

Autos & Mobility Industry Briefing -- 30th April to 6th May 2018

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 (history)

- Released financial results for Q1 2018. PBT of €3.165 billion was slightly down on Q1 2017, revenue of €22.7 billion was down (5.2)%. (BMW)
- Said that Minis produced in India have 50% local content and the company may start selling BMW PHEVs in the country if it can identify the right product. (Autocar)
- BMW developed an electric scooter that it might supply to third parties if it finds sufficient demand. (Autocar)

Daimler (history)

- Ceasing production of home storage batteries, saying that in future it will offer third party products more suited to stationary storage applications. Daimler intends to continue to supply used vehicle batteries for industrial storage units. (Manager Magazin)
- CEO Zetsche said the company has plans in place to resist a hostile takeover (whether by Geely or anyone else) but that the scenario was "theoretical". (<u>Automotive News</u>)

FCA (history)

Suffered production stoppages at the Brampton, Ontario plant because of supplier strikes. (<u>Auto Evolution</u>)

Ferrari

- Said production for 2018 and part of 2019 is almost sold out. (Bloomberg)
 - o Implication: Not bad but still a little way from the late eighties glory days with <u>4 year waiting lists for the Testarossa</u>.

Ford (history)

• Created a JV with existing low cost electric vehicle partner Zotye to create all-electric vehicles aimed at ride sharing fleets and drivers. (Ford)

Geely (includes Volvo) (history)

Moody's upgraded Volvo's credit rating to Ba1. (<u>Volvo</u>)

General Motors (history)

- Autonomous vehicle AI provider Algolux raised \$10 million, led by GM Ventures. (FINSMES)
- Said that 3D printing could reduce the weight of structural body components by 40%, whilst improving strength. The press release implied that GM intends to incorporate the technology into vehicles currently under development. (GM)

Nissan (includes Mitsubishi) (history)

• Renault CEO Ghosn said "nobody can answer this question" when asked whether Renault and Nissan would merge by 2022. He also said that "more than 95%" of vehicle content needs to be Chinese to be competitive in China and that this requires joint ventures. (Macau Business)

PSA (includes Opel/Vauxhall) (history)

- Opel's CEO said the plan for the next generation Mokka X had been completely changed since the PSA takeover because the intended GM platform was "heavy and doesn't offer electrification". (Auto Express)
- CEO Tavares offered to share benchmarking data, including cost and operational details of PSA plants outside Germany, to convince German unions of the case for change. (Manager Magazin)
- Reportedly hired Tata Consulting to help it improve in low cost cars. The targets are said to be: 90% localisation and production costs 1/3 lower than the best Western plants. (<u>Les Echos</u>)
- Has merged its UK wholly owned dealers into a single company and is targeting further expansion into Vauxhall sites, recently buying four under the Go Vauxhall brand. (Vauxhall)

Renault (history)

• Renault CEO Ghosn said "nobody can answer this question" when asked whether Renault and Nissan would merge by 2022. He also said that "more than 95%" of vehicle content needs to be Chinese in order to be competitive in China and that this requires joint ventures. (Macau Business)

Tata (includes JLR) (history)

Tata Motors is to sell its defence and aerospace division to Tata Advanced Systems. (Autocar)

Tesla (history)

- Announced financial results for the first quarter 2018. Tesla made a loss of \$(784) million on revenues of \$3.4 billion. Automotive revenue of \$2.7 billion rose 19% on a year-over-year basis. (<u>Tesla</u>)
- Held an earnings call with CEO Musk in a combative mood, cutting off the analyst questions in favour of non-financial details. Although Musk did reveal that he is expecting Model 3 to get a 30%-40% share in premium sedans (cynics shouldn't scoff about comparisons to non-existent segments, Musk is talking about 3-Series and C-Class, not Fusion and Malibu), unfortunately he refused to expand upon the "Customer Deposits" line in Tesla's financial statements -- a potential good news story which has grown substantially in recent quarters -- indicating some support for Musk's bullishness on Tesla's offering (he said Semi reservations were about 2,000 units). (Seeking Alpha)
- After the call, Musk said he shouldn't have ignored the analyst questions, but defended his actions on the basis that he believed they were trying to justify a short position (they weren't). (Reuters)
- Said on the conference call that its best single hour production rate for Model 3 was equivalent to 5,000 units per week and that improvements in uptime will help it sustain that level soon -- working a continuous shift pattern. Executives described operations with less intensive manning as "foolish". CEO Musk also detailed several unremarkable cost and time saving ideas the company had implemented, describing a revolutionary way of listening to employees that sounded a lot like the decades-old idea of quality circles. Seasoned production hands will also be surprised to know that software is the biggest part of a successful production system.(Seeking Alpha)
 - o Implication: It should be a concern that senior Tesla executives, who normally exhibit good command of detail were caught out by questions from Barclays are manufacturing line pacing and showed a clear misunderstanding of best in class levels or how they are measured. The CFO also said that depreciation per unit would be under \$2,000 per unit at scale "well below most competitors" even though CapEx of 4% of (wholesale) revenue is becoming an industry norm, and \$2,000 is 4% of \$50,000 -- quite above the average wholesale revenue of Model 3 competitors.
- CEO Musk said Tesla will "probably be ready by the end of next year" to enable autonomous peer-to-peer ride hailing services -- but that regulators might not allow it at that stage. He also said that Tesla will begin publishing Autopilot performance data. (Seeking Alpha)

