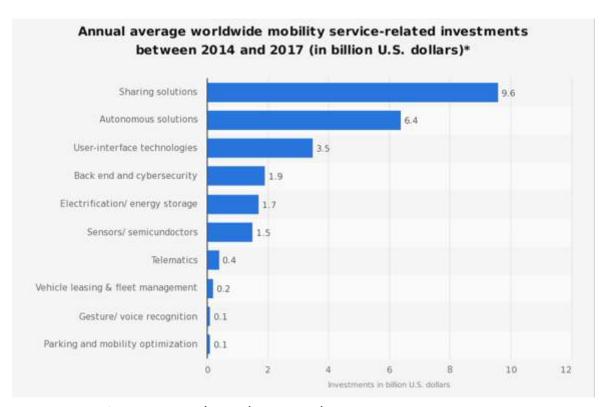
- 24% expected annual growth in revenues from 2018 to 2019
- Revenues in the ride hailing market will continue to increase thus car manufacturers should consider the mobility services as an important part of their revenues streams in the future

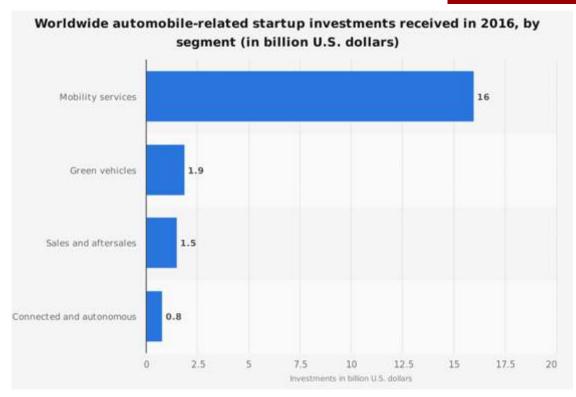
Sharing services account to the highest investment





Car Makers challenges





Source: McKinsey, 2014 through September 2017

Source: Oliver Wyman, 2016

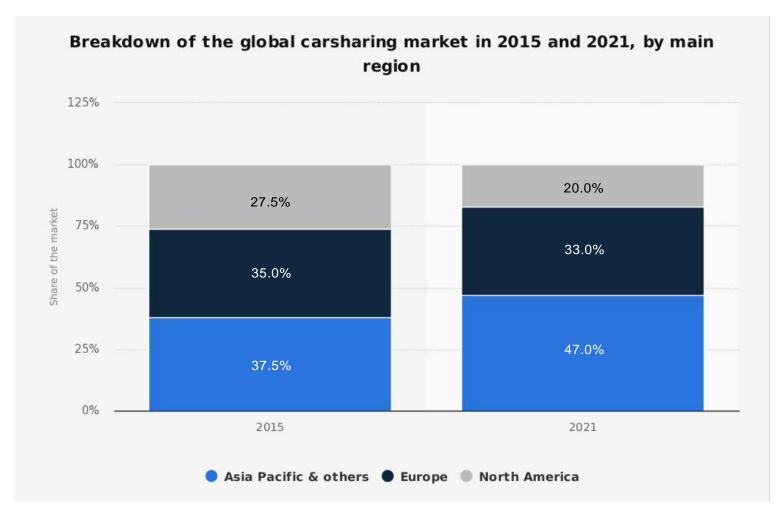
- 25.4 Billions were invested in the mobility services activities
- 38% of these investments was spent on the sharing solutions and 25% on autonomous solutions
- o **79**% of automobile-related startups investments are on mobility services
- Thus to become a player in the mobility services, car makers should invest the most on sharing solutions (car or ride sharing)

