



AD PUNCTUM

News Review -- 6th November to 12th November 2017

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

Our latest research

How fast can autonomous vehicles travel safely? With current state of the art technology, autonomous vehicles are likely to have maximum speeds below those human drivers are held to. The reason is simply the range limitations of the sensor set (in the medium term) and a higher standard of safety than humans apply to themselves. The flip side is that this could reduce the cost, weight and environmental impact of the vehicles.

- [Read a summary presentation here \(18 slides\)](#)

News about the major automakers

BMW

- Reported financial results for Q3 2017. Automotive revenue of €21.04 billion was down (2.4)% on a year-over-year basis, despite a 1.2% increase in volume to 590,415 vehicles sold. Group PBT of €2.4billion was down (5.9)% YoY. ([BMW](#))
- Despite Q3 earnings being lower than the prior year, BMW said it was in good shape on a year to date basis and increased its forecast for full year results. ([BMW](#))

Daimler

- Daimler said it was acquiring CINTEO, a German digital services company with around 100 employees, to accelerate digitisation of its marketing, sales and media functions. ([Business Review Europe](#))
- Daimler's car sharing service Car2Go published a white paper covering essential conditions for successful fleet operation of autonomous vehicles. ([Car2Go](#))
- Is working on a pilot project to use automotive fuel cells for stationary power generation. ([Daimler](#))

Ford

- Signed a \$765 million deal with Zotye to produce electric cars in China under a new brand. The two companies had previously signed an MoU. ([Ford](#))

Geely (includes Volvo)

- Proton suppliers have reportedly been told to cut prices by 20%. Several are saying that they cannot compete with prices from Geely's Chinese suppliers that they are now in competition with. ([Free Malaysia Today](#))
- The CEO of Lotus said that the company has a ten-year plan for new products and electrification, to be unveiled next year. Lotus will stay at its current sales level of around 1,500 cars per year for the next "two to three" years and then sales will rise. ([Top Gear](#))
- Geely Automobile Holdings will acquire several automotive components plants from its parent. ([The Standard](#))

General Motors

- Will host an investor event on November 30th to “share our vision for an autonomous future”. ([GM](#))
- A review of the Super Cruise system being fitted to Cadillacs found that the vehicle’s facial recognition (intended to ensure that the driver is concentrating on the road) cannot recognise some beverage type and still has problems in difficult lighting conditions. ([Detroit Free Press](#))

Honda

- Will expand the Honda Xcelerator program to work with start-ups in more locations. ([Autocar](#))
- Said that it would be unable to afford a 10% tariff on UK-built cars if post-Brexit trading conditions used WTO tariffs. ([Reuters](#))

Nissan (includes Mitsubishi)

- Reported Q3 2017 / 1H fiscal year financial results. Although revenues were up, profits were down, in part due to market mix. Nissan reduced full year profit outlook, partly due to the final inspection issues in Japan. ([Nissan](#))
- Mitsubishi reported Q3 2017 / 1H fiscal year results. Revenue was up 9.6% on a year-over-year basis and the business has a YTD operating margin of 4.7%, up from a negative (3.7)% margin the previous year. ([Mitsubishi](#))
- Carlos Ghosn said in an interview that car ownership would continue and the growth of ride-hailing did not affect negatively affect sales volumes “a lot of people think this is substitution, it’s not -- it’s addition”. ([Bloomberg](#))

PSA (includes Opel/Vauxhall)

- Released details of its turnaround strategy for Opel and Vauxhall, named PACE! (as in speed, not an olive branch to anxious unions). The plan relies on cost cuts in external material purchasing, manufacturing and engineering; improved brand position and revenue; and an expansion of products and markets -- particularly LCV where Opel / Vauxhall aim to increase sales by 25% by 2020. Although PSA was keen to stress that there was no need for job cuts (recent Ellesmere Port announcements notwithstanding), it isn’t clear how financial targets will be achieved without them, especially since there is an explicit target of lowering the breakeven point from an unknown level today to 800,000 units per annum. ([PSA](#))
- Finalised a joint venture to manufacture cars in Algeria with three local partners. Operations will start in 2018 and reach full production in 2019. ([PSA](#))
- Has recently increased the price of the all-electric Opel Ampera-e (Chevrolet Bolt) by \$5,000 in some European markets, blaming GM for the price hike. ([Electrek](#))
- Opel’s integration into PSA has begun in earnest, with the Opel France sales team moving into shared premises with the other PSA brands. ([Journal Auto](#))

Renault

- Renault declared that its autonomous vehicles have industry-leading obstacle avoidance capabilities. This claim is solely in relation to the way the vehicle executes emergency manoeuvres, not how well it detects obstacles. ([Renault](#))

