

WHAT'S NEW?

H1 2020

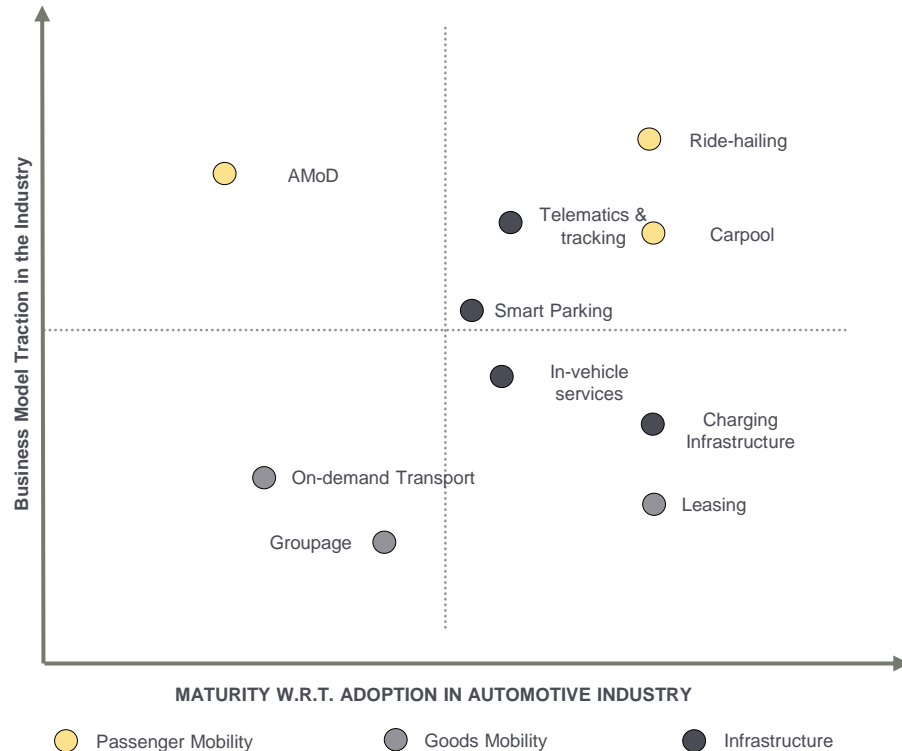
EXECUTIVE LENS

Summarized insights for Mobility Business Models w.r.t. trends in technology, market, and players



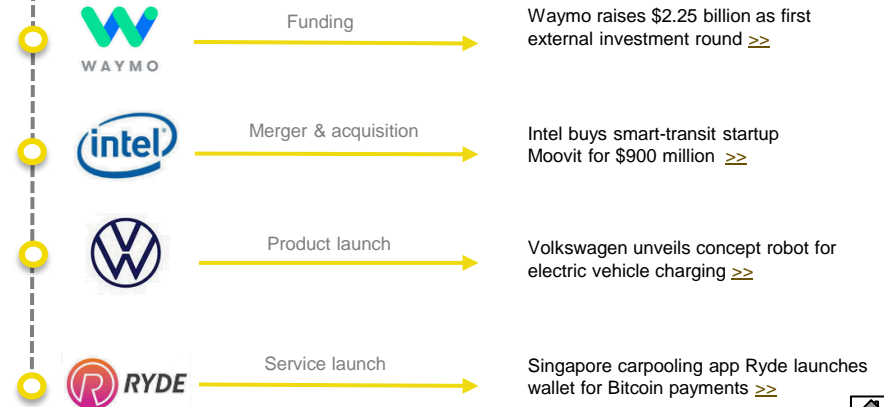
State of the Trend

Automakers launching their own mobility services in partnership with startups



- Variations of the shared mobility business models are being developed targeting specific customer demographic segments.
- Mobility service providers are increasingly employing electric vehicles into their fleets in line with electrification megatrend.
- Autonomous vehicles in goods' delivery is picking up pace, in terms of funding, technology and services.
- New value chains are being created, specifically in the infrastructure segment, giving rise to new startups in charging, parking, and telematics domain.

Key Developments in H1 2020



Emerging trends in Mobility Business Models in H1-20'

Blockchain is helping from verifying a vehicle's history, better supply chain tracking, automating transactions, enabling seamless ridesharing or supporting fairer insurance. Contactless deliveries gaining momentum in response to COVID-19 pandemic.

Which are the upcoming trends in MBM?

Who's behind them?

What do we see happening?

Emergence of blockchain in mobility services



TADA, Southeast Asia's blockchain-based zero-commission ride-hailing service has completed its Series A extension round for an undisclosed sum >>



Hewlett Packard Enterprise (HPE) and Continental plan launches a blockchain-based platform for car manufacturers to share and sell vehicle data >>



Sony Corporation has announced the development of a blockchain-based common database platform to help facilitate mobility-as-a-service (MaaS) solutions >>