Asia with the biggest share of the carsharing market





Car Makers challenges

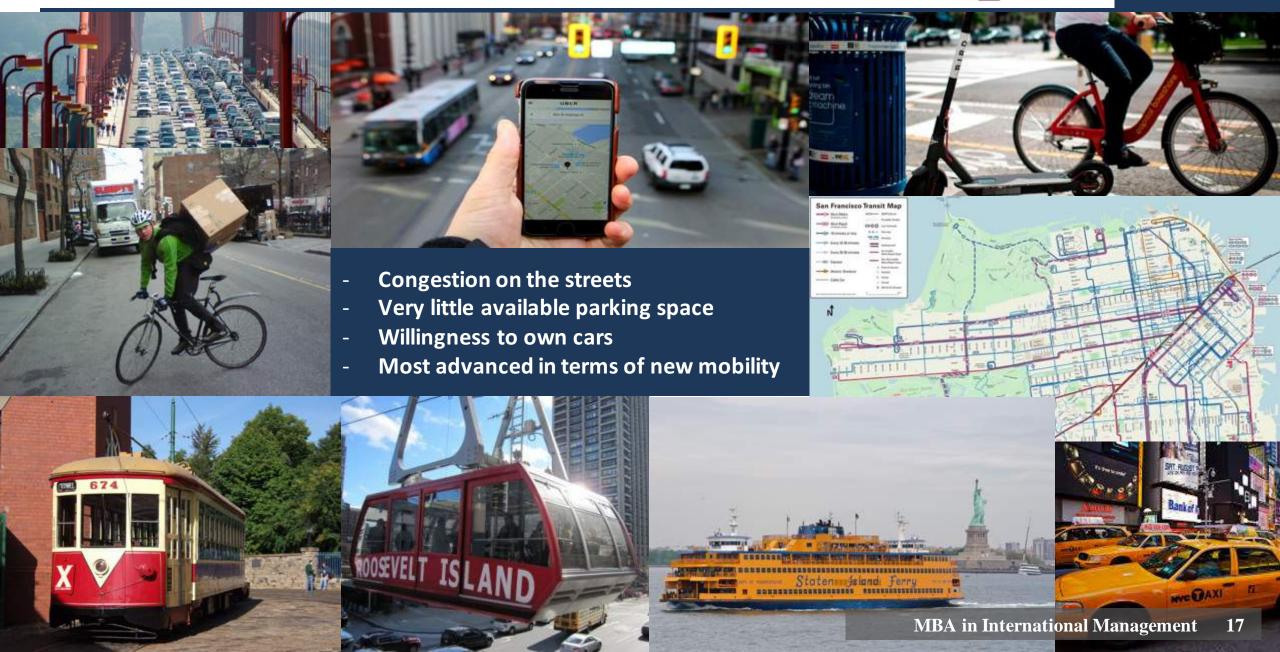


- Asia is currently (37.5%) and is expected to be leading (~ 50%) the carsharing market in 2021 followed by Europe and North America
- In order to increase worldwide carsales, carmakers are particularly keen on tapping into the growing affluence of Asian markets, where passenger vehicle sales have **doubled** over the **past seven years**. Between 2008 and 2016, car sales were on the rise in Indonesia and India;
- Car manufacturers should consider the asian market to develop their mobility services operations

Source: Roland Berger, 2015

United States





Situation in the US 1/2





Car Makers challenges

		DAIMLER	<u>GM</u>	FIAT CHRYSLER AUTOMOBILES	Ford
Collaboration			UBER	moenteve (intel)	ly∩
Investment			lyR 500 M\$	• A P T I V •	Velodyne Civil Maps
Acquisition			Cruise 581 m\$		chotot 65 M\$ - ended jan. 2019
Internal Initiative	BMW ConnectedDrive	moovel CAR	M∆VEN		FORD SMART MOBILITY
Strategy description	Car sharing + IOT strategy - Focus on car sharing and user experience	All out trial strategy - Exploring all options before killing a few	All out trial strategy - Exploring all options before killing a few	Focussed independent development - Organically growing its own subsidiary	Isolated holistic development - Limited collaboration





	JAGUAR	TOYOTA	VOLVO	HONDA
Collaboration	WAYMO		Autoliv	WAYMO
Investment				C(UISC 2.75 B\$
Acquisition		UBER 500 M\$		
Internal Initiative	JAGUAR I-PACE	TOYOTA i-ROAD	UBER	
Strategy description	Electric Car supplier space - Dependent on 'Owners' global strategy	Conceptual futuristic design and drive - Autonomous - New designs	Focus on backend tech and becoming a 'specialized supplier' strategy	Big singular partnership strategy





Strengths 👺

- Brand name
- Present everywhere and potential/resources to expand anywhere
- On demand service
- **No fixed asset** requirement
- Acceptability
- Customer engagement
- Low delay

Weakness <u>*</u>

- High commissions
- Low midwest presence
- Absence of customer service executives
- **Legal** tangles
- Continued burn

Opportunities Threats

- New markets
- Newer segments through diversified services
- Market capitalization
- Acquisition

- Regional players
- Controversy(bad press)
- Political situation
- Car operators tie up with different players

Uber's strategy:

- Land and conquer
- Burn cash until you capture it
- Brand image
- Conquer with data
- Driver background checks