Suzuki

- Would like to cooperate on electric vehicles and batteries with other companies and is open to joining the Toyota-Mazda-Denso electric joint venture. ([Reuters](#))

Tata (includes JLR)

- Reported Q3 2017 / Q2 fiscal year financial results. Revenue and profits increased on a year-over-year basis but the Tata Motors brand is still lossmaking. ([Tata](#))

Tesla

- Bought automation supplier Perbix to help it improve manufacturing efficiency. ([Bloomberg](#))
- Had reportedly only assembled 440 Model 3 to the end of October. ([Electrek](#))

Toyota

- Reported Financial results for Q3 2017 / Q2 fiscal year. Sales of 2,174,324 were down (0.8%) on a year-over-year basis, although revenue of 7.14 trillion yen (about \$64.4 billion) was up 10.2% YoY. Operating income of 522 billion yen / \$4.0 billion was up 10.0% YoY. ([Toyota](#))
- Now offers behaviour and usage based insurance in Japan using telematics data received from the car. ([Toyota](#))

VW Group

- Seat and Telefonica will collaborate on the application of 5G in connected cars and are working on pilot projects to use blockchain in Seat's operations. ([Telecom paper](#))
- Lamborghini unveiled a concept for an all-electric supercar and said that it was working on super capacitors to overcome weight problems with batteries. ([Autocar](#))
- Audi is working with two partners on a trial to produce diesel using hydropower. The result is being branded as an "e-fuel" with a view to convincing consumers that it is an environmentally friendly alternative to electric vehicles. ([Autocar](#))
- Said that VW's IT department will collaborate with Google to apply quantum computing in the company's processes, with a view to reducing calculation times. ([VW](#))
- Will produce a new SUV at its Pacheco, Argentina plant starting in 2020. The €560 million investment is forecast to create 2,500 jobs. ([VW](#))
- VW's CEO mused that making an all-electric vehicle would allow a product that was close to the philosophical routes of the original. ([Autocar](#))

Other

- Brazilian company **Grupo Caoa** has purchased 50% of Chery's operations in Brazil as part of an expansion plan for the Chinese brand. The company is Hyundai's local partner in Brazil. ([Economic Times of India](#))
- James **Dyson** said that his company had not yet chosen a production location for its new electric car. ([City AM](#))
- **Hennessey** unveiled the Venom F5, a supercar that the company says will have a top speed greater than 300mph. The engine has a claimed power output of 1,600 hp. ([New Atlas](#)) The car will have to beat the benchmark set by the Koenigsegg Agera RS which recently claimed to have set a new record of 277.9 mph ([Autocar](#))
- **Subaru** released Q3 2017 / 1H fiscal year financial results. Although sales increased, Subaru reduced their full year forecast for both sales and profit, citing weaker than expected growth and adverse exchange. ([Subaru](#))
- **OSVehicle** unveiled their modular self-driving electric car called EDIT. ([Medium](#))
- British sports car maker **Westfield** said it won't abandon its roots just because its autonomous pod business is growing. The company plans to release a new mid-engined car in 2018 called the GTM. Hybrid and fully electric versions are on the cards. ([Autocar](#))

News about other companies and trends ...

Economic / Political News

- The EU released its proposal for 2025 and 2030 vehicle emissions. 2025 emissions targets are 15% below 2021 fleet average levels and 2030 targets are 30% below 2021. ([EU](#))
 - Implication: At face value, this is a bit harder than the vehicle industry wanted, since ACEA's earlier paper had proposed no new target for 2025. ACEA's response called the proposal "challenging" ([ACEA](#)). In the detail of the proposals however is a bit of a softening of the blow. Although the EU wants to measure vehicle emissions by the WLTP standard from 2021 onwards, it will rebase the 95 g/km CO₂ measured on NEDC basis -- hence why the proposals are expressed in percentages rather than absolutes. If the targets had simply continued from 95g, including the move to the new test, then the gradient would have been steeper.

- **UK** car sales in October were 158,192 units, down (12.2)% on a year-over-year basis. Diesel sales were down by (30)%. The trade body urged the government to “restore confidence in new cleaner diesels”, saying that there was “confusion over government policy”. ([SMMT](#)) Light commercial vehicle registrations fell (7.4)% YoY to 24,968 units. ([SMMT](#))
- The **US** EPA appeared set to relax rules that would have banned putting remanufactured engines in new build trucks. The older engines tend to pollute more heavily but reduce the vehicle cost (partly because they use cheaper technologies that pollute more heavily!). ([Economic Times of India](#))
- **Paris** is expected to confirm in its new climate plan that it will ban diesel cars by 2024 and petrol by 2030. ([Journal Auto](#))
- **Opec** issued a new forecast for oil demand to 2040. Although the group’s most likely scenario sees demand continuing to rise through the period, in the faster EV growth scenario, demand plateaus after 2034. ([Bloomberg](#))
- **South Korea’s** environment ministry has threatened **BMW, Mercedes** and **Porsche** with a combined €55 million of fines because it says that they have violated emissions test procedures. ([Der Spiegel](#))

