

ORION

Strategic Intelligence Report

My ORION Project

Your personal strategic intelligence workspace - select forces from the ORION Global Dataset

Executive Summary

This report provides a comprehensive analysis of the selected strategic driving forces. These forces represent critical uncertainties and trends that may impact the strategic landscape. The following sections detail each force, its dimensions, and potential implications.

Driving Forces

1. First there was Netflix. Now you can subscribe to an electric car

Type: Weak Signal

You've already got a monthly Netflix subscription, and maybe a veg box delivery service. So why wouldn't you start leasing an electric car on the same month-to-month terms? Hot on the heels of bicycle and other monthly subscription services, drivers can now get electric cars on a renewable monthly basis, with everything included – even free charging. A number of firms are now offering this fresh take on driving, effectively giving people a chance to try electric vehicles without the commitment of buying or entering a lengthy leasing agreement. For £389 a month – with no up front deposit – Onto will provide a Renault Zoe 135 capable of about 190 miles on a full charge. As with Netflix, the contract automatically renews each month unless you cancel, meaning that as long as you keep paying, the car stays outside your house. Included in the monthly fee is the insurance,....

Source: *The Guardian*

2. Autonomous robots eye caregiving

Type: Trend

The US healthcare industry faces a critical staffing shortage amid a rapidly aging population. Projected shortages of over 139,000 physicians and 63,000 nurses by 2030. Ages 65+ Healthcare leaders look to advanced robotics for solutions. Categories in focus include caregiving support, hospital operations and logistics, lab automation, and remote care delivery. Highly capable humanoid robot developers eye caregiving applications. Scouting Report • Core Products/Services: Develops and manufactures humanoid robots equipped with AI for various industries. Primary product is Neo, a second- generation android designed for home assistance and consumer tasks....Robots feature human-like movements and behaviors, capable of learning and improving task performance over time. The company's "master plan" highlights a long-term business opportunity: " 700M aging population in need of at-home care " Tesla Optimus Robot "What can it do? It can basically do anything you want. It can be a teacher, babysit your kids, it can walk your dog,....

Source: *CB Insights*

3. Auto subscription from coffee company

Type: Trend

The German retailer Tchibo has partnered with like2drive to offer electric vehicle subscriptions. Customers can visit the Tchibo online shop and choose between a Tesla Model 3 and a Fiat 500E ICON. In contrast to conventional leasing models, the customers save on the starting premium, factory transport and final instalment. For a monthly flat-rate fee amounting to €777 for a Tesla Model 3, the customer gets 10,000 included kilometres a year. The cost for insurance, taxes, repairs, maintenance and winter tyre changes are included in the price. According to Tchibo, this offer will allow more people to switch to electric vehicles.

Source: *TrendOne*

4. Mobile entertainment hubs

Type: Trend

Vehicles today are jam-packed with entertainment options for passengers and, in some instances, even drivers. Vehicles are rolling out to market with immersive audio, larger screens, and the ability to stream movies, shows, and play video games. Broadcast TV in vehicles is in the works thanks to a coalition of players across mobility and media, and the UK government has given its blessing for drivers to watch TV in an autonomous vehicle operating in self-driving mode. Partnerships will continue to play a key role in bringing more entertainment into the automotive space. One prime example is the new partnership between Honda and Sony, under the joint EV brand Afeela. Honda will be focusing on the automotive build, while Sony will bring its expertise in entertainment, screens, image sensors, and virtual reality. The future of entertainment in the vehicle cabin is potentially limitless, as EVs offer much more flexibility in their...

Source: *Future Today Institute*

5. Is Silicon Valley's golden era coming to an end?

Type: Weak Signal

Huge layoffs at Snapchat, dramatic valuation drops at Meta and Apple, and hiring freezes at other Big Tech firms have given new fuel to an increasingly common question: Is Silicon Valley's golden era coming to an end? The answer is complicated, experts say. The tech industry has been on a run of impressive growth for some time, bolstered in recent years by a pandemic that forced most of the world online and sent demand for tech services booming. That explosion – and the high salaries and office perks that came with it – seems to be slowing. This party couldn't go on for ever Margaret O'Mara, University of Washington professor and author "This party couldn't go on for ever," said Margaret O'Mara, professor at the University of Washington and author of *The Code: Silicon Valley and the Remaking of America*. "In many ways, we are just going back to normal..."

Source: *The Guardian*

6. Cleaner fuels

Type: Trend

The advent of cleaner fuel sources is revolutionizing the supply chain industry. E-fuels, hydrogen, and inductive charging for electric vehicles are not only reducing our dependence on fossil fuels but also offering significant savings in energy costs. Major players in various sectors, from shipping to aviation, are investing in cleaner fuel sources, paving the way for a more sustainable and efficient supply chain industry. Tesla's megawatt charging stations and other EV chargers are now more ubiquitous. These stations can recharge 70% of an electric semi's battery in under 30 minutes, which gives it a range of 300-500 miles. Initial calculations found that electric semis will save up to 83% in energy costs when compared with diesel fuel. Ford has piloted a prototype that has a robot EV charging station, which assists disabled drivers with fueling. Several hydrogen-powered fuel cells for maritime vessels are prototyping, and the first commercially hydrogen-powered vessel was...

