

News Review -- 16th October to 22nd October

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

- Had offices raided by EU officials investigation an alleged cartel between Daimler, BMW and VW. Daimler claimed publicly that it had whistle-blower status and was therefore expected not to be fined. (Reuters)
- Mini's chief designer hinted that the company was looking to expand the range in future beyond the current 5 bodystyles. (<u>Autocar</u>)

Daimler

- Announced financial results for Q3 2017. Sales of 824,000 units were up 9% and revenue of €40.8 billion was up 6% on a year over year basis. Profits fell, EBIT of €3.5 billion was down (14)% and net profit of €2.3 billion was down (17)%. Daimler said that warranty recall costs were a drag on profits. (Daimler)
- Announced that it was taking further preparatory steps towards the creation of a three division structure: Daimler financial services; Mercedes-Benz cars and vans; Daimler trucks and buses. The company said that this would cost a "three-digit euro million amount" (Daimler)
- Showed off a specific use case application of platooning autonomous technology. Mercedes Trucks converted airport snow clearing trucks so that only a lead vehicle needs to be manned and the rest of the group can follow its example. (TechCrunch)
- Will recall over 1 million vehicles due to problems with airbags. (Manager Magazin)

Ford

- Seemingly in response to the blog post by Cruise Automation's CEO, the CEO of Argo AI wrote an article explaining that it was "really hard" to master self-driving and that those expected rapid progress to the point where AVs are ubiquitous within "a few years" are "not well connected to the state of the art or committed to the safe deployment of the technology". (Ford)
 - o Implication: Ad Punctum's research is generally aligned to the tone of the article but we would highlight the semantic importance of ubiquity to the debate. We see specific use case, geo-fenced vehicles as being a reality within a few years and that, properly used, these will enable lower cost on-demand transport through mixed fleets of AVs and human drivers.
- Said it would recall about 1.3 million F-150 a Super Duty trucks to fix a potential problem with water entering door latches and freezing. (Ford)
- Had to suspend operations of the Chariot service in California after routine inspections found that some of its drivers were improperly licensed. (Wired)

Geely (includes Volvo)

- Having announced earlier in the year that Polestar was to become a standalone all-electric brand, the company has now said that there will be a three car line-up, with all vehicles built in Chengdu, China. The first product will be the Polestar 1, a carbon-bodied, 600hp 2+2 coupe range-extended PHEV. The factory will be completed in 2018 with first sales in 2019 and the vehicle will be available on subscription, rather than for purchase (it isn't clear what will happen at the end of the lease period). The Polestar 2 will be a mid-sized BEV (i.e. S40/60 sized) launching in late 2019 and the Polestar 3 will be a BEV SUV. (Volvo)
 - o Implication: the unveiling of the Polestar 1 as a Fisker Karma, rather than Tesla, fighter suggests that Volvo have taken the fastest route to market in order to launch the brand quickly.
- Said that it was spending €640 million on launching Polestar and that it expects 40% of global car sales to be allelectric in the next 20 years. (Volvo)

General Motors

- Cruise Automation will begin testing in New York in early 2018. The vehicles will have safety drivers at the wheel. (New York Governor)
- Reached a settlement with 49 US states over defective ignition switches. GM will pay a total of \$120 million. The recall actions to correct the problems have already taken place. (<u>Detroit News</u>)
- In an interview GM's president said that it was unlikely to make further acquisitions for its self-driving car business or that it was planning to spin-off any mobility business from the main company. (Reuters)

Honda

 Said that Kobe Steel had falsified tests on aluminium Honda uses for doors and other closures but that the material still passed Honda' own tests and was therefore not a safety risk. Honda is still checking whether any parts used by its suppliers are affected. (Honda)

Hyundai / Kia

- Beijing-Hyundai (the company's Chinese JV) said it had created a strategy called "localization 2.0" to help its products be seen as more Chinese and offset some of the negative sentiment it has received over US military sites in South Korea. (ET News)
- Launched an all-electric car sharing scheme with 100 vehicles in Amsterdam. Rental costs €12 per hour. (<u>Auto Rental International</u>)