Contactless autonomous deliveries: an emerging business model



Nuro is using delivery robots to help health care workers fighting COVID-19 >>



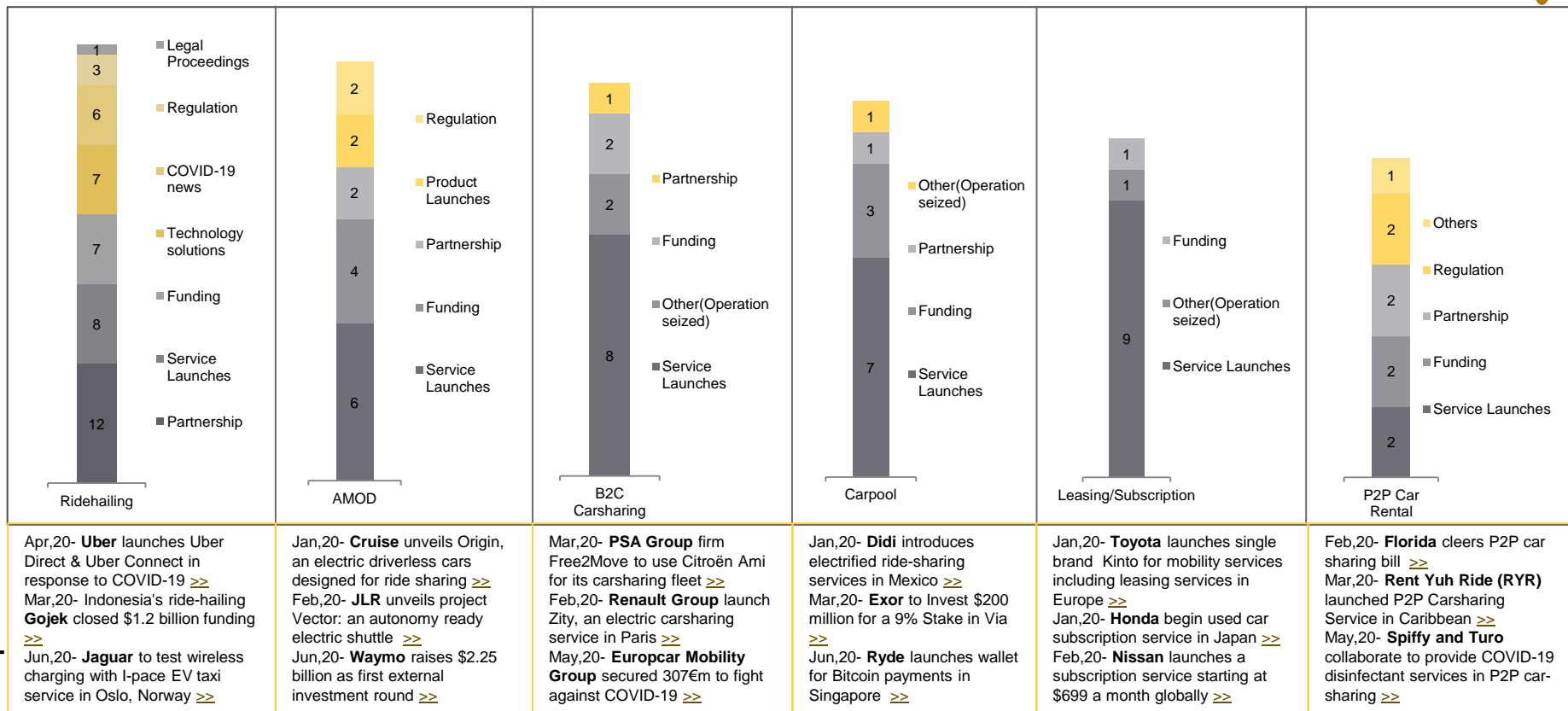
Starship Technologies has launched a robot food delivery service in Tempe, Ariz., as part of the autonomous delivery startup's expansion plans >>



Refraction AI launches contactless robot grocery delivery in Ann Arbor >>

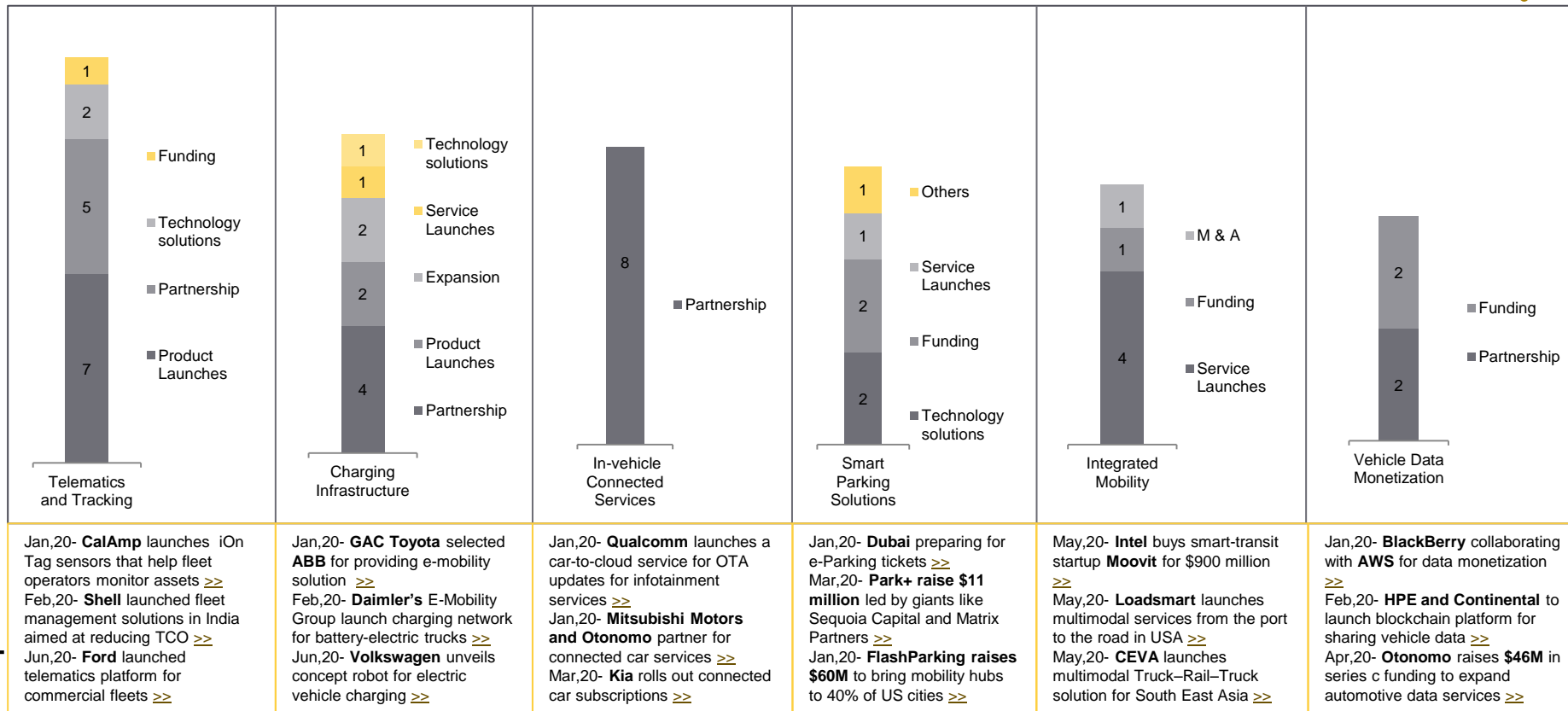
Development summary for H1-2020 in passenger mobility business models

OEMs are launching their own B2C carsharing services, leasing services in partnerships with major startups in Europe



Development summary for H1-2020 in Infrastructure/connectivity mobility business models

Blockchain technology gaining momentum for data monetization in mobility



Jan,20- **CalAmp** launches iOn Tag sensors that help fleet operators monitor assets >>>
 Feb,20- **Shell** launched fleet management solutions in India aimed at reducing TCO >>>
 Jun,20- **Ford** launched telematics platform for commercial fleets >>>

Jan,20- **GAC Toyota** selected **ABB** for providing e-mobility solution >>>
 Feb,20- **Daimler's** E-Mobility Group launch charging network for battery-electric trucks >>>
 Jun,20- **Volkswagen** unveils concept robot for electric vehicle charging >>>

Jan,20- **Qualcomm** launches a car-to-cloud service for OTA updates for infotainment services >>>
 Jan,20- **Mitsubishi Motors and Otonomo** partner for connected car services >>>
 Mar,20- **Kia** rolls out connected car subscriptions >>>

