



AD PUNCTUM

News Review -- 4th to 10th December

News is arranged by company and topic. Stories that apply to more than one company or topic are duplicated.

News about the major automakers

BMW

- Rolls-Royce's CEO said that the Phantom will likely have an all-electric version (definitely no hybrid) but at the moment there is no demand from customers for such a model. ([Autocar](#))
- Denied claims by an environmental group that it had fitted defeat devices on diesel vehicles sold in Germany. The group said that it had tested vehicles on and off static tests and found discrepancies. ([Economic Times of India](#))
- Presented a strategy update. Although most of the targets, especially around longer term product are already in the public domain, there were some new slides explaining the company's view on topics such as electrification and autonomy. ([BMW](#))
- When presenting the company's strategy update, BMW's CEO drew attention to the company having trademarked i1 to i9 and iX1 to iX9. He also said that the i3 has conquest rates in excess of 80 percent. ([BMW](#))
- BMW's R&D head said that the company was better than all competition in technical competence and value creation around electrical powertrain and that it would always develop e-drives, power electronics and battery systems in-house, but could use make-to-print outsourcing. He illustrated the data challenge from autonomous vehicles saying that currently BMW's entire storage requirement was 60 PB, but autonomous vehicles will increase this to 500 PB. On autonomous capability he was bullish saying vehicles would "fully master level 5 right from the outset in 2021" and mentioned access to free real-time HD maps as a key enabler that BMW has worked on delivering. ([BMW](#))

Daimler

- Reorganised its trucks division to give the China market greater prominence. ([Daimler](#))

FCA

- Opened a new distribution centre in Detroit, USA, adding 100 jobs. ([Detroit News](#))

Ford

- Said that it will launch 50 new vehicles in China by 2025 and that its local assembly will increase by a further five models, not including the Zotye JV, one of which will be the company's first serious attempt at a BEV. As part of the plan, Ford wants to contain administrative costs, saying the structure would not increase beyond 2018 levels and that it was creating a single distribution group that would work with its three Chinese JVs. ([Ford](#))
- Agreed a collaboration with Alibaba that will potentially encompass a number of areas including digital marketing, smart vehicles and mobility services. The initial projects will look at retail sales. ([Ford](#))
- Planning to produce its first mainstream electric vehicle in Mexico rather than Michigan, USA. Ford said this was because it expects the market for fully autonomous vehicles to take off quickly so it wants to work on readying Flat Rock to meet the anticipated demand. ([New York Times](#))

- Introduced updated versions of the Transit Courier and Transit Connect (small commercial vehicles). Powertrain is now Euro 6.2-capable and Ford's press release drew attention to the gasoline engine derivatives which feature fuel economy technologies such as cylinder deactivation. ([Ford](#))
- Released its 2018 trends report showing the areas that the company is watching. NOTE: the report is about societal change so those hoping for insights into diesel mix or adoption of autonomous vehicles will be disappointed. ([Ford](#))
- Not wishing to be outdone by GM, Ford released a blog post about its autonomous vehicle ambitions, led by a 250-strong team at Argo AI. Ford believes that a vehicle must be commercial-grade and feature upgraded attributes to enable a longer service life. The company will be beginning pilot trials in 2018, although it isn't clear whether or not this will feature the all-new PHEV that the company is working on. ([Ford](#))
- Reportedly reduced the line rate in Valencia by 120 vehicles per day and will shed 280 temporary staff (up from around 100 a fortnight ago), with unspecified further employee reductions made through relocation and natural attrition. ([Europa Press](#))

General Motors

- Launched an online payments and reservation service called Marketplace that is integrated with the vehicle instrument panel. GM claimed the product as a world-first but it wasn't clear how it is materially different to offerings from the likes of Ford and PSA. ([GM](#))
- Scheduled downtime at the Oshawa, Canada assembly plant due to weak sales of the Chevrolet Impala and Cadillac XTS made there. ([Automotive News](#))

Honda

- Signed a collaboration agreement with SenseTime to work on artificial intelligence applications for autonomous vehicles. Honda is particularly interested in improvements to image recognition. ([Honda](#))

Hyundai / Kia

- Suffered continued strikes in South Korea as management rejected union demands for higher pay. Five plants have been affected, with over 43,000 vehicles lost. ([Yonhap](#))

Nissan (includes Mitsubishi)

- Created a new brand for robo taxi ride hailing called Easy Ride, in partnership with DeNA. The companies are planning a two week long public trial in March 2018 in Yokohama, Japan. Full services will be introduced by the "early 2020s". ([Nissan](#))
- Mitsubishi signed an MoU with the Indonesian government to find ways of promoting electrified vehicles in the country. This seems to be an opportunity to influence government policy around incentives. ([Mitsubishi](#))
- Will investigate vehicle-to-grid applications for electric vehicles in Japan with TEPCO -- Nissan already has several projects running in different European countries. ([Autocar](#))
- CEO Carlos Ghosn gave an interview in which he said that the industry would be totally transformed in 10 years, with large changes starting in the next three to four years. He said that significant further guidance from regulators was necessary before the winning technology set could be identified. He also said the best business advice he had ever been given was "if you want recognition, buy yourself a dog". ([Nissan](#))