Mazda

• An interview given by a powertrain executive created speculation that the company is working on a range-extended PHEV that uses a rotary (Wankel) engine. (Green Car Reports)

Nissan (includes Mitsubishi)

- Mitsubishi announced targets for its three year plan called "Drive for Growth". The company is aiming for a 6% operating profit by 2019 with a massive sales increase and will launch 11 new models, focus on core markets and reduce costs. (Mitsubishi)
- Said that despite an earlier stoppage, it had discovered that several plants had continued to carry out inspections by incorrectly certified personnel and therefore production in Japanese factories was shut down. The problem appears to be that vehicle plants divided up quality checking tasks in a way that had not been approved. (Nissan)
- Said that it was adding a 2nd shift (457 workers) to its St Petersburg plant in order to increase production of Qashqai,
 X-Trail and Murano. (Nissan)
- Mitsubishi will undertake a vehicle to grid trial with PHEVs in the Netherlands. Although there are several schemes under trial with various manufacturers, this seems to be the first PHEV specific one. It is in collaboration with NewMotion (recently purchased by Shell). (Mitsubishi)

PSA (includes Opel/Vauxhall)

- CEO Tavares said in an interview that production costs at Opel factories were 50% higher than at French PSA plants and that Opel was in danger of missing 2020 feet average CO₂ targets. (Reuters)
 - Implication: Since EU CO₂ limits are calculated at a group level, and PSA are already on target to be one
 of the best performing companies, talking about emissions seems to confirm that PSA's intent is to
 operate Opel / Vauxhall at arm's length (whilst enforcing R&D sharing) in order to wring concessions
 from unions.
- Opel dealers in Norway have been told to stop taking orders for Ampera-e vehicles (Chevrolet Bolt) and to put customers on a reservation list, with a likely delivery date no sooner than 2019. (<u>Tek.no</u>)
- Will expand its emov all-electric car sharing scheme in Madrid to 600 vehicles in total (memo: it recently said it would shutter activities in Berlin). PSA says that the Madrid operation has an average user age of 36, 71% of customers are men and the average travel time is 20 minutes. (<u>Auto Factil</u>)
- Has created a peer-to-peer platform called carventura that will enable used car sales by providing secure payments, price appraisals and limited warranties. (PSA)

Renault

• Refused to comment on rumours that it has been working on the establishment of a plant in Pakistan since late 2016. (Usine Nouvelle)

Tesla

- Refused to confirm that it had signed a deal to open a factory in China. Memo: In June the company said it was looking at sites around Shanghai for a new plant. (Reuters)
- Announced an increase in borrowing capacity from \$600 million to \$1.1billion. (Tesla)
- Agreed a pay rise of 30% at its German (formerly Grohmann) division. In return for signing a long term agreement, workers will get a bonus paid in cash and Tesla stock. (Reuters)
- Some industry experts speculated that the cause of Model 3 production bottlenecks was problems with weld quality on the body in white line because Model 3 uses so much steel -- a material Tesla is less familiar with. (Golem)
 - o Implication: We consider this to be an unlikely cause of the issues for Tesla (albeit not impossible). Weld technology -- the steel, the guns and set-up -- are all long-established technologies. Tesla shouldn't have trouble finding people who know how to do this properly.

Toyota

- Is recalling around 310,000 Sienna vehicles to rectify possible gearbox problems. (Toyota)
- Said that Kobe Steel supplied aluminium had been used in vehicles but that it passed Toyota's own safety tests. Investigations are still ongoing regarding steel components used by Toyota. (Toyota)
- Unveiled a Concept-i family of vehicles at the Tokyo motor show that consist of an electric scooter, a compact car
 and a vehicle that can seat four people in comfort. (<u>Toyota</u>). The company also show a vehicle called "Fine-Comfort
 Ride", which was its take on the type of lounge like autonomous vehicles such as the M-B F105. (<u>Toyota</u>)
 - Implication: although Toyota wasn't explicit, Ad Punctum's research points to shared vehicles having fewer derivatives, rather than the variety of today. In such a future state scenario, a continuous design theme would be a plus since customers would want vehicles that were familiar even as specific journeys require slightly different models.