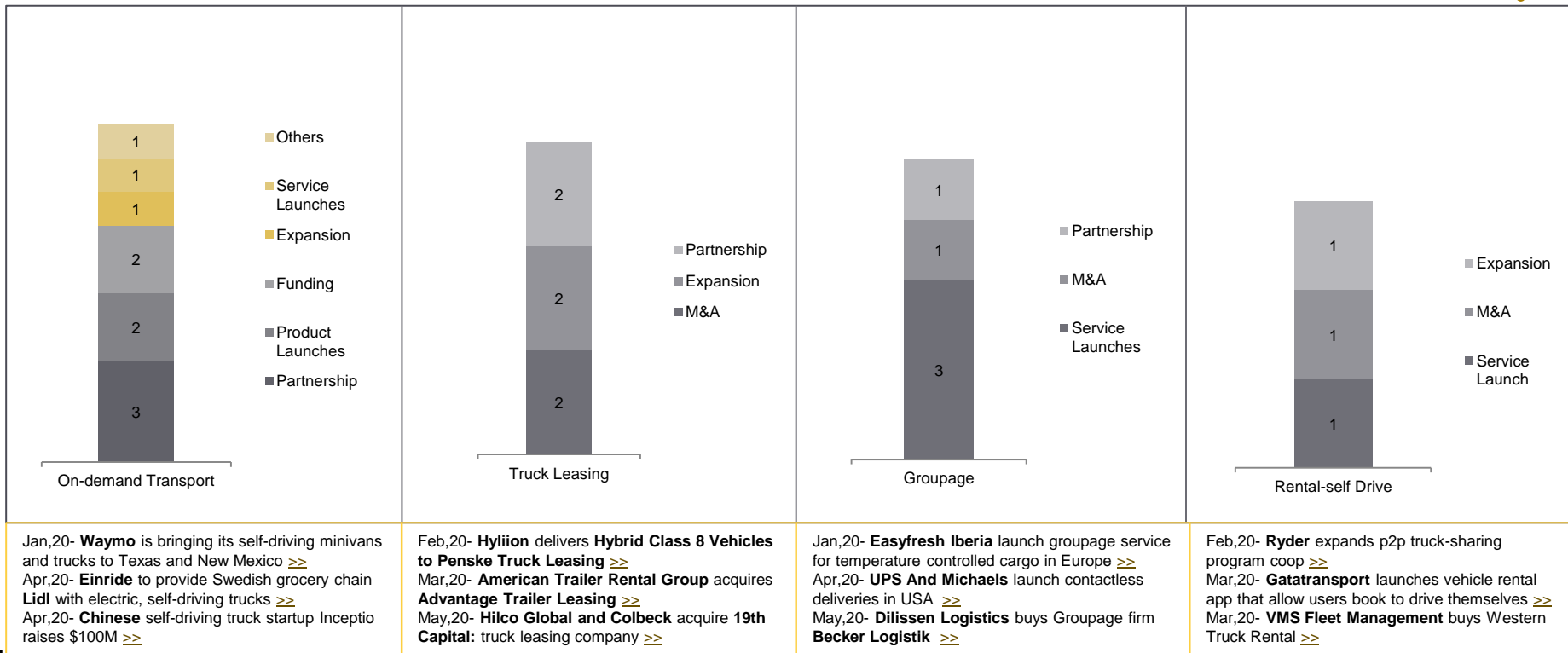
Jan,20- **Dubai** preparing for e-Parking tickets >>>
 Mar,20- **Park+** raise \$11 million led by giants like Sequoia Capital and Matrix Partners >>>
 Jan,20- **FlashParking** raises \$60M to bring mobility hubs to 40% of US cities >>>

May,20- **Intel** buys smart-transit startup **Moovit** for \$900 million >>>
 May,20- **Loadsmart** launches multimodal services from the port to the road in USA >>>
 May,20- **CEVA** launches multimodal Truck-Rail-Truck solution for South East Asia >>>

Jan,20- **BlackBerry** collaborating with **AWS** for data monetization >>>
 Feb,20- **HPE and Continental** to launch blockchain platform for sharing vehicle data >>>
 Apr,20- **Otonomo** raises \$46M in series c funding to expand automotive data services >>>

Development summary for H1-2020 in goods mobility business models

First and last mile autonomous goods delivery getting traction in US and China



Jan,20- **Waymo** is bringing its self-driving minivans and trucks to Texas and New Mexico >>
 Apr,20- **Einride** to provide Swedish grocery chain **Lidl** with electric, self-driving trucks >>
 Apr,20- **Chinese** self-driving truck startup **Inceptio** raises \$100M >>

Feb,20- **Hyllion** delivers **Hybrid Class 8 Vehicles to Penske Truck Leasing** >>
 Mar,20- **American Trailer Rental Group** acquires **Advantage Trailer Leasing** >>
 May,20- **Hilco Global and Colbeck** acquire **19th Capital**: truck leasing company >>

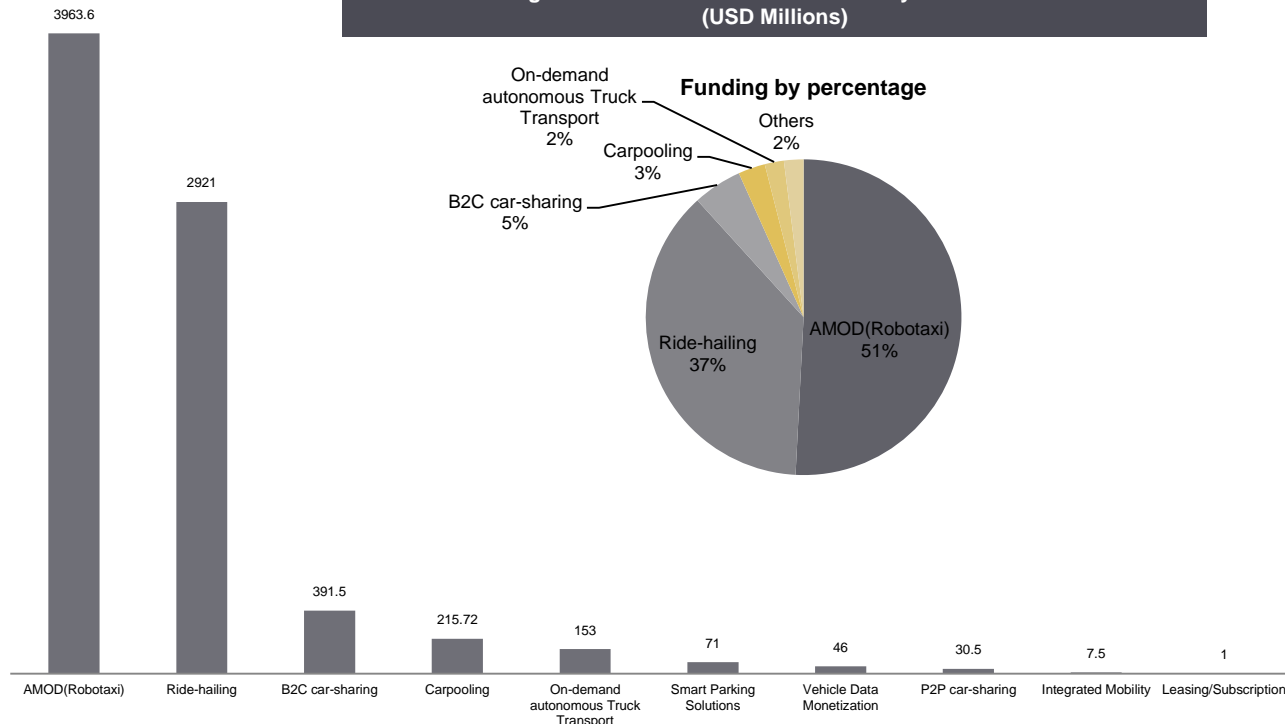
Jan,20- **Easyfresh Iberia** launch groupage service for temperature controlled cargo in Europe >>
 Apr,20- **UPS And Michaels** launch contactless deliveries in USA >>
 May,20- **Dilissen Logistics** buys Groupage firm **Becker Logistik** >>