PSA (includes Opel/Vauxhall)

- Announced a 50/50 JV with Nidec to develop and produce electric motors for vehicles, with PSA as the anchor customer. The manufacturing base will be in France. ([PSA](#))
- Created a concept urban mobility vehicle as part of a European consortium with public funding. The vehicle is a PHEV using 48V electrification and an engine from a scooter. ([PSA](#))
- CEO Carlos Tavares was appointed head of the European manufacturers association, ACEA, for 2018. ([ACEA](#))

Renault

- Launched a new 1.3L petrol engine that it has developed in partnership with Daimler. ([Renault](#))
- Announced the re-launch of Karhoo, the taxi aggregator app that Renault purchased after its failure. The company forecasts that by the end of December over 150,000 taxis will use the app. ([Renault](#))
- CEO Carlos Ghosn gave an interview in which he said that the industry would be totally transformed in 10 years, with large changes starting in the next three to four years. He said that significant further guidance from regulators was necessary before the winning technology set could be identified. He also said the best business advice he had ever been given was “if you want recognition, buy yourself a dog”. ([Nissan](#))
- Created a running prototype of the Symbioz concept vehicle in order to show the company’s vision of mobility in 2023 with a autonomous-capable, privately-owned, vehicle. Confusingly, part of this vision seems to be people sitting in the car as it drives, experiencing the drive through virtual reality (video at 01:00 if you don’t believe me). ([Renault](#))

Tata (includes JLR)

- Tata is working with Thai start-up DRVR to provide fleet management services in markets including Thailand and Indonesia. ([Autocar](#))

Tesla

- British Insurer Direct Line has started offering a 5 percent discount on vehicles fitted with autopilot. ([Electrek](#))
- CEO Elon Musk said that the company was creating its own self-driving hardware with help from AMD and that fully driverless vehicles would appear in two years time. ([Futurism](#))
 - Implication: Given that some owners have already purchased the fully driverless option, this indicates that Tesla will have to replace hardware in the vehicles in order to enable the feature. If Tesla develop a cost-effective way of doing this then we could see hardware upgrades going from zero today (unless you want a new stereo for your McLaren F1), to a way of life in the future.

Toyota

- Said that it has stopped selling the diesel powered Auris in the UK. ([Autocar](#))

VW Group

- Announced that Škoda would install a new paintshop at its Mladá Boleslav plant that will increase capacity to 2,700 cars per day from June 2019. ([VW](#))
- Launched a connected vehicles brand called RIO for MAN and Scania vehicles to supply telematics data to operators. RIO will operate a freemium model with a service called RIO Essentials on all vehicles. ([VW](#))
- Audi said that it had developed a system that could create a 3D awareness of the surrounding area using a mono camera and a set of neural network algorithms. The system operates at 15 fps, so will have large gaps in its situational awareness at higher speeds -- e.g 0.9m between frames at 30mph -- nevertheless it could have immediate application in low speed situations such as parking garages. ([Audi](#))
- VW’s inhouse mobility start-up Moia said it had created a purpose built vehicle for on-demand ride hailing The company plans to launch services in Hamburg at the end of 2018. The vehicle itself is fully-electric with a claimed range of 300km and space for six. It was created by VW’s commercial vehicles group. ([VW](#))
- According to Porsche executives, around 60 percent of Panamera models sold in Europe were hybrid versions. In some markets, the number is as high as 90 percent. The company is already working on derivatives of the Mission E to increase its all-electric portfolio. ([Electrek](#))
- Reportedly issued a stop-ship on T6 vans because of excessive emissions that the company has detected, and has yet to explain. ([Reuters](#))
- Lamborghini launched the Urus “super SUV”. To ensure it is “suitable for everyday driving”, the company equipped their latest model with a 650hp V8, rear wheel steering and a \$200,000 price tag. ([Lamborghini](#))