VW Group

- Seat has abandoned plans to enter the Iranian market and will instead focus on untapped areas of growth in Europe. (Europa Press)
- Škoda has pushed back plans for a US expansion in order to focus resources on low cost small cars. (Autocar)
- The Audi works council demanded that the company give job guarantees to 2025 to ensure that employees could contribute constructively to the technological change facing the industry. (<u>Handelsblatt</u>)

- VW's chief digital officer said in an interview that the company saw five elements in the autonomous mobility value chain: the vehicle manufacturer; the self-driving system designer; the fleet owner / operator; the mobility service provider and then providers of additional digital services (including advertising). He said that the company believes that a robo taxi will pay for itself "within months", describing on-demand mobility as "super profitable" and saying the company wanted to operate "all five levels" of the mobility system. (Manager Magazin)
 - o Implication: Ad Punctum's research (find it here) supports VW's profitability assessment in the very short term. Robo taxis that have operating costs below \$0.50 per mile and can charge a similar fare to taxis (above \$2.50 per mile) will be very profitable. Competition is likely to bring the price down rapidly so that longer term profits are more in line with transport operators today (about 10% 15% of revenue). We fundamentally disagree that OEMs will be well placed to operate all levels of the on-demand mobility chain (see why here).

Other

• **Subaru** said that the only Kobe Steel supplied materials affected by falsified tests were aluminium panels used in hoods and that the material passed Subaru's own safety tests. It is still checking whether any parts used by its suppliers are affected. (Subaru)

News about other companies and trends ...

Economic / Political News

- **European** passenger car registrations for September of 1,427,105 units were down (2)% on a year-over-year basis. The primary cause was falling sales in the UK and Germany. (ACEA)
- China passenger car sales of 2.343 million units was up 3.3% on a year over year basis (<u>CAAM</u>). Commercial vehicle registrations of 367,000 units was up 23.9% YoY. (<u>CAAM</u>)

Suppliers

- **Bridgestone** released a presentation about its plan covering 2018 to 2022. The company's priorities are improving its brand; encouraging innovation; making continuous improvement; managing talent; improving governance and expanding the business in new areas. (Bridgestone)
- **Denso** announced a collaboration with **FotoNation** to improve image recognition in Denso systems. (<u>Denso</u>)
- LG & Qualcomm will collaborate on next generation connected car solutions. (LG)

Dealers

- French group Sogesa / Passion Automobile said it was buying Austrian group BGA Motors. (Journal Auto)
- **UK** dealers are seeing hybrids sell much more quickly this year. According to one platform, hybrids have gone from taking twice as long as a petrol or diesel (around 80 days vs 40 days), to almost half as long (just over 20 days) in the last 12 months. (Motor Trader)
- PSA has created a peer-to-peer platform called carventura that will enable used car sales by providing secure
 payments, price appraisals and limited warranties. (PSA)

Ride-Hailing, Car Sharing & Rental

- **Lyft** announced that it had raised \$1 billion in a round led by **Alphabet's** (Google's) growth fund. The company is now valued at \$11 billion. (<u>Lyft</u>)
- **Grab** announced \$700 million in debt to fund expansion and that it will partner in Singapore with **SMRT** (public transport and taxi operator) to create a flexible fleet. (Grab)
- **California's** Energy Commission has approved a grant for an all-fuel cell car sharing scheme. There will be 15 vehicles in the fleet. (Auto Rental International)
- Research by website rastreator.com found that six out of ten Spaniards would be prepared to carshare (temporary rental, not pooling) if it saved them money. (<u>Europa Press</u>)