- CEO Musk said Model Y R&D and CapEx will only become "significant" in 2019 and that the vehicle will be a "manufacturing revolution", with production due to start in early 2020. The production location will apparently be somewhere other than the Freemont factory but Tesla won't decide where until later in 2018 (but it seems to be somewhere in China -- perhaps near Shanghai). (Seeking Alpha)
 - o Implication: With Tesla's own volume forecasts of Model Y outstripping the Model 3 and its manufacturing capability underwhelming, it will be an impressive feat to create and recruit for a vehicle factory to produce an all-new design in less than two years -- something I'm not sure I can recall a precedent for.
- When asked about 350 kW charging rates, Tesla indicated that in the near term, any upgrades to its facilities will be at around 200 250 MW, citing trade-offs between battery energy density and charging speed (whilst at the same time conceding it could design faster charging battery packs). Tesla also foresees new battery design reducing cobalt usage to "almost nothing". (Seeking Alpha)

Tovota (history)

- Planning a new proving ground for driverless vehicles in Michigan. (<u>Toyota</u>)
- Investing C\$1.4 billion, with C\$100 million of government support, in its Ontario plants in order to increase production of RAV4. (CBC)

VW Group (history)

- New CEO Deiss said VW Group is still looking at the disposal of non-core assets, name-checking Ducati, Renk and MAN Diesel and Turbo as the targets of "future perspectives". (Reuters)
- Reportedly working on an alliance with Didi Chuxing that would see VW run part of the fleet and develop purposebuilt vehicles. (<u>Reuters</u>)
- The Škoda Karoq will be assembled at the former Harmann factory in Osnabrück, Germany. Škoda officials were keen to stress that the main production source will continue to be in the Czech Republic. (Manager Magazin)
- Bentley's new CEO said the company needed to improve its strategy for connected, autonomous and electrified technologies and that he is revamping the cycle plan to include more electrification. He forecasts hybrid versions of the Bentayga will account for 10% of sales and the next car to get a similar treatment is "probably" the Flying Spur, with a decision to be made in the next six months. He suggested the brand would have a pure electric within the next five years. (Autocar)
- VW publicised its new "Lydia" pick-to-voice system, an alternative to established pick-to-light error proofing. The benefits are that less physical infrastructure is necessary since the production orders are relayed by a headset and wi-fi. The computerised voice chooses cute names for parts: apple and mango replace long part numbers. (VW)
- The US Department of Justice charged former VW CEO Martin Winterkorn over the diesel scandal. The charges involve conspiracy and wire fraud. (US Dept of Justice)
- Said that the transition to WLTP standards in Europe was the biggest single risk to its 2018 forecast. (VW)
- Perhaps in a deliberate stab at Tesla, Porsche detailed some of its in-process measurement techniques, noting the number of measurement points and issues such as the effect of the paint process on car body dimensions. (Porsche)
- Porsche family scion Wolfgang Porsche said he viewed nephew Ferdinand Oliver Porsche as his likely replacement at the head of Porsche SE (large shareholder in VW Group). (<u>Manager Magazin</u>)

Other

- **Brabham** unveiled the BT62, a £1 million track-only supercar. Production will be limited to 70 examples. (Autocar)
- SF Motors will open a large R&D facility in Silicon Valley in Q4 2018. (Teslerati)

News about other companies and trends ...