Suppliers

- **Continental** and **Osram** will create a 50:50 joint venture for automotive lighting. Both companies will contribute existing business units to the new enterprise. ([Continental](#))
- **International Automotive Components** has started production at its new Opole, Poland plant dedicated to tailored interiors. ([Economic Times of India](#))
- **Plastic Omnium** announced it had participated in a \$240 million fund run by VC company **Aster**. ([Press Release](#))
- **3D Systems** said that it had won a 3 year contract from **BMW** to produce prototype parts on-demand. ([3D Systems](#))
- **Magna** announced financial results for Q3 2017. Revenue of \$9.5 billion was up 7% on a year-over-year basis but income from operations of \$670 million was slightly down on the prior year. ([Magna](#))
- **Continental** reported Q3 2017 financial results. Revenue in the first nine months was €32.7 billion and adjusted EBIT margin was 10.6%. ([Continental](#))
- **Bridgestone** reported financial results for Q3 2017. In the first nine months, sales increase 8.9% versus a year earlier but operating income was down (9.0)%. ([Bridgestone](#))

Dealers

- UK online used car start-up **Hellocar** ceased operations saying that its model had proved difficult to scale. ([TechCrunch](#))
- UK dealer group **Lookers** said that although new car sales were weak, profit per unit was holding up well and used cars were “buoyant”. The company believes that there are “significant consolidation opportunities”. ([Automotive Manager](#))

Ride-Hailing, Car Sharing & Rental

- **Uber** said that it will trial flying taxis in Los Angeles from 2020 (Dubai was already on the cards) and sees “heavy use” of Uber Air by 2028. It is collaborating with NASA to develop the necessary control systems. ([Business Insider](#))
- **Hertz’s** CEO said the company does not view ride hailing as “the enemy” and that it is a likely area of growth, suggesting that it may be a way for vehicles to be retained for longer periods. ([Bloomberg](#))
- **Daimler’s Car2Go** said that Madrid was one of its top 3 busiest cities globally, with 180,000 users sharing the 500 vehicles it has in the city. ([Europa Press](#))
- **Uber** has created a new service option called “Express Pool” to reduce fares. Rather than being collected and dropped off at the exact spot they want, passengers begin and end their journeys at nearby “smart spots” which are easy for the cars to reach. ([TechCrunch](#))
 - Implication: with this service, Uber is getting close to how a dynamic bus might look-and-feel.

Driverless / Autonomy

- **Waymo** said that it had begun trials of self-driving vehicles on public roads without safety drivers. Subject to further tests, the company plans to offer rides to members of the public within a few months. ([Waymo](#))
 - Implication: Waymo have yet to explain how they intend to supervise the vehicles and what actions they would take in the event of the vehicle find its route is blocked or otherwise undrivable. Likely the company is planning to either “shadow” the cars, enabling fast reaction to incidents or to manage them from a remote command station where operators can drive via video. The former seems more likely.
- **Navya** launched a self-driving bus service in Las Vegas, the assembled media were more captivated by the truck that crashed into the demonstration vehicle within minutes of the service starting. ([The Verge](#))
 - Implication: The more stories that appear in the media about self-driving vehicle crashes where the other driver is to blame, the better from our point of view. Although at first they appear wrong-headed, if they build up a picture in the minds of everyday consumers that self-driving vehicle crashes are (a) normally minor shunts and (b) caused by bone-headed humans, people will be less wary of using the technology.
- **Velodyne** launched the VLS-128, a 128-line lidar sensor with a range of nearly 250m. Pricing is still near-prohibitive for production applications. ([Press Release](#))
- **Embark** has begun testing driverless trucks on a 650 mile stretch of highway in the USA. ([Wired](#))
 - Implication: Although the company talks about “end to end” driving, the test does not perform the start and end legs of the delivery, leaving the trick navigation of small roads and distribution centres to human drivers. Instead, it shows how driverless vehicles, in concert with human-driven ones can fractionally reduce the human cost of transportation, saving money and getting to market more quickly than relying on a complete solution.
- **Apple** has acquired **InVisage**, an imaging sensor company that has short-range lidar amongst its product range. ([Electronics Weekly](#))
- A review of **GM's** Super Cruise system being fitted to Cadillacs found that the vehicle’s facial recognition (intended to ensure that the driver is concentrating on the road) cannot recognise some beverage type and still has problems in difficult lighting conditions. ([Detroit Free Press](#))
- The **RAND Corporation** issued a study saying that autonomous vehicles should be deployed quickly, once their standard of driving was beyond that of the average driver, arguing that cumulative lives saved by implementing early outweighed the benefits of waiting until vehicles were substantively safer than humans (and avoiding retrospective moral quandaries about how a vehicle should have perhaps acted in a situation that caused a fatality. ([RAND](#))
- A recent trial of commercially available **L1/L2** vehicles by **Danish** authorities found significant deterioration in sensor performance in wet roads, with only one vehicle on test demonstrating the same obstacle detection ability in both wet and dry conditions. ([Autonomes Fahren](#))