- In an interview **GM's** president said that it was unlikely to make further acquisitions for its self-driving car business or that it was planning to spin-off any mobility business from the main company. (Reuters)
- **Hyundai** launched an all-electric car sharing scheme with 100 vehicles in Amsterdam. Rental costs €12 per hour. (Auto Rental International)
- **PSA** will expand its emov all-electric car sharing scheme in Madrid to 600 vehicles in total (memo: it recently said it would shutter activities in Berlin). PSA says that the Madrid operation has an average user age of 36, 71% of customers are men and the average travel time is 20 minutes. (Auto Factil)
- **Ford** had to suspend operations of the **Chariot** service in California after routine inspections found that some of its drivers were improperly licensed. (Wired)

Driverless / Autonomy

- The CEO of **Mobileye** (owned by **Intel**) co-authored an academic paper that lays out some rules Mobileye hopes can help assign blame in accidents and both be used to establish whether self-driving vehicles are safe in principle and be applied to specific accidents. (<u>Intel</u>)
- A video posted in Twitter showed the latest prototype driverless vehicle prepared by **Apple** and the detailing of the sensor set housing led some commentators to speculate that Apple was working on finer aesthetic design points ahead of an unveiling. (CNET)
- Researchers associated with a **UK** Government funded AV trial in London published a survey on public perceptions of driverless vehicles. One finding was that when cast as a pedestrian, people thought driverless vehicles would be safer than human-piloted ones, but that as a passenger, they saw human-driven vehicles as safer. (Gateway Project)

Electrification

- **Toshiba** said that it had developed a new anode technology for lithium ion batteries that would allow a battery to be charged in 6 minutes. The technology will be launched in 2019. (<u>Inside EVs</u>)
 - o Implication: Toshiba claim to have achieved the fast charge capability with changes to the anode, rather than having to go to a completely new type of battery (e.g. sold-state). The claimed range is also being achieved on a relatively small battery (32 kWh -- around half the size of a Chevrolet Bolt battery) so although Porsche Mission E and Daimler make similar claims for 200km range in just over 5 minutes, their assumptions rest on using a larger battery.
- A recent UBS study highlighted a number of commodities that would be overwhelmed by substantial growth in
 electric vehicles (assuming future battery technologies were essentially the same as today and no recycling loop had
 developed). (Mining.com)
- Shell launched a charging service in the UK offering 50 kW chargers on petrol forecourts. The company aims to have 10 sites by the end of 2017 and will also launch in the Netherlands. This is a separate scheme to NewMotion, the charging company Shell recently acquired. (Inside EVs)
- Chinese backed electric car start-up SF Motors said that it had bought InEVit -- a start-up working on energy storage and electric powertrain products. (Reuters)
- Charging company **Hubject** said that it had received additional funding to expand into the US and China. Note that BMW, Daimler and VW are among the company's shareholders. (<u>Hubject</u>)
- **Opel** dealers in Norway have been told to stop taking orders for Ampera-e vehicles (Chevrolet Bolt) and to put customers on a reservation list, with a likely delivery date no sooner than 2019. (Tek.no)
- **Volvo** said that **Polestar** will have a three car line-up, with all vehicles built in Chengdu, China. The first product will be the Polestar 1, a carbon-bodied, 600hp 2+2 coupe range-extended PHEV. The factory will be completed in 2018 with first sales in 2019 and the vehicle will be available on subscription, rather than for. The Polestar 2 will be a midsized BEV (i.e. S40/60 sized) launching in late 2019 and the Polestar 3 will be a BEV SUV. (Volvo)

Connectivity

- **European** industry body ACEA published six **cybersecurity** principles that its members had endorsed. The key things are having good processes upfront, being able to react to emergencies and sharing best practice and lessons learned. (ACEA)
- **Argus** and **Elektrobit** (owned by **Continental**) have released an over the air update product that the two companies say takes care of the entire process and provides security to the OEM. (<u>Telematics News</u>)
- LG & Qualcomm will collaborate on next generation connected car solutions. (LG)

Other

• **Foxconn** and **IDG Capital** are reportedly working on a fund worth \$1.5 billion that will invest in automotive technologies. (China Money Network)