Feb,20- **Ryder** expands p2p truck-sharing program coop >>
 Mar,20- **Gatatransport** launches vehicle rental app that allow users book to drive themselves >>
 Mar,20- **VMS Fleet Management** buys Western Truck Rental >>

Funding Scenario (H1 2020)

Surge funding for ride-hailing companies for further penetration into Asian markets. Robotaxi services dominated the funding in H1-2020 taking 51%(3.9B\$) of total share lead by Waymo (3B\$)

Funding Scenario in H1 2020 across Mobility Business Models (USD Millions)



Top Gainers – Unicorns



3000 Million(\$)
AMOD(Robotaxi)



1575 Million(\$)
Ride-hailing



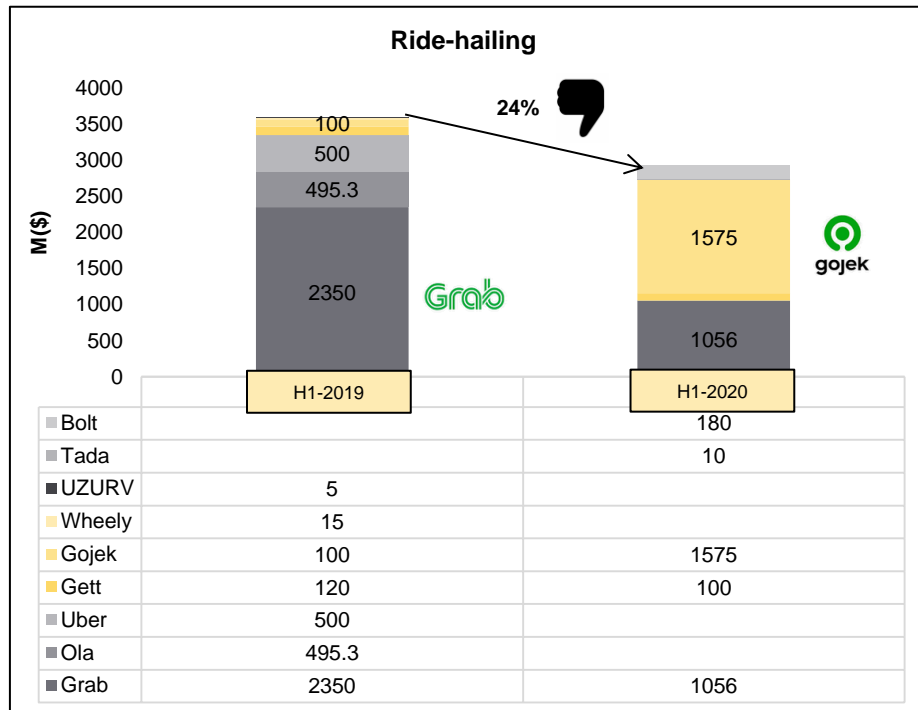
361.5 Million(\$)
B2C carsharing



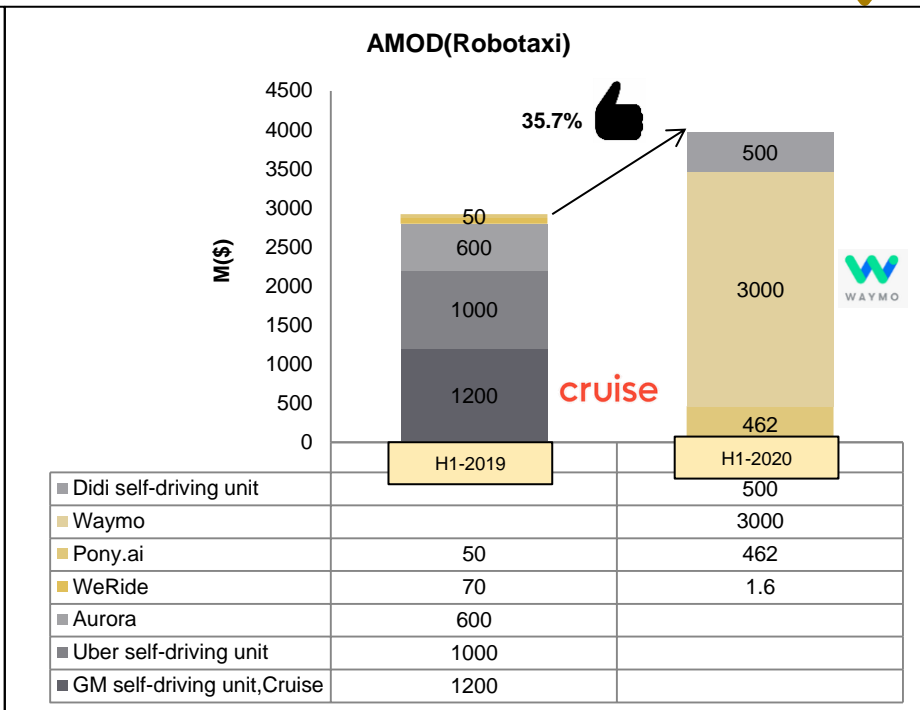
200 Million(\$)
Carpooling

Funding Scenario (H1 2019 vs H1 2020)

Funding in H1-20'(2731 M\$) is down by approx. 24% YOY compared to H1-19'(3585.3 M\$) in ride-hailing services