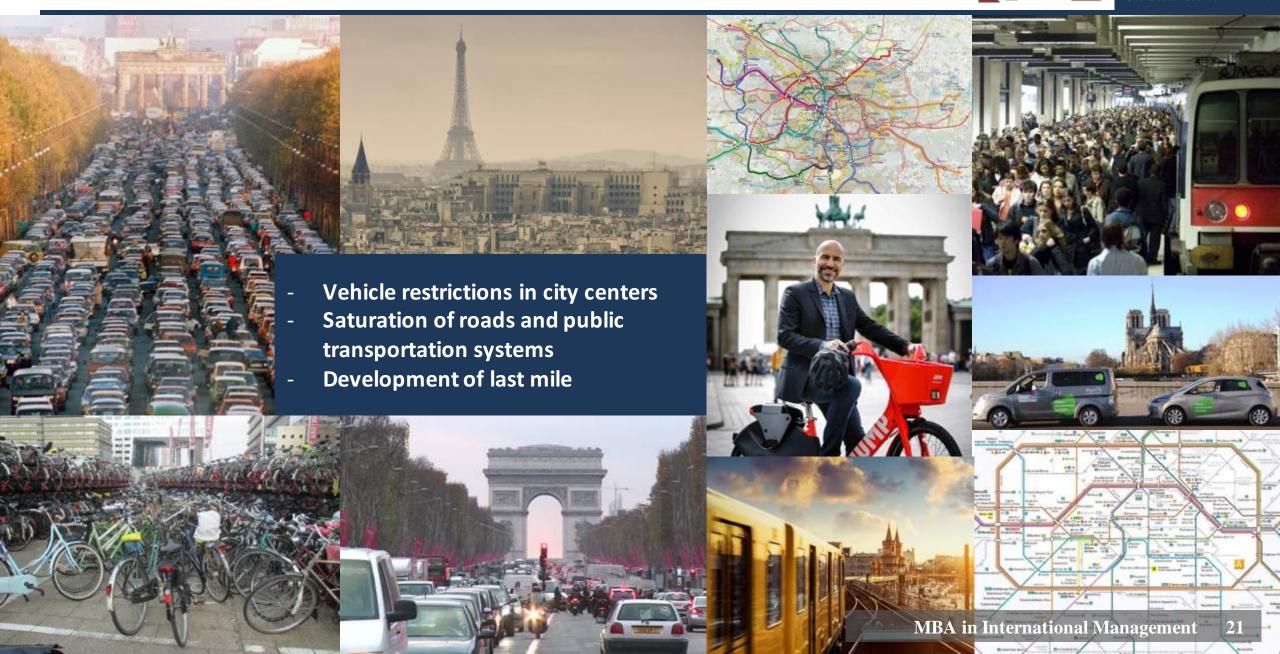
"Transportation as reliable as running water, everywhere for everyone."

-Vision of Uber, Company Website



Europe (France & Germany)





Situation in Europe (France & Germany)





Car Makers challenges

	RENAULT NISSAN MITSUBISHI	Na Carlot			DAIMLER	
Collaboration	ADA =	@mmunauto COUP	Collaboration			JUNO
Investment	iCabbi		Investment			Gett 10° M\$
Acquisition	marcel Yuso		Acquisition	Trede	Trese	Trese
Internal Initiative	mov'in.paris RENAULT MOBILITY	FREE2 M©VE	Internal Initiative	BMW ConnectedDrive DriveNow	SAR	MOIA
Strategy description	Global mobility strategy testing & customer centric - Acquisition of small players and technology leading very diversified investment policy	1 Umbrella brand & plateform for mobility services (Free2Move) providing third party services to customers Car sharing in France, Spain and	Strategy description	Specialized strategy Strong car sharing activity +5000cars	Fleet management strategy? Specialized? Strong activity with Car2go	Diversification - Watching mobility services test investments, aiming at being a key OEM - Try innovative services with Moia

SWOT - DAIMLER





Car Makers challenges

Strengths **E**

- Global **leader** in premium cars
- Diversified (trucks, coaches, cars)
- **Smart**, adapted for urban mob
- Experience and heavy investments in mobility services
- Strong brand and robust image
- Strong **R&D** + F1

Weaknesses <u></u>

- High maintenance costs of vehicles
- Lower popularity among young people

Daimler's strategy:

- Strengthening our global core business (CORE)
- Leading in new future fields (CASE)
- Adapting our corporate culture (CULTURE), and
- Strengthening our divisional structure (COMPANY).
- The benchmark for each of these strategic components is our fifth and most important C: **CUSTOMERS**.

"By these five components we want to achieve profitable growth, increase the value of our company and significantly shape the future of mobility."