Source: *Future Today Institute*

7. Car Component Revolution

Type: Wildcard

The car value chain landscape may witness significant changes in the coming years. With the rising demands for secure and ethical procurement of the raw materials used in car components, carmakers are urged to innovate their production processes at speed. Tesla, for example, has announced its plans to venture into the lithium mining industry to manufacture its batteries for EVs. The transformation of the car industry is right on the horizon. Despite the heightened expectations regarding the wider circulation of Electric Vehicles (EVs) in the near future, the reality is that EVs still account for only a tiny proportion of the total vehicle fleet worldwide. One of the obstacles lies in the current cost and performance of batteries used in EVs. Despite continued efforts to manufacture longer-range and lower-cost batteries, battery production uncertainties keep increasing. Lithium-ion batteries widely used in EVs are heavily dependent on rare materials such as lithium,...

Source: *Chief Executive;Automotive Logistics;Ars Technica;MINING.COM*

8. Out of Batteries

Type: Wildcard

Demand for electricity off the grid and during peak hours is going up. While batteries have a huge market potential, they bear the risk of becoming a major disruptor in case some of their raw materials like lithium, cobalt, and nickel become too rare and expensive. Without a massive growth of energy storage, a new energy crisis could become a possibility. When carbon-based fuels are replaced by wind and solar, maintaining steady energy sources for cities and industries becomes vital. To ensure electricity supply can match demand, large-scale energy storage to flexibly provide power is required. In other words, without rapidly increasing energy storage capacity, the risk of an electricity crisis is continually growing. The market for large-scale storage is steadily growing, and Tesla stands as one of the great successes in the industry. The company wants to produce cheaper batteries for its electric cars, but it also aims to...

Source: *Autovista24;TechHQ;Euronews;Quartz;Bloomberg;Smart Energy*

9. Circular Economy in Mobility

Type: Trend

The concept of a circular economy in mobility focuses on creating sustainable, efficient transportation ecosystems by designing products and systems with an emphasis on durability, reuse, and recyclability. This approach aims to minimize environmental impact by reducing waste and conserving resources throughout the lifecycle of mobility solutions, from manufacturing to end-of-life. By embracing principles such as modularity, remanufacturability, and material recycling, the mobility sector can significantly contribute to environmental preservation and resource efficiency. Examples and Real Illustrations of Circular Economy in Mobility Electric Vehicle (EV) Battery Recycling Programs: A key aspect of circular mobility is the recycling of electric vehicle batteries. Companies like Tesla and Nissan are pioneering battery recycling programs to reclaim valuable metals and materials from spent EV batteries. These materials can then be reused to manufacture new batteries, reducing the need for virgin materials and lowering the environmental footprint of EV production. Vehicle Sharing and Subscription Services:...

Source: *IF - ORION.AI*

10. The self-driving trolley problem: how will future AI systems make the most ethical choices for all of us?

Type: Weak Signal

Artificial intelligence (AI) is already making decisions in the fields of business, health care and manufacturing. But AI algorithms generally still get help from people applying checks and making the final call. What would happen if AI systems had to make independent decisions, and ones that could mean life or death for humans? Pop culture has long portrayed our general distrust of AI. In the 2004 sci-fi movie *I, Robot*, detective Del Spooner (played by Will Smith) is suspicious of robots after being rescued by one from a car crash, while a 12-year-old girl was left to drown. He says: I was the logical choice. It calculated that I had a 45% chance of survival. Sarah only had an 11% chance. That was somebody's baby – 11% is more than enough. A human being would've known that. Unlike humans, robots lack a moral conscience and follow the "ethics" programmed into...

Source: *The Conversation*

11. Optimus Primetime: Navigating a Future With Robots

Type: Trend

Robots have been a cornerstone of science fiction for decades, but they are now closer to science than fiction—even though a survey of G7 countries found that the majority of respondents were uncomfortable with the idea of humanoid robots. Research has found that the presence of a robot decreases workers' feelings of meaning fulness and autonomy in their jobs. Incidents with robots outside the workplace have also incited frustration , and numerous reports of people damaging delivery robots suggest the tone of human sentiment towards them. Despite these concerns, the robotics industry is still garner- ing significant investment. Apple and other large companies have launched robotics programs, and some projections expect the mar- ket to nearly double over the next five years. The field seems to be at a turning point , largely because of the artificial intelligence (AI) boom. Consequently, it's worth examining what recent develop- ments have been...