Other

- **Subaru** said that its first BEV will be a variant of an existing car. The challenge with this route is normally battery package -- expect a higher price and compromised range. ([Autocar](#))
- Chinese car company **BYD** signed an agreement for a plant in Morocco where it will assemble electric vehicles. The company also plans to produce battery packs and electric commercial vehicles in the country. ([Les Echos](#))
 - Implication: Established companies like the low-cost footprint of North Africa but struggle to source the latest technologies there. If BYD helps to establish significant battery expertise in Morocco, more could follow (not least Renault and PSA).
- **McLaren** unveiled the £750,000 Senna supercar. An upgraded version of the 720S, it has an engine with an output of 800PS and will be built in a limited edition of 500 models. ([McLaren](#))
- **Saleen** showed the 450hp Saleen 1 sports car at the LA show. The vehicle will be built with capital from Jiangsu Saleen Automotive Technology Group. ([Auto Blog](#))
- **Morgan** will end production of the Aero 8 with a limited edition run of eight Aero GT cars. ([Car Buzz](#))
- **W Motors** announced the production-ready 800 hp Fenyr SuperSport supercar. Priced at \$1.85 million, the company is aiming to sell 25 examples during the production run. ([Car Buzz](#))
- Well-funded Chinese start-up **WM Motor** displayed the prototype of its first model, an SUV and said that it would use the **Weltmeister** brand for its products. The company hopes to sell 100,000 vehicles each year once it has launched all three vehicles in its portfolio. The CEO says that the company has raised \$1.81 billion so far and requires a further \$1.5 billion to bring all vehicles to production. ([Electrek](#))
 - Implication: Although \$3 billion sounds about right for a from-scratch three vehicle portfolio, this would be expected to provide three differentiated platforms and manufacturing capacity of near 500,000 units of each model (c. 1.5 million in total). Since stated intentions are for 100,000 vehicles per year, this seems an expensive way of producing this portfolio and footprint.
- **Spyker** will end production of the C8 Aileron with a three car limited edition. It isn't clear whether these are part of the "last five" units that the company announced in March 2016, or additions to the run. Production of its successor, the C8 Preliator, will begin in Coventry, UK in summer 2018. ([Spyker](#))
- **NEVS** said that it will restart production at the former **Saab** plant in Trollhättan, Sweden in order to assemble 9-3 EVs. The company is also looking to expand existing capacity in China. ([Autocar](#))
- Chinese start-up **Leapmotor** said it had received pre-A funding from **Sequoia Capital** -- this is slightly confusing since the company claims to have already invested \$395 million in production and R&D. ([China Money Network](#))

[News about other companies and trends ...](#)

Economic / Political News

- **German** new car sales in November of 302,636 vehicles were up 9.4% on a year-over-year basis. Diesel share fell by (17)%. ([KBA](#))
- **UK** car sales in November of 163,541 units were down (11.2)% on a year-over-year basis. Diesel demand fell (30)%, only partially offset by increases in petrol and electrified products. ([SMMT](#))

Suppliers

- **Rockwell Automation** acquired **Odos Imaging**, a specialist in 3D time of flight sensors (a type of low-cost distance measurement). Automotive will be one of the application areas for the technology. ([Vision Systems](#))
- **Samsung** invested in Chinese machine vision firm **Vion Technology**. Although at present the firm is focused on image recognition from static cameras, the same techniques could have application in vehicles, or in V2I communication and decision-making networks. ([China Money Network](#))
- **Continental** showed the ProViuMirror, a product that replaces wing mirrors with a single in-car video. The company claims removing the wing mirrors will save 2% fuel economy. ([Continental](#))
- **Denso** said it would fully absorb **ASMO**, a business that it has so far consolidated on the basis of 92.4% ownership across various entities. ([Denso](#))

- As expected, **ZF's** CEO resigned. The company announced it had appointed former VAG veteran Franz-Josef Paefgen as Chairman. He said it was “vital {for ZF to} settle down”. ([ZF](#))

Dealers

- **UK** dealers were reportedly loss-making in October. Used vehicles performed well across a range of measures -- price and stock turns in particular -- but failed to offset new vehicle sales deterioration. ([Automotive Manager](#))

Ride-Hailing, Car Sharing & Rental

- **Renault** announced the re-launch of **Karhoo**, the taxi aggregator app that Renault purchased after its failure. The company forecasts that by the end of December over 150,000 taxis will use the app. ([Renault](#))
- **Uber** has run into licensing problems in two further UK cities -- York and Sheffield. As with London, the company is able to appeal. ([BBC](#))
- **ComfortDelGro** is buying a majority stake in a private hire vehicle fleet operator from an **Uber** subsidiary. ([Reuters](#))
- **Didi** will reportedly launch in Mexico early in 2018. It recently apparently gave up on the US. ([Reuters](#))
- **Go-Jek** said it was planning to open its first overseas service, in the Philippines early in 2018. ([Reuters](#))
- **Go-Jek** has invested in Bangladeshi ride hailing firm **Pathao**. ([Deal Street Asia](#))
- Chinese electric vehicle car sharing company **PonyCar** has reportedly raised \$37 million in a series C round, bringing total fundraising to \$83 million in just over a year. ([China Money Network](#))
- In a preview of some of the problems the sharing economy will yield, car rental operators were criticised for not wiping user data such as phone and location details when a vehicle was passed to a new user. ([V3](#))
- Fuelling rumours of an impending IPO, **Lyft** boosted its fund-raising by another \$500 million and has just hired a VP of corporate development and IR. ([TechCrunch](#))