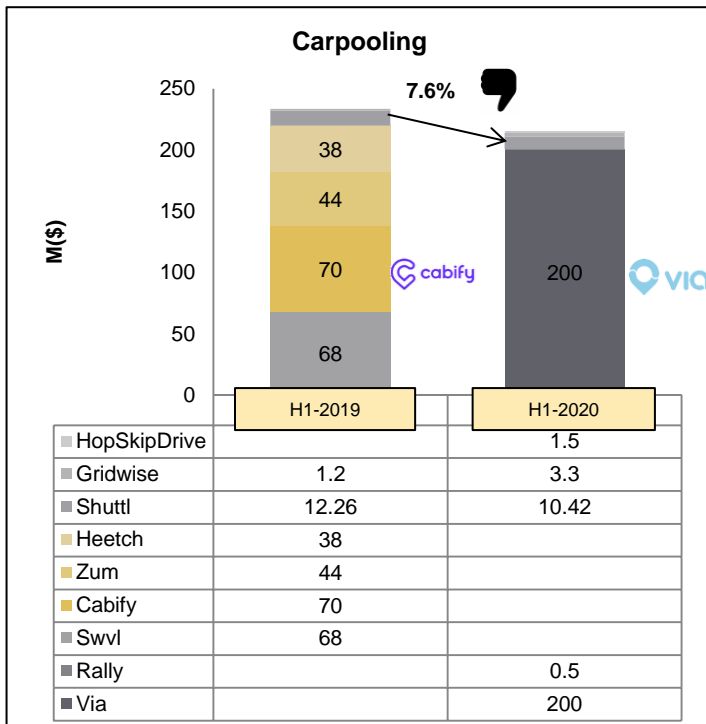
Funding in H1-20'(2731 M\$) is down by approx. 24% YOY compared to H1-19'(3585.3 M\$) in ride-hailing services. Grab received the highest funding(2350 M\$) in H1-2019 while, Gojek(1575) received the highest funding in H1-2020. 9 ride-hailing startups have declared funding in H1-19 and H1-20' out of 57 which FutureBridge tracks in our startup tracker.



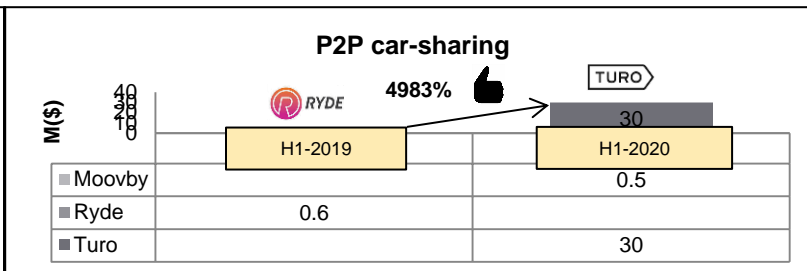
Funding in H1-20'(3963.6 M\$) is up by approx. 35.7% YOY compared to H1-19'(2920 M\$) in robotaxi services. Cruise received the highest funding(1200 M\$) in H1-2019 while, Waymo received the highest funding(3000 M\$) in H1-2020. 7 AMOD startups have declared funding in H1-19 and H1-20' out of 13 which FutureBridge tracks in our startup tracker.

Funding Scenario (H1 2019 vs. H1 2020)

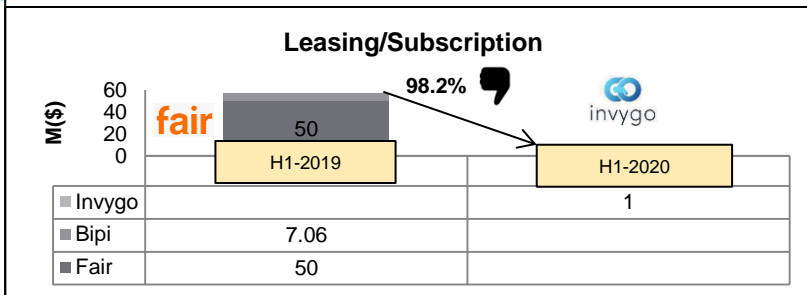
Funding in H1-20'(215.7 M\$) is down by approx. 7.6% YOY compared to H1-19'(233.46 M\$) in carpooling services.



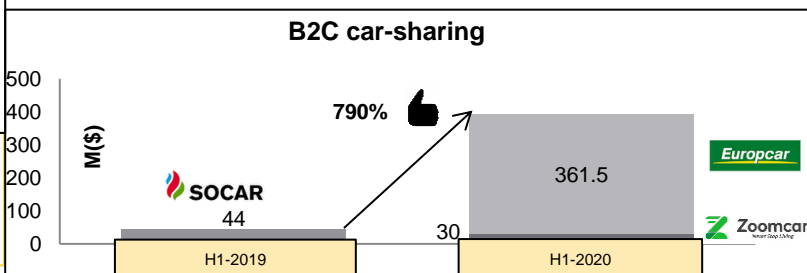
Funding in H1-20'(215.7 M\$) is down by approx. 7.6% YOY compared to H1-19'(233.46 M\$) in carpooling services. Swvl received the highest funding(68 M\$) in H1-2019 while, Via received the highest funding(200 M\$) in H1-2020. 9 carpooling startups have declared funding in H1-19 and H1-20' out of 60 which FutureBridge tracks in our startup tracker.



Funding in H1-20'(30.5 M\$) is up by approx. 4983% YOY compared to H1-19'(0.6 M\$) in P2P car-sharing services. Ryde received the highest funding(0.6 M\$) in H1-2019 while, Turo received the highest funding(30 M\$) in H1-2020. 3 P2P carsharing startups have declared funding in H1-19 and H1-20' out of 19 which FutureBridge tracks in our startup tracker.



Funding in H1-20'(1 M\$) is down by approx. 98.2% YOY compared to H1-19'(50.7 M\$) in leasing/subscription services. Fair received the highest funding(50 M\$) in H1-2019 while, Invigo received the highest funding(1 M\$) in H1-2020. 3 leasing/subscription startups have declared funding in H1-19 and H1-20' out of 19 which FutureBridge tracks in our startup tracker.