Electrification

- Chinese EV start-up **NIO** has reportedly raised \$1 billion from investors including **Tencent**, giving the firm a \$5 billion valuation. ([Reuters](#))
- **EON** and **Clever** are planning to build a 180 station charging network between Norway and Italy with a maximum highway distance of 180km between stations. ([Bloomberg](#))
- **Continental's** CEO said that the company was interested in making battery cells, but with solid state rather than lithium ion chemistry. He said that the company would prefer to do this in partnership with others. ([Reuters](#))
- **Faraday Future** has recently suffered from several executive departures, including the CFO (with whom the company is now engaged in a war of words / lawsuits) and CTO. ([Digital Trends](#))
- **LeEco** founder Jia Yueting said he plans to sell his stake in **Lucid Motors**, indicating he will focus on **Faraday Future**. ([Global Times](#))
- Researchers in the Netherlands showed off a Tesla Model S that they have converted to use a hydrogen fuel cell as a secondary power source. ([Futurism](#))
 - Implication: The early-2000s saw a flood of aftermarket natural gas conversions for European petrol cars. Could aftermarket fuel cells be a significant trend in future (this particular vehicle cost over \$500,000, so a bit of work left to do).

- **Lamborghini** unveiled a concept for an all-electric supercar and said that it was working on super capacitors to overcome weight problems with batteries. They appear to have thought of everything except how the car will go over speed bumps. ([Autocar](#))
- **OSVehicle** unveiled their modular self-driving electric car called EDIT. ([Medium](#))
- **Baidu** is reportedly leading a new round of investment in Chinese electric car maker **WMMotor**. **Tencent** may also be involved in the funding. ([China Money Network](#))
- **Deutsche Telekom** is looking to integrate electric car charging into local telephone exchanges in Germany. The company has over 330,000 locations in the country and has earmarked 12,000 for potential conversion to charging stations. ([Golem](#))
- US company **Workhorse** have unveiled their next range-extended product: the N-Gen van. The vehicle has an electric only range of around 100 miles and has a novel optional extra: a drone that docks on the roof to increase the number of delivery drops the vehicle can make. Patent attorneys at Daimler and Amazon: pay close attention... ([Green Car Reports](#))

Connectivity

- **Seat** and **Telefonica** will collaborate on the application of 5G in connected cars and are working on pilot projects to use blockchain in Seat's operations. ([Telecom paper](#))
- Ola and Microsoft have formed a partnership to develop connected vehicle services. The aim is to offer car manufacturers a platform that combines diagnostics, condition monitoring and navigation. ([Reuters](#))
- **Tata Elxsi** and **Blackberry** announced a partnership to create secure communications applications. Blackberry will provide the QNX platform and Tata Elxsi will undertake integration and customisation. ([Press Release](#))
- **Toyota** now offers behaviour and usage based insurance in Japan using telematics data received from the car. ([Toyota](#))
- **Fujitsu** and **Here** formed a partnership to provide combined location and analytics solutions, initially aimed at Japanese carmakers. ([Fujitsu](#))
- **LexisNexis** said that it had created a telematics exchange that would allow insurers and OEMs to share data and give a consistent view of risk and driver scoring, regardless of vehicle type. ([LexisNexis](#))

Other

- Bicycle sharing service **Mobike's** cofounder said that the company was investigating ways to provide transport solutions beyond the "one to five kilometres" of range people normally cover on bikes. He said that in the next three months the company would offering services in the Chinese market aimed at between 3km and 25km trips. ([Wired](#))
- **Deliveroo** said that it would offer its Deliveroo Plus food delivery service (a flat monthly rate for all delivery costs akin to Amazon Prime) for £7.99 per month across the UK. Deliveroo's claimed savings for users in a trial scheme imply that subscribers use the service around 12 times each month. ([Business Insider](#))
- **Mahindra's GenZe** division unveiled its latest e-bike, retailing at \$1,899. The battery has a 30-50 mile range. ([Press Release](#))