-Vision of Daimler, Company Website

Opportunities



- Electric incentives on European market
- Technology progress on autonomous drive/sensors
- Promotion of premium cars with car mobility services

Threats (**)

- Ban of cars in city centres (London, Paris next?)
- Dieselgate and disapproval of diesel engines; could undermine their investing capabilities
- Congestion in cities







Strengths 🔑

- Ability to scale organisation (alliance ventures innovation and partnership teams for example are autonomous 1 million investment decisions)
- Leaders with EV
- Best sellers worldwide (thanks to alliance)

Weaknesses 💺

Weak presence in the US

Renault Alliance's strategy:

- Provide cars and services in a customer centric way
- Valuing at every moment customer satisfaction

Opportunities



- Electric incentives on **European market**
- Technology progress on autonomous drive/sensors
- Promotion of premium cars with car mobility services

Threats(

- Ban of cars in city centers (London, Paris next?)
- Congestion in cities
- Risk of schism following Carlos Ghosn issues with Japanese justice

"Connected mobility for everyone. At the core of the work of the Alliance technology teams is a vision of a future with zero emissions and zero fatalities."

-Vision of Renault, Company Website



SWOT - marcel





Car Makers challenges

Sthrengths **C**

- Customer service oriented
- Innovative and green service provided with fully electric cars (e.co Renault Zoe)
- Lowest commission of the market, high driver loyalty
- Backed by Renault RCI (cars and finance)

Weaknesses 💺

- Low market share and poor know how
- Only in France (Paris region) for now
- More expensive than competitors (eg. uber)

Marcel's strategy:

Be the first service 100% electric and anticipate the future diesel ban in most of major European cities

Opportunities



- Electric incentives on European market
- Positive attitude of urban residents toward electric vehicles
- Difficult relationship between drivers and uber

Threats (*)

- Ban of cars in city centers (London, Paris next?)
- Congestion in cities
- Difficulty to enter new markets (high rivalry)

"Marcel believes in a quality transport activity, more fair and sustainable!"

- Vision of Marcel, Company Website









Sthrengths 🔑

- Early installed service, important establishment
- Access to vehicle via Daimler
- Alliances with municipalities
- High capital with Daimler support
- Attractiveness of prices
- Strong brand image

Weaknesses 💺

- Less incentive to innovate than competitors (as subsidiary of Daimler)
- Poor marketing due to wide customer target
- China: cars need to be imported, so have higher cost.

Opportunities |



- Willingness of cities to propose mobility services
- Public awareness and acceptance
- China: Electric incentives/ increasing demand

Threats (

- High level of competition with low differentiation
- China: Limited parking places in cities./ Do not have much price advantage compare to local taxi and local players

"Flexible carsharing reduces traffic in towns and cities, frees up valuable parking space and improves air quality. Car2go therefore contributes to an increase in the quality of life, while at the same time precisely meeting the mobility requirements of those who live in the towns and cities."

Olivier Reppert, CEO car2go Group GmbH



India









•	Ford	M ahindra	TATA MOTORS	
Collaboration	hmda Growing Goods	EESL SMART© 0% Polivion, 100% Bectic	EESL	
Investment	Zoomcar 26M\$	Zoomcar Zooms 40M\$		
Acquisition				
Internal Initiative	FORD SMART MOBILITY			
Strategy description	Collaboration & Investment Helping local authorities to modernize mobility infra. Investments in mobility services providers.	Collaboration & Investment Partnering with local authorities & private players to supply EVs.	Collaborative Strategy Partnering with local authorities.	

- Ford & Hyderabad Metropolitan Development Authority to explore Integrated Mobility Solutions for Smarter City Commute. Ford to invest \$50 million on center for integrated mobility in Maharashtra
- Ford (USD 24m) and Mahindra (USD 40m) together have invested USD 64m in Zoomcar along with other investors.
- Ford Motor has begun an experimental 'smart shuttle service' for its employees at the production unit in Chennai - could see wider implementation.
- Tata Motors and Mahindra will jointly deliver 10k EVs to State-owned Energy Efficiency Services Ltd. (EESL) for the Delhi-NCR region. Tata also delivered 25 Electric buses to Mumbai government.
- India needs \$ 4.5 trillion by 2040 to develop Infra, of which it will be able to garner about USD 3.9 trillion: Eco Survey. Govt trying to seek help from private sector to bridge the gap.