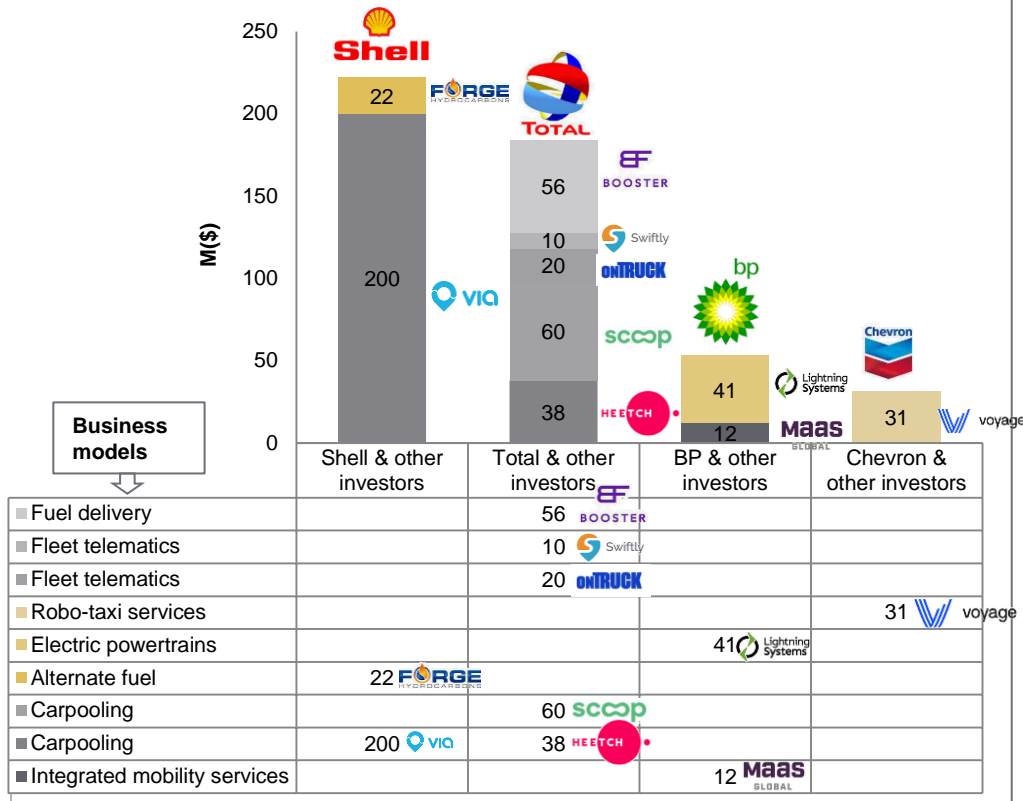
Funding in H1-20'(391.5 M\$) is up by approx. 790% YOY compared to H1-19'(44 M\$) in B2C car-sharing services. Socar received the highest funding(44 M\$) in H1-2019 while, Europcar received the highest funding(361.5 M\$) in H1-2020. 3 B2C car-sharing startups have declared funding in H1-19 and H1-20' out of 17 which FutureBridge tracks in our startup tracker.

Oil & gas companies investments & acquisitions from Jan-19 to H1-2020 in different business model

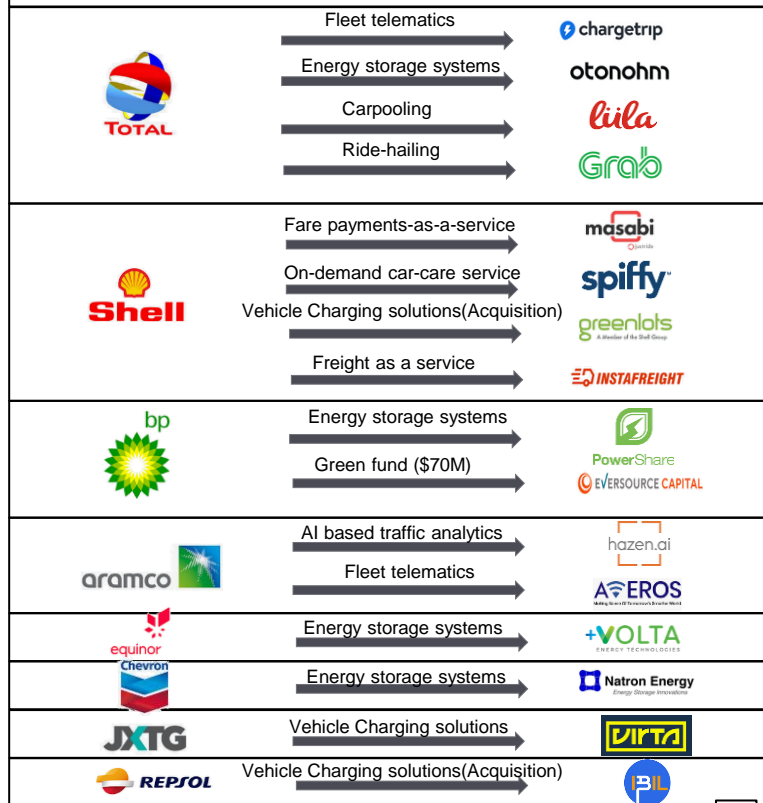


Oil & gas players are mostly investing in Fleet telematics, carpooling, and energy storage systems related business models

Participation in funding rounds by Oil & gas players in various startups related to mobility from Jan-19 to H1-2020