Driverless / Autonomy

- The autonomous vehicle trial in Boston between **Lyft** and **nuTonomy** (now owned by **Aptiv**) has now begun. Customers order a Lyft ride as normal and are sent a nuTonomy car if they are in the same area. ([nuTonomy](#))
- **Aptiv's** CEO repeated the company's view that autonomous vehicle system cost will have fallen to \$5,000 per unit by 2025. Although this led to plenty of media excitement, the company has been showing this figure in public domain presentations for over a year. ([Bloomberg](#))
- Malaysian media profiled the efforts of local self-driving vehicle start-up **Reka Studios**. ([Paul Tan](#))
- **Baidu** led a \$15 million investment in Chinese driver assistance start-up **Smarter Eyes Technology**. ([SCMP](#))
- A presentation by **Apple** at a machine learning conference showed more of company's research into image recognition and scene understanding (such as identifying the movement of partially obscured pedestrians). Some commentators speculated that Apple are having to be more open in order to attract talent to the company. ([Wired](#))
- **Rinspeed** previewed the Snap autonomous vehicle, which will be displayed at CES in January. The vehicle uses a skateboard concept whereby different body shapes can be mounted quickly onto a running base, enabling re-purposing for new roles. ([Autocar](#))
 - Implication: Ad Punctum has repeatedly supported skateboard concepts that can be adapted to different roles over unibodies that are more rigid. With the Snap following (relatively) hot on the heels of GM, the more the merrier. Skateboards have considerable technical challenges to overcome, not least secure connection for crash and how to avoid duplication of expensive sensors that are mounted on the top hat. The greater the number of teams working on the problem, the more likely a good solution will emerge.
- **Aston Martin** said that it has intentionally not fitted ADAS technologies to new vehicles because customers want a more pure driving experience. CEO Andy Palmer said that partner Daimler could supply such devices on a plug-and-play basis if customer perspective changed. ([Automotive News](#))
 - Implication: It seems likely that in a future of autonomous vehicles, the idea of driving oneself won't disappear but it will be distilled into something more focused than today's vehicles. Aston Martin are right to be monitoring this trend.

- Lidar start-up **Ouster** emerged from stealth mode announcing that it has \$27 million in funding. The company says that its 64 line product, the OS1 is available now for \$12,000 per unit. The company hopes to manufacture 1,000 units per month at the beginning of 2018 and be running at a rate of 10,000 units per month by late 2018. ([Forbes](#))
 - Implication: A run rate of 10,000 units per month would supply something in the region of 24,000 to 30,000 L4/5 vehicles each year or about 120,000 L3 vehicles per year. Those are serial production levels, far in excess of all cumulative prototype demand. It remains to be seen whether these production forecasts are based on customer orders or simply for scene-stealing effect. \$12,000 per unit looks much too high for retail (L3) take-up.

Electrification

- As a guide to the cost of high-performance electrification infrastructure, **ABB** announced that it had secured a contract to supply 600kW and 400kW chargers for a bus route in Nantes, France operated by 20 vehicles. The cost? A cool \$20 million. ([Inside EVs](#))
- A group of OEMs have pledged to source raw materials for electric vehicles in an ethical and environmentally responsible way with monitoring by a 3rd party. **BMW** (which earlier announced a unilateral plan) is part of the group. ([Green Car Reports](#))
- A consortium of German companies, including **Porsche** and **BMW**, is working on a project called FastCharge to develop a prototype 450kW charger in 2018. If successful, the **Ionity** JV (of which both are members) could work on this technology, rather than the 350kW currently planned. ([Inside EVs](#))
- Compact electric car start-up **Uniti** says that it will provide five years of free electricity with each model for customers in Sweden. ([Uniti](#)). The company said that its launch product would be on sale for between €15,000 and €20,000. It can be reserved with a fully refundable deposit of €149. ([Uniti](#))

Connectivity

- Indian start-up **Netradyne** launched a low-cost driver monitoring and ADAS product, aimed at commercial fleets called **Driveri**. ([Autocar](#))
- **Tata** is working with Thai start-up **DRVR** to provide fleet management services in markets including Thailand and Indonesia. ([Autocar](#))

Other

- Bicycle sharing firm **OBike** reportedly suffered a data breach in which account details were stolen. ([CNET](#))
- Bicycle sharing firm **Ofo** is said to have raised \$1 billion. ([Business Insider](#))
- Singaporean telecoms company **M1** and university **NTU** have started a three year project researching drone traffic control systems. ([Today](#))
- Bicycle sharing firm **Hellobike** raised \$350 million, despite recently merging with **Youon Bike**, reportedly because of weakness in the face of brutal competition. ([China Money Network](#))