Sthrengths **E**

- Strong venture capital support
- Over 110 cities, 1M drivers(0.9M vehicles)
- Large fleet of cars, SUVs,
 'Autos' & motorbikes
- Driven by a hyperlocal approach
- 45% market share

Opportunities

- Increasing demand for mobility services
- Many potential cities are yet to be covered
- Saturated public transport
- Expansion of Ola Pedal
 - GDP growth rate of 7.1%

Weaknesses <u></u>

- No Control over Drivers
- Weak customer support
- Dependence on Internet
- Less penetration in 'non tech-savvy' population

Threats 🍼 🖰

- Increasing competition
- **Switch option** for customers.
- Conflict with traditional business, eg. taxi
- Ambiguous government regulation

Ola's strategy:

- Convenient, transparent, and quick service fulfilment
- Leveraging the best of technology
- Building innovative solutions ground-up that are relevant at global scale.
- Offering a highly personalised experience

"Driven by a hyperlocal approach, Ola is committed to its mission of building mobility for a billion people."

- - Vision of OLA, Company Website







Separate e-mobility division

- Already delivered an e-car and an e-bus
- Sub-brand: TAMO- an incubation centre of innovation
- Heavy investment in cloud based architecture and end to end mobility

Weaknesses <u></u>

- Already behind the curve compared to the global players
- Very large workforce owing to traditional operations
- Segregation between products and services

Threats (**)

Opportunities

- Indian government's vision for electric vehicles by 2030
- Partnership with the government for public transport
- Incubation platform could
 provide future partnerships

- Entry of global players
- Different governments have different policies on evehicles and mobility services
- High speed internet is still limited to cities

Tata's strategy:

- Always focus on investing in upgrading key systems
- Advance technology vehicles
- Reducing carbon footprint of operations
- Building a socially responsible value chain
- Strengthening waste management

"We innovate mobility solution with passion to enhance quality of life."

- - Vision of TATA(mobility), Company Website

China









*3	上六集团	W 长安汽车 CHANGAN	⊚ DF¶	FAW	BENAULT HISSAN MITSUBISH:
Collaboration	TEVCARD III III	T3 Travel	FREE2 MOVE 50% from PSA T3 Travel	With vw T3 Travel	(TD) (GO) (蓝 歌
Investment				228M\$ in 4 years	
Acquisition					
Internal Initiative	享遊出行	◎ 长安出行	∑ =go		
Strategy description	Intermediate mobility strategy - First player who provide EV - Just launched ride hailing service (Xiangdao) in December 2018.	Testing stage - Collaborated with other two "big four" OEMs (T3) - L3 autonomous driving platform by 2020, and L4 by 2025.	Testing stage - Cooperated with many players - Willingness to partner on the capital level to jointly develop a travel ecosystem.	Testing stage - Cooperated with different players in car sharing Together with VW, built five manufactory center in 2018.	Collaboration strategy - ToGo collaborated with many car makers in order to give customer more choices ToGo has been faced with a refund plight since December 2018







- **Biggest platform** in China
- Business range from taxi to car hailing
- Cover 400 cities and have 450m users
- Immediate active after registering

Weaknesses <u></u>

- No hardware facility
- No technical barrier
- Customers do not have switch cost
- Has difficulty managing drivers

Threats

Opportunities

- High demand of mobility services
- Large numbers of potential users
- Government support on internet business

- Intense competition
- Conflict with traditional business, eg. taxi
- Regulations are not clear

Didi's strategy:

- Creating customer value
- Data-driven thinking
- Win-Win collaboration
- Integrity is the bedrock of our foundation
- Growth comes with accepting challenge

"To Become a Global Leader in the Revolution in Transportation and Automotive Technology."

-Vision of Didi, Company Website







Sthrengths **E**

- Can leverage resources from SAIC
- First player providing EV
- Cover 64 cities and have more than 3M users
- Online registration with deposit

Weaknesses <u></u>

- Need to register in advance (2-3 days)
- Mainly focus on car sharing
- High operational cost

Evcard's strategy:

 To be the leader in the industry of time sharing rental and adhere to explore more intelligent, environmentally friendly, open and friendly experience mode for users

Opportunities

- Government support on EV
- High demand on mobility services
- Large numbers of potential users

Threats

- Increasing competition
- **Congestion** in cities
- Limited charging **stations**

"Sharing, Eco-friendly, Efficiency and Innovation."

-Vision of EVCARD, Company Website





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Strategy to capture Mobility Business





Strategies for the future

To be successful in entering and lasting in mobility services business, car manufacturers will have to capture a significative part of the mobility business as a key growths drivers.