Other undisclosed investments/acquisitions from Jan-19 to H1-2020

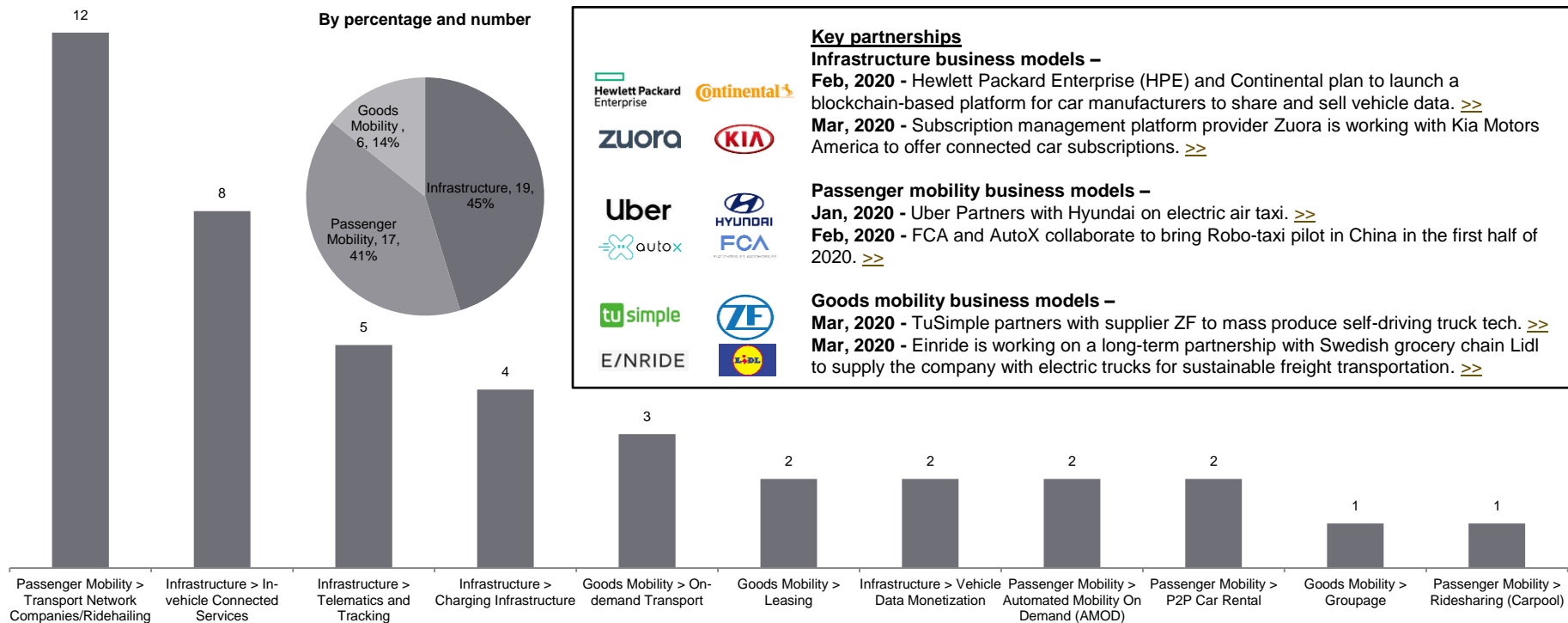


Collaborations in H1-20' in passenger, goods and infrastructure mobility services

Automakers and suppliers increasingly partnering to provide disinfectant services in car's; players also collaborating with new technology companies (e.g. block chain) for capabilities enhancements

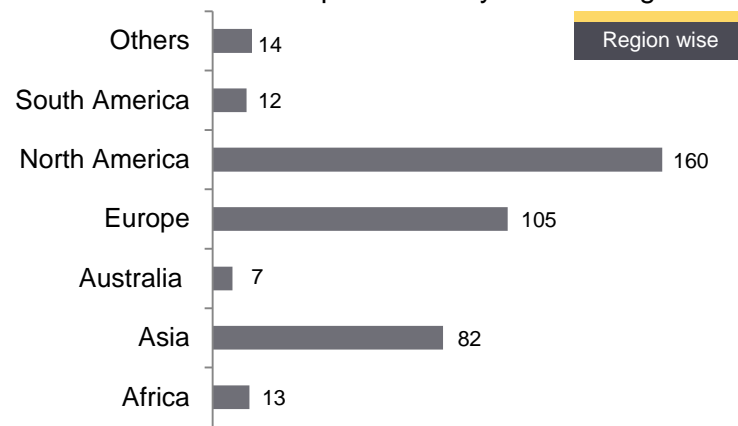
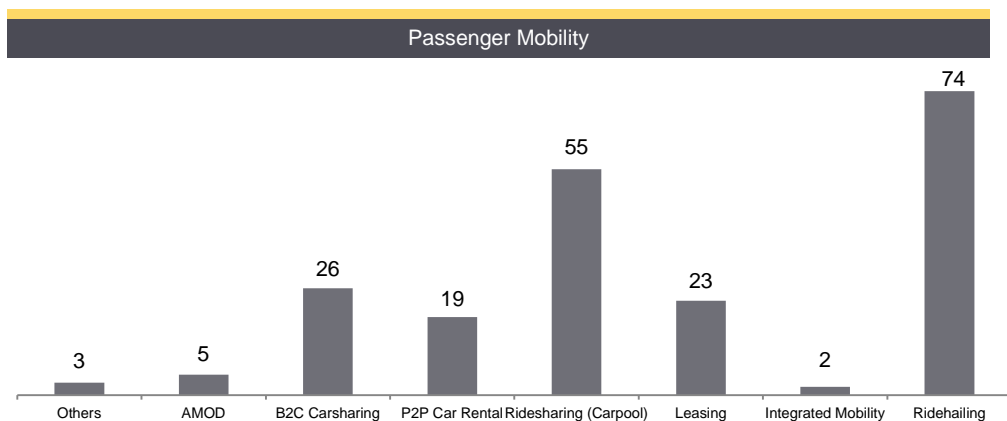


Number of collaborations / partnership activities across business models observed in H1 2020

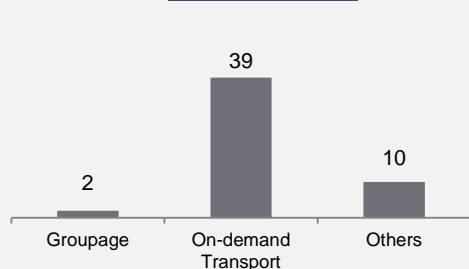


Startup tracker summary-H1,20'

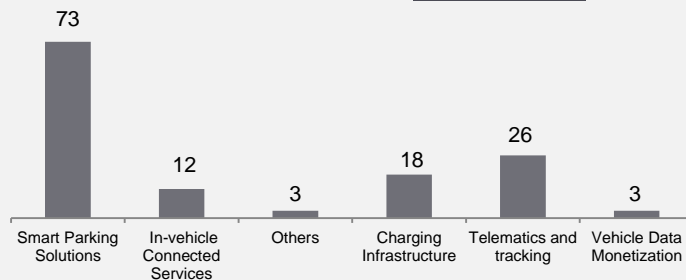
Proliferation of leasing/subscription business models across the globe in H1-20' in passenger mobility and Fleet telematics and in-vehicle connected services in goods mobility and infrastructure respectively gaining momentum out of 393 startups tracked by FutureBridge



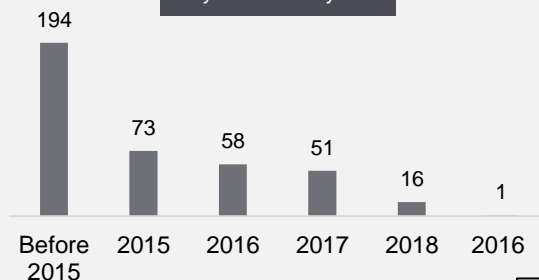
Goods Mobility



Infrastructure



By foundation year



COVID-19 impact on mobility business models in H1-20'

The Surge of rides in micromobility, leasing services while carpooling and carsharing services seizing their operations in certain geographies

Operations getting seize in certain geographies, players looking for buyers, carpooling & carsharing biggest hit due to COVID-19

- The car-sharing company [Getaround](#) is actively seeking a sale as the coronavirus outbreak has sent demand plunging
- Uber and Lyft both suspend their [carpooling option](#) due to COVID-19 in multiple countries
- General Motors is shutting down [Maven](#), the car-sharing service it launched in 2016

Ride volume down from Jan to April 20' but slowly getting recovered in May 20' in certain geographies

