

The 10 Biggest Tech Companies Disrupting Autonomous Driving: Amazon, Baidu, Huawei, Intel, Microsoft and more

This report examines the capabilities of the 10 biggest Tech Companies in Autonomous Driving and their potential in rising new business models.

LONDON, UK, February 6, 2022 /EINPresswire.com/ -- The world's biggest [Tech Companies](#),

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Tech Giants are entering the Mobility Market to capitalize on their expertise in AI and Software which are critical for Autonomous Driving and the digitalization transformation of the auto industry”

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including [Amazon](#), Apple and Microsoft, together with Chinese Majors Alibaba, Baidu, Huawei and others, are expanding their presence in the automotive industry to monetize the capability gap of existing Tier-1s in Software, AI, and data needed for Autonomous Mobility. They are also supporting the digitalization transformation of major carmakers and suppliers.

As the value creation in Mobility shifts from hardware to software, this expansion threatens major Tier-1 Suppliers Bosch, Continental and others, who still maintain the lion's share in the radars and cameras for ADAS, but need to

transform quickly to the needs of Autonomous Mobility to maintain their position in the market.

This report examines the capabilities of the 10 biggest Tech Companies in Autonomous Driving and their potential to capture share in rising new business models in Autonomous Mobility.

- 1) Alibaba
- 2) Amazon
- 3) Apple
- 4) Baidu
- 5) Huawei
- 6) Intel
- 7) Microsoft
- 8) Samsung
- 9) Sony
- 10) Tencent

Tech Companies are building capabilities to become the new, core Suppliers of Autonomous Driving.

We assess each one of the companies based on three parameters:

- Technology Competitiveness: Includes the availability of L2-L4 Features, Sensors (e.g. lidar), Chips, Cloud, SW Stack and AMoD
- Strategy Execution: Assesses the company's vision, investments, partnerships, manpower in AD and plans in robotaxis and MaaS
- Market Positioning: Quantifies the client base across carmakers and suppliers, the geographical coverage of services and AD revenues

Today, the majority of revenues in ADAS and Autonomous Driving come from sales of ADAS sensors, i.e., radars, cameras, ultrasonics, together with ADAS features. By 2025, Lidar and Automated Driving-Domain Controllers to support Lv.3-4 will also become substantial revenue pools. New Tech Suppliers of ADAS and Autonomous Driving technology, specifically the Chinese Giants such as Baidu, aim to monetize their experience in Software & AI, together with their unique position in China's booming electric, shared and autonomous market, by engaging in a series of parallel strategies.

Carmakers are already starting to work with cloud computing providers for a variety of application segments—including software development platforms and SaaS.

□ Amazon Web Services holds a strong position in this domain counting Lyft, TuSimple, HERE, Toyota Research Institute, and nuTonomy among its clients

□ Microsoft Azure is also being used by carmakers such as VW (Feb'21), Ford, and Cruise (Jan'21) among others.

□ Alibaba, the Chinese e-commerce giant, has formed an EV joint venture with SAIC, while Didi Chuxing – the Chinese ride-hailing provider – has partnered with automaker BYD in D1 development – an electric vehicle specifically designed for ride-hailing services.

□ Huawei has recently launched new products in Autonomous Driving focusing on ADAS sensors (4D imaging radar), HMI (AR-HUD) during their product launch titled 'Focused Innovation for Intelligent Vehicles'.

□ Samsung Electronics will work together with Tesla to develop chips for their next-gen HW 4.0 for autonomous driving.

We identify a number of opportunities for Tech Companies to enter or disrupt the existing supply chain.

- 1) Next-gen Perception Hardware for Autonomous Driving: imaging radars, advanced cameras and lidar for L3-5 Autonomous Driving
- 2) Software: chips for Autonomous Driving
- 3) AI: From AI for AD to AI for HMI such as in-car AI assistants
- 4) Data-based Mobility Business models such as in-car e-commerce
- 5) Connectivity and cloud: 5G, Connected Infrastructure and Smart Cities
- 6) Autonomous Shared Mobility: AMoD / robotaxis, autonomous deliveries

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