Source: American Planning Association;Tech Xplore;The New York Times;Bloomberg;Axios;New Atlas;The Verge;The New York Times;Futurism;Taylor & Francis Online;KTLA;Euronews;Built In;IEEE Spectrum;The New York Times;The Robot Report;NBC News;Mordor Intelligenc;Robotics 24/7;Forbes;CIO;Smart Cities Dive;Carbon Brief;TED;VentureBeat;Nature;Model D;Cities Today;ABC10;Pew Research Center;TechCrunch;Harvard Gazette;ROBOTS;CNN;WIRED;Cornell University;NPR;UT News;Nature;Associated Press News;Reuters;Foreign Policy;MIT Technology Review;KUOW;Frontiers;The Register;The Verge;MIT Technology Review;Forbes India;Grist;Model D;Gallup;Popular Mechanics;The New York Times;Human Rights Watch;CNBC;The Seattle Times

12. Robot Redux

Type: Trend

Make room for humanoid robots—they could soon be a staple in all homes. It might be the most unsettling sci-fi cliché of all, but it's drawing inevitably closer. Humanoid robots are coming to factories, offices, cities, and— possibly—homes in the coming years. Mechanical companions will assist with the drudgery that most of us would rather avoid, like hefting items around in a house move, administering medication to aging (and cranky) seniors, or simply keeping up with the cleaning. Humanoid robots as a serious consumer category became realer when Tesla, a company more recognized for its electric saloons, announced that its robot Optimus will be in production in 2025 and available for purchase in 2026. During an October 2024 event, the robots appeared uncannily competent. They seemed to work the room, hobnobbing with guests. One was clad in a cowboy hat and ordered to serve drinks at the bar. "I think...

Source: VML Intelligence;Singularity Hub;Analytics India Magazine;Gizmodo;Fortune;Nature;Silicon Canals;PYMNTS.com;Fortune;The Robot Report

13. Is Switzerland's Electric Vehicle Story A Preview For The Rest Of The Globe?

Type: Weak Signal

For a long time, Norway was the ultimate trendsetter when it came to the future of electric vehicle adoption. Now there's another country worth admiring. Known for exquisite chocolates, fine watches, secretive banks, and Roger Federer — Switzerland is now making some waves on the EV scene. It turns out that last year, an electric car sold more units than any other car (gasoline, diesel, hybrid, etc.) in Switzerland. The Tesla Model 3 didn't just rule all EV sales in Switzerland, but also all types of cars. The following chart released by the Swiss IVT Astra shows that Tesla's Model 3 has beaten the sales of every car in the country in 2021. To that end, Tesla sold 5,072 units of the Model 3 sedan in Switzerland in 2021. The closest Model 3 competitor in the country was the internal combustion engine Škoda Octavia, with 4,969 units sold. The closest...

Source: *Cleantech News*

14. Humanoid Robots

Type: Trend

Humanoid robots are rapidly advancing from concept to deployment, driven by breakthroughs in AI, computer vision, and robotics hardware. Figure's \$675 million funding round, backed by Microsoft, OpenAI, and Amazon, underscores growing investor confidence in AI-powered robotics. OpenAI's partnership with Figure aims to enhance robots' language understanding and make them better at interacting with humans and autonomously adapting to tasks. Tesla's Optimus Gen2, unveiled last year, features improved dexterity and balance, while Amazon is testing Agility Robotics' Digit for warehouse logistics. Another example is Fourier Intelligence's GR-1, which addresses global aging trends by assisting eldercare residents. Despite rapid innovation, commercialization hurdles persist. High production costs, safety concerns, and the need for reliable general-purpose applications could slow adoption. The debate over humanoid versus task-specific robotic designs continues, with critics questioning the necessity of a human-like form for industrial applications. However, the race to develop AI-integrated humanoids is intensifying, with industry leaders...

Source: *Peter Diamandis;Space.com;Designboom Magazine;TechCrunch;Singularity Hub;Business Insider;Peter Diamandis;Business Insider;The Robot Report;The Robot Report;Analytics Vidhya;New York Post;The Conversation;Geeky Gadgets;Computerworld;Peter Diamandis;Peter Diamandis;Peter Diamandis;The Robot Report;The Robot Report;Interesting Engineering;MDPI;The Robot Report*

15. Human Brain-AI Symbiosis

Type: Wildcard

Humans aren't necessarily doomed to lose the race against the AI, because an artificial general intelligence capable of deep learning may turn out to be impossible to create. Also, if the AI would advance in great leaps, it wouldn't necessarily become truly learning, intelligent, or unfathomable to us. At the same time, it may be possible to increase the capacity of human brains with the help of computers and, for example, neural programming, to be equal with a future super AI, or even exceed it. Machine intelligence and machine learning are the parts of AI which are advancing rapidly, and in many visions, they are feared to replace all human labour. It is also feared that a self-developing AI will become incomprehensible, and hence uncontrollable, for the humankind. Even if the development of the AI would not advance nearly as quickly, the computer farms of the future will far exceed...

Source: *All Israel News;TNW;Nautilus;The Independent;Fortune;Futurism*

16. Humanoid Robots Entering the Workforce

Type: Trend

