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INTELLOTRACKER

Development in Autonomous Vehicles

May 2023



ARANCA'S QUARTERLY SECTORIAL UPDATE ACROSS FOUR DIMENSIONS....

Developments • Technology updates • Company expansions • Disruptive innovations • Competitor tracking • New product launches • Under-research technologies • Product USPs •	01 02 4D's	Dynamics • New entrants/ start-ups models • Supply chain activities • Other initiatives • New business
Drivers • Government policies • Product ratings & regulations • Influencers • Litigations • Other details • Customer Insights •	04 03	Diversification • Mergers & • Licensing activities acquisitions • Exploring alternate • VC investments applications • Company • collaborations •



	Develop	PMENTS
New Product Launch		Mercedes became the first Automaker to successfully put level 3 self- driving and to offer it in the US market. Source: Insideevs
New Manufacturing Set-ups	Ford	Ford Launched Its automated driving unit Latitude in Pittsburgh, Michigan. This will allow the company to get back to US market after the closer of its last Unit by Government because of tax issues. Source: <u>ET Auto</u>
Company Expansion	🍫 Gatik	Self – driving startup Gatik doubled its workforce and struck a deal with Kroger for the operation of autonomous trucks. Now around 600 more self-driving trucks will be on the road in the US. Source: ET Auto
Technology Updates	-	Polestar adopted New EV to Use Lidar Tech to Bolster Self-Driving Capabilities. EV automaker Polestar has extended its relationship with lidar developer Luminar Technologies. This will improve the self-driving capabilities of polestar cars. Source: <u>World Today</u>
New Manufacturing Set-ups	JAGUAR	Jaguar Land Rover opens 3 self-driving systems in Munich, Bologna and Madrid for its next generation of luxury vehicles. JLR already has six global tech hubs the United States, China and Europe. Source: <u>Cnbc</u>
New Product Launch	amazon	Amazon's self-driving car shuttles people on public roads for the first time. The firm will now operate a shuttle for employees on the same trip while it seeks additional clearances to expand its service to the public in US. <i>Source: Indian Express</i>
Company Expansion	Ша <mark>а</mark> bi	Self-driving truck startup Waabi brings on Volvo VC as strategic investor. This will help both Volvo and Waabi to exchange the technology and create something perfect in the world of self-driving trucks. Source: <u>Tech Xplore</u>
Technology/ Innovations		RoboSense Launches RS-Fusion-P6, Automotive-Grade Solid-State LiDAR Perception Solution for L4 Autonomous Driving. This will be new generation of LiDAR which will help self-driving become more effective and safer. Source: Business wire
Competitor Tracking		Mercedes-Benz's new self-driving tech is turning up the heat on Tesla at the worst possible time as Mercedes became first car company to offer level 3 self-driving in US while Tesla is calling back its level 2 self-driving cars because of defective sensors. <i>Source:</i> <u>Business Insider</u>
Technology/ Innovations	tu simple	The patent from Beijing Tusimple Technology shows Simulation method for autonomous vehicle and method for controlling autonomous vehicle which will improve the training of an AI model for the driving. Source: <u>Patent</u>
Technology/ Innovations		The patent from Jiuzhi Suzhou Intelligent Technology found new method of Path planning method, device and storage medium for automatically driving vehicle to get rid of trouble which will improve the accuracy of an AI model for the driving. Source: Patent
Technology/ Innovations	ORONGHUI	Patent from Anhui Ronghui Technology Co ltd describes a laser and radar system for self-driving cars, this will allow companies to put both the system in one space which will make autonomous vehicles more accurate in detecting the distance. Source: Patent

Diversification		ICATION
Company Collaboration		Self – driving sensor maker Luminar technologies Inc announced an expanded partnership with Mercedes – Benz group to enable fully automated driving for its next generation vehicles. Source: ET Auto
Company Collaboration		Jaguar Land Rover, in partnership with Nvidia which is biggest graphic card company, this will allow JLR to bring the Graphic AI into self-driving cars. Source: <u>Cnbc</u>
Company Collaboration	CLG M	LG partner with Canadian auto parts company Magna for developing self-driving technology with the aim of supplying products to global automakers like Radar and Lidar sensors. Source: <u>Nikkei Asia</u>
Company Collaboration	oxbohica	Oxbotica and Google Cloud partner to scale up autonomous software. This partnership will give an advantage to Oxbotica to develop training models for the self-driving cars using Google's 3d maps. Source: <u>Cision</u>
Company Collaboration	Ontinental ⁵	Continental and Ambarella Partner on Assisted and Automated Driving Systems with Full Software Stack. Source: <u>Globe News Wire</u>
Merger and Acquisition	VOLVO	Swedish car maker Volvo has acquired Zenseact, an autonomous driving software and hardware supplier. Based in Gothenburg, Zenseact works with NVIDIA and Hewlett Packard Enterprises. Source: <u>Tech explores</u>



	Drivers	
Government Policies & Regulations		UK government issued a law saying that companies cannot allow their cars to be controlled from abroad, Law Commission backs this statement and soon a strict notice will be issued. Source: <u>BBC</u>
Government Policies & Regulations		Ford withdrew its petition for approval to deploy 2,500 autonomous vehicles yearly without human controls like steering wheels. Source: <u>auto news</u>
Government Policies & Regulations		First self-driving bus was launched in UK in the month of February 2023. The UK government went out of ways to make this possible. Source: <u>Gov.UK</u>

SOLUTION PORTFOLIO – TECHNOLOGY RESEARCH & ADVISORY

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IP Strategy	Technology Intelligence	Growth & Strategy
How best can we proactively manage and monetise our technical knowhow / intellectual property?	How best can we keep abreast of technology trends, competitor activity and headwinds / tailwinds in our domain?	Which technologies do we invest in? How do we ensure quick wins? Speed to market?
 IP Portfolio Analysis 	 Competitor Benchmarking 	 R&D Strategy Roadmaps
 IP Monetisation 	 Tech / IP Landscapes 	 Technology Scouting
 IP Valuation 	 Technology Watch 	 Open Innovation
 Prior Art Searches 	 Market Analysis / Trends 	 Product Development