Xxx New items to be included in the business model for mobility services



Key Resources

- Manufacturing plants
- Licenses
- Distribution network
- IT and digital facilities



Key Partners

- Alliances
- Joint ventures
- Collaboration



Key activities

- R&D / Engineering / Design / Manufacturing
- Marketing / sales /after sales
- Distribution
- Product development
- UX and services design



Value proposition

- Provide the customer with a vehicle
- Provide the customer with a mobility service
- Provide a brand that connects to the user on a daily basis



Customer relationships

- Customer assistance
- Brand awareness
- Customer loyalty
- Customer experience
- Customer support



Channels

- Dealers / Stores /Resellers
- Exhibitions and events
- Mobility plateforms
- Mobile applications
- Parking spots



Mass market

segments

- Organizations
- Mobility services providers



Costs

- R&D / Manufacturing
- Distribution
- Marketing
- Maintenance and cleaning
- Mobile applications development



Revenues

- Sale of cars
- After sales services
- Mobility services activities

Business model to cope with mobility activity 1/2





Strategies for the future



Value proposition

 Car manufacturers will not anymore provide their customers with cars from a one time sale but rather with a brand that connects them to the users on a daily basis through the mobility services they offer.



Key activities

- In terms of key activities, these will remain intact as they will still build cars for selling and mobility purposes. However the model of the car will change due to different needs and thus the manufacturing will be directly impacted. Sturdy but yet comfortable cars need to be built; The size of the car will be reduced as they are targeting cities and urban destinations.
- For autonomous and electric car manufacturing, the R&D team would have to launch a specific project for that matter.



Key Partners

Car manufacturers will not reinvent the wheel. Partners are crucial during the phase of becoming mobility provider

- Collaboration with mobility services operating without fleet
- Joint ventures with car makers performing well in the mobility services
- Investments in tech startups and companies working on electric and autonomous cars. In addition to investments in safety and radar systems that are an important pillar in the autonomous industry.



Key Resources

Along with the existing resources, IT and digital facilities (servers for instance) will be needed. Mobility services will accessed through different digital channels and thus the need for resources to host this activity

Business model to cope with mobility activity 2/2





Strategies for the future



Channels

- Mobility services will be at the reach of customers via mobility platforms which includes websites and mobile applications for instance.
- In addition, car makers will have to secure spots for the vehicles to be accessible thus the tremendous need for parking spots



Costs

- As more customers will be using the car on a daily and monthly basis, additional responsibilities arise in order to keep the image of the brand;
 Maintenance as well as cleaning are crucial to secure a good experience for the users during their journey. On the other hand, this variable cost will impact the cost of this service to the customers.
- Moreover, developing online platforms to make the services reachable for users is of paramount importance. This cost include developing, designing, maintaining and support the clients on these applications.



Customer relationship

- As a mobility service operator, the car manufacturer will need to ensure the clients are enjoying a good experience starting from booking the service till the end of the ride.
- Customer satisfaction and customer experience are important to keep a good relationship with the client and ensure they will be frequent and loyal users of the services offered.



Revenues

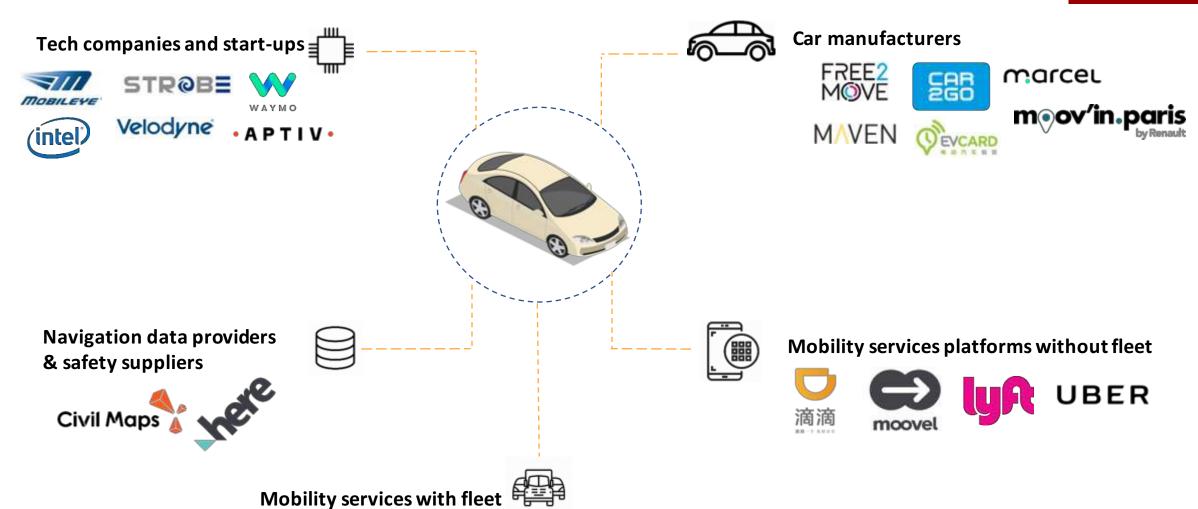
• In terms of revenue streams, the mobility services activity is generating a new source of income; it covers subscriptions to bundles, tariffs of the activity and extra options booked by the consumers such as navigation systems.

Car makers among the mobility services' stakeholders





Strategies for the future







Car manufacturers need a clear vision of their future





Strategies for the future

3 different types of visions for car manufacturer with increasing level of difficulty:



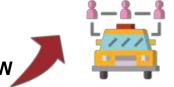
Car manufacturer

Customers will still want to buy and own cars. This activity will remain but might not be the core market for car makers.



B2B provider

- Produce vehicles "built-forservice" targeting mobility services operators.
- Partnerships and investments done with tech companies (focusing on EV and autonomous cars).



Car mobility service provider

- **Provide** their customers with **mobility services**
- include electric and autonomous cars owners of a vehicle fleet.



Full mobility service provider

Become a **full stack mobility** provider and owning the **mobility service platform**.

Difficulty 7

W: work force

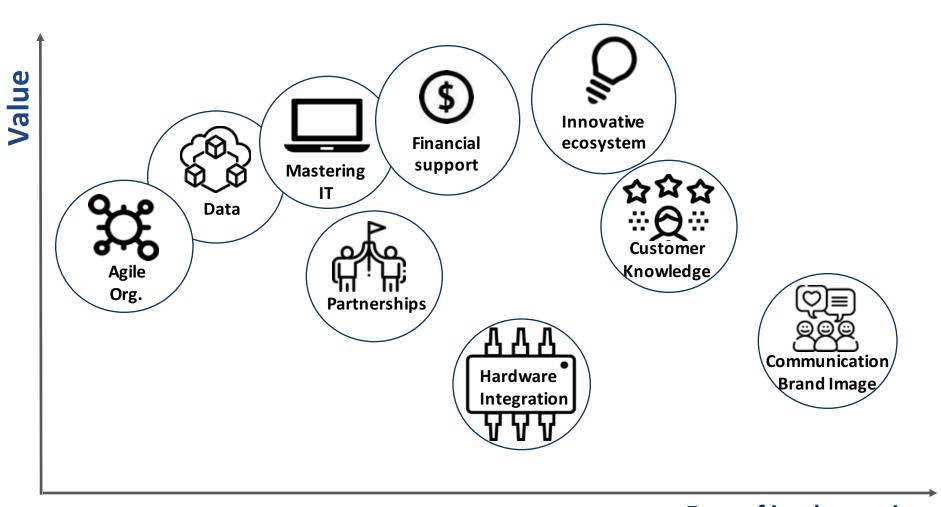
Identifying Key Success Factors is critical for success





Strategies for the future

Our research identifies the key success factors that help shape winning strategies:





Highly flexible and agile organizational structure



IT and the Org structure have a crossflow of data for quicker and better decision making



Highly flexible and agile organizational structure



Mutually beneficial partnerships



Successful integration of different mobility service hardware components(Bikes, Cars, Scooters etc.)



Understanding and quickly reacting to customer needs



Effective communication and projecting the most relevant brand image to targeted customer segments

Ease of implementing

A framework to use the right levers





Strategies for the future

In order to achieve their vision, car manufacturers need to draw a strategy based on the right Key Success Factors:

			Key Success Factors							
			Core business	Hardware integration	IT / Data	Innovative ecosystems	Partnerships & Financial support	Agile organization	Customer Knowledge	Comm. & Brand image
Visions	Today	Classic car manufacturer		+	/	/	/	/	+	++
	Future	B2B provider		+ =	/ =	+ 7	++	+ 7	لا /	+
		Car mobility service provider	+++	+++ 77	++	++	+ 7	++	++	+++
		Full mobility service provider	+++	+++ 77	+++	+++ 77	+++ 77	+++ 77	+++	+++







Customer behavior and expectations data gathering

- Car makers should understand in detail what and how are the user experiencing mobility in general. This could be
 done on different avenues, data generation from telematics services within owned vehicles and rideshare/short time
 rental programs. The mobility technology & the scalability of it across use cases and regions becomes more prominent
 for success.
- Customer demands depend highly on the city structure (hilly cities will not be convenient for bikes) as well as its
 transportation infrastructure. Therefore it is important to be specific in the strategy adopted as it should not be a
 general approach applied everywhere rather should be based by city.



Investments and partnerships

- Investments and partnerships with automated vehicles companies are of paramount importance to cope with the new technologies that will be invading the mobility market.
- **Partnerships are essential** to do work in a fast and effective manner without being restricted by the corset of 5-10-20 year old process and organizations that would not allow the same speed of innovation and risk taking.
- Partnerships with governments are important as well to allow cars used in the mobility services to be parked on the street making it easy accessible to users. In China, government are supporting car makers by providing them special parking spots on the street.
- Small car manufacturer should merge or join another CM or partner with an advanced AV company





Strategies for the future



Engineering and manufacturing

- The model will require more robust exteriors and interiors as these vehicles will be used 10X of private passenger cars and the wear and tear will be significant.
- Smaller and easier & cheaper to produce and maintain.
- Those vehicles/model will play less focus on design & powertrain options but more on interior comfort and longevity (e.g. how to clean/replace the vehicle carpet without dismounting all seats). We will also a bigger variety of those interior concepts, e.g. a few seats with bigger storage facilities or first-class comfort seats but build on top of the same chassis and powertrain platform.
- The safety attributes of the automated technology will be fully realized and electrification will allow for smaller motors opening up the platform for a whole new set of form factors to become available.



Financial support

• Significant amounts of cash to finance the advanced technology development but foremost a multi-year long rollout will low or even negative profit margins. The service rollout consumes significant resources besides the transportation itself (e.g. for fleet maintenance, provisioning, cleaning)







Efficient mergers and acquisitions

- It is of utmost importance to merge with and/or acquire companies in order to remain competitive and sustain growth. This will require an intricate and objective understanding of the self.
- Efficient mergers (software, hardware, humans) is efficient for the smooth integration which is imperative to entering this industry. It will be very difficult to smoothen out rough edges from the past in the future.



Empowered implementation squads

- The nature of the mobility services market requires that organizations be very nimble. It would be prudent strategy to have specialized and empowered individuals pulled from the ranks/hired who have knowledge of both the car manufacturing and mobility services industries.
- They should be empowered enough to take quick independent decisions that enable the organization staying one step ahead of the competition.
- They will be of high importance in dealing with partnerships, mergers and acquisitions.







Focus on electric cars

- Global environmental concerns and general awareness demands that car makers focus on electric cars.
- We recommend focus on human driven electric cars in the near future.
- Such initiatives help build a good brand image in addition to unlocking newer markets.



Invest in autonomous drive

- Autonomous drive is still a technology in its 'testing' phase. Also, there are many legal and philosophical(trolley problem) questions around it. Different countries/states may choose to deal with the questions differently hence it is difficult to predict where this industry is going to go.
- However, we are certain that this is the way of the future. It is recommended to invest in autonomous drive. However, not as an immediate revenue generating stream.



You need to have a great product, a great team culture of innovation and a relentless obsessive focus on the customer.

... About how to succeed in Mobility Services.

THANK YOU!



To all the interviewees for all their valuable inputs:

- Jean-Bernard GUERREE Partner Eurogroup Consulting San Francisco office
- Dr. Samit GHOSH Partner P3 member of the Eurogroup Consulting network Nextcontinent, USA
- Patrick VERGELAS Head of mobility services at Renault, France
- Jean-Christophe LABARRE Alliance Venture Innovation & Partnerships Director, France
- Luc CHAUSSON Strategic project director "together 2025", VW
- Dihao ZENG General Manager at Free2Move (PSA), China

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- Bertrand DE LA VILLEON Partner Eurogroup Consulting France
- Antoine BERGUE Senior Consultant Eurogroup Consulting
- Eric THOREZ ESCP Europe MBA mentor
- Amaury DE BUCHET- ESCP Europe professor

MBA in International Management Team







Cynthia NAHAS – Lebanese

3 years' experience as a functional consultant at Murex Systems. Areas of expertise include solution development for credit and market risk, versatile enhancement and team leading.



Lijuan WANG - Chinese

8 years' experience with the Daimler China Accounting Shared Services Centre. Led Inventory Management team for 3 years.



Mathieu BEAU - French

Engineer, 8 years experience in IT services. Worked as a consultant and then led teams in both insurance and media industries. Particular skills in mobile applications and innovations.



François RETHORE – French

10 years' experience audit and finance in France, Europe and Asia. Part of the retail FMCG leader in Europe. Skills range from accounting and controlling to strategic planning.



Sudhanshu TRIVEDI - Indian

9 years in customer behavior group dynamics and marketing analytics with special focus on budget optimization and building customer loyalty.



Suraj AMIN – Indian

9 years experience with JPMorgan & Deutsche Bank. Expertise: competitive analysis, cost planning & forecasting, project and team management. Experience running own start-up.



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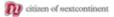
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