Economic / Political News

- **US** light vehicle industry for April was 17.07 million units, an improvement versus the prior year on a run rate basis. Year to date sales are now about flat with March and April making up for a subpar first two months. (Wards)
- Passenger car sales in Germany of 314,055 units were 8% higher on a year-over-year basis. (KBA)

- **UK** registrations of passenger cars and <u>commercial vehicles</u> rose in April, although on a year-to-date basis they remain down versus 2017. 167,911 new cars were sold, a year over year increase of 10.4% -- partly reflecting 2 additional sales days. The local trade body was careful not to read too much into the results. (<u>SMMT</u>)
- Spain had 113,816 registrations of passenger in April, a 12.3% year-over-year increase. (ANFAC)
- Italian passenger car sales of 171,379 units were up 6.5% on the prior year. (UNRAE)
- Rumours that the **UK's 2040 ban on combustion engine vehicles** would go so far as to specify a minimum electric-only range of 50 miles provoked outrage from the OEM trade body. Government press offices refused to comment on the specifics saying all would become clear once the policy was published. (BBC)

Suppliers

- Adient reported financial results for Q1 2018. Revenue was \$4.6 billion and unadjusted EBIT was \$(134) million -- turning into a \$252 million profit after adjustments. (Adient)
- **Aptiv** reported Q1 2018 financial results and the acquisition of cable maker **KUM**. Adjusted operating income was \$427 million on revenues of \$3.6 billion. (Aptiv)
- AAM released financial results for Q1 2018. Sales were \$1.86 billion and net income was \$89.4 million. (AAM)
- Bosch invested in deep learning computer vision firm Allegro.ai. (Bosch)

Ride-Hailing, Car Sharing & Rental (history)

- Europear acquired scooter rental firm Scooty. (<u>Auto Rental News</u>)
- **VW** is reportedly working on an alliance with **Didi Chuxing** that would see VW run part of the fleet and develop purpose-built vehicles. (Reuters)

Driverless / Autonomy (history)

- **Aptiv** and **Lyft** announced a fleet of 30 vehicles in Las Vegas, USA that will take part in a long term autonomous trial as part of a "multiyear agreement". (Aptiv)
- Autonomous vehicle AI provider Algolux raised \$10 million, led by GM Ventures. (<u>FINSMES</u>)
- A German-led study found that consumers were prepared to **pay for autonomy**, but not much. Only around 50% of respondents would part with more than €1,000 for the technology. The authors noted that this could be a lack of imagination on behalf of those surveyed and that technology demonstrations could change things. (<u>Fraunhofer</u>)
 - o Implication: Although the willingness to pay might seem too low, it partially reflects the ability of customers to afford more expensive options (especially ones that they aren't confident will work properly). With system costs likely to be in the thousands of dollars for many years, it is easier to see why autonomy is more of an immediate priority for fleets than retail customers.
- An **MIT** project is working on vehicles that do not require high quality maps and instead use (relatively) rough data about the surroundings to determine its route. (<u>IEEE Spectrum</u>)
 - Implication: although this may seem like a less optimal approach than using detailed maps, it may serve as a
 useful alternative that would be a good additional to a system using multiple artificial intelligence set ups to
 create redundancy.

Electrification (history)

- Daimler said it will buy batteries from CATL but declined to give volumes or name affected vehicles. (<u>Handelsblatt</u>)
- Battery maker EcoFlow raised \$4 million and may raise a Series B this year. (Deal Street Asia)
- **BMW** is working with **Sila Nanotechnologies** on new battery materials that could increased battery storage capacity without needing new production lines. (<u>Inside EVs</u>)
- **Daimler** is ceasing production of home storage batteries, saying that in future it will offer third party products more suited to stationary storage applications. Daimler intends to continue to supply used vehicle batteries for industrial storage units. (Manager Magazin)

Connectivity

 A group of carmakers (BMW, Ford, GM and Renault) and suppliers created MOBI (Mobility Open Blockchain Initiative), to develop blockchain solutions for transactions and data management. (<u>Press Release</u>)

- Aeris will provide the underpinnings for connected Mitsubishi vehicles in North America. (<u>Telematics News</u>)
- Customers in the USA were surprised to find that they retained access to their vehicle months after selling them. VW says that in the terms of service, the onus is on the owner to disconnect themselves when they get rid of the vehicle, but is that enough? (<u>The Verge</u>)
- GPS verification firm **Regulus Cyber** emerged from stealth mode with \$6.3 million of funding. (<u>TechCrunch</u>)

Other

- LimeBike is offering a new electric scooter, created by Segway, that boasts range of up to 35 miles. (<u>TechCrunch</u>)
- Washé, a start-up offering on-demand car washing, raised \$3.5 million. (TechCrunch)
- Electric scooter and rickshaw maker **Terra Motors** announced \$10 million in funding. (Economic Times of India)