- In the United States, Uber's most important market, ride requests were up [12%](#) in 1st week of May from their lowest point in April.
- DiDi's ride volume in China has reached [60% to 70%](#) of pre-coronavirus levels in April, and is five times its February low.
- Lyft Inc said U.S. ridership had improved more than [20%](#) in May from coronavirus-hit rock bottom in April

Players exploring alternative business models for revenue generation

- Lyft Inc launched services to provide [essential goods, including groceries, meals and medical supplies](#), to people in need during the COVID-19
- Gojek and the Indonesian government tie-up for food and grocery deliveries in [Jakarta](#)
- Pony.AI launches [autonomous delivery](#) service to address heightened demand during covid-19

New safety measures getting implemented & innovation spurs up in MaaS in response to COVID-19

- Coronavirus fears prompt Chinese ride-hailing app DiDi to install [protective sheets](#) in vehicles and give masks to drivers
- China's Didi will begin using [AI](#) to verify if drivers in its Latin American markets wear mask
- Droom extends its Germ-Shield technology: an [antimicrobial surface](#) protection to sanitize Gurugram Police's vehicle fleet in India



Slow down in testing for AMOD services, automakers delaying their robotaxi service launch plans, Robotaxi players getting acquired






- Ford is pushing back the launch of its forthcoming robotaxi and autonomous delivery services from 2021 to [2022](#)
- [Waymo, Cruise, Argo, Pony.ai](#) suspend self-driving tests on coronavirus fears
- Amazon acquired self-driving car startup Zoox in a deal estimated to be worth [\\$1.2 billion](#).

Micromobility, Leasing services, and used car sales getting momentum




- Uber is leading a 170 million U.S. dollar investment round with participation from Alphabet in U.S. micromobility startup [Lime](#)
- Car subscription service increases in Australia. Carbar has grown more than [160%](#) since the beginning of the year
- Used car sales shoot up during lockdown, booking/inquiry numbers up to [115%](#) of the pre-Covid-19 levels for Maruti Suzuki



Vehicle data monetization getting momentum in H1-20'

Macro category	External road and environmental conditions	Technical status of the vehicle	Vehicle usage	Direct communications from the vehicle	Personal Preference data
Use case today	<ul style="list-style-type: none"> Real-time maps 	<ul style="list-style-type: none"> Car repair diagnostics Automatic emergency call 	<ul style="list-style-type: none"> PAYD insurance Toll or road tax payment 	<ul style="list-style-type: none"> Speech control of messaging and e-mail 	<ul style="list-style-type: none"> Vehicle settings memory 
Future use case	<ul style="list-style-type: none"> Preventive safety Live road condition reports 	<ul style="list-style-type: none"> Predictive remote service booking 	<ul style="list-style-type: none"> Reduced engineering costs Trunk delivery 	<ul style="list-style-type: none"> Proactive navigation and services Virtual assistant 	<ul style="list-style-type: none"> E-commerce in car Targeted advertisements

Latest Developments

<p>Jan,20- BlackBerry collaborating with AWS for data monetization >>></p> 	<p>Feb,20- HPE and Continental to launch blockchain platform for sharing vehicle data >>></p> 	<p>Apr,20- Otonomo raises \$46M in series c funding to expand automotive data services >>></p> 
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Autonomous Goods Mobility-on-Demand gaining momentum in H1-20'

First mile solutions

- **Jan,20'** SAIC showcases their first autonomous truck at Shanghai port for "First-Mile" Autonomous Logistics Transportation >>



- **May,20'** Hutchison Ports uses autonomous trucks in smart terminal transformation >>



STARSHIP

- **Apr,20'** Starship Technologies has launched a robot food delivery service in Tempe, Ariz., as part of the autonomous delivery startup's expansion plans >>



- **Jun,20'** Refraction AI launches contactless robot grocery delivery in Ann Arbor >>



Goods Mobility-on-Demand

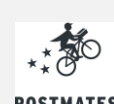


Middle mile solutions

- **May,20'** Gatik, a Palo Alto-based startup developing autonomous vehicles for business to business short-haul logistics, has launched a new platform to serve the supply chain's so-called middle mile – the autonomous box truck >>



Other Players working on Last-mile delivery solutions



POSTMATES

STARSHIP

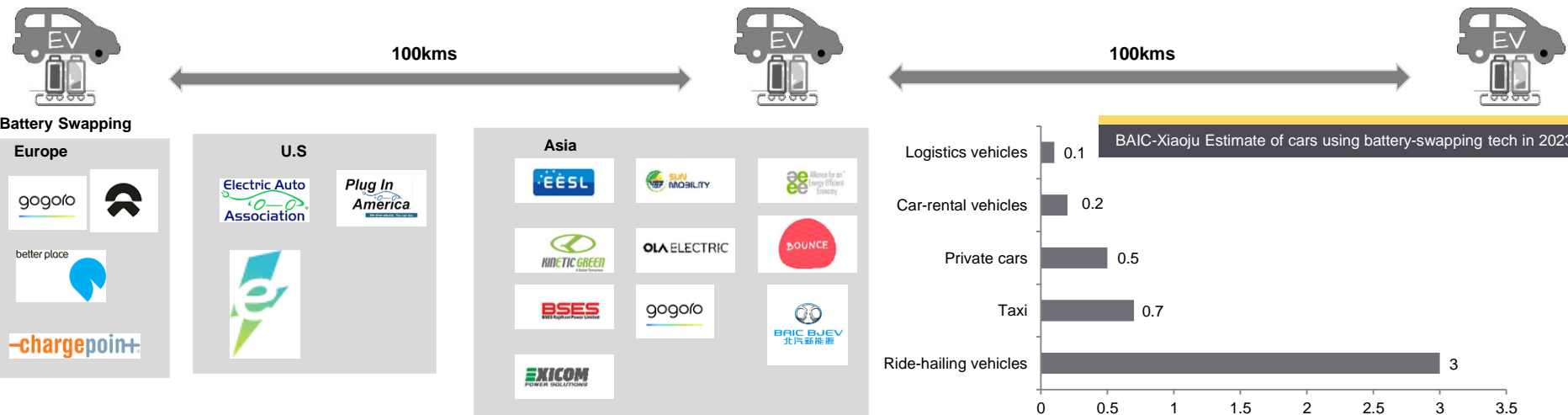


- Reduced road freight operating costs
- Low noise, zero emission solutions



- Requires better infrastructure
- Economical benefits are yet to be evaluated

Mobility players betting on battery swapping technology to push electric cars H1-20'



Latest Developments



Mar,20' Renault Morphoz concept a battery-swapping, shape-shifting Gallic EV >>>



Jun,20' IOC launches battery swapping facility for quick recharge of electric vehicles in India >>>



May,20' NIO Completes More Than 500,000 Battery Swaps till May end in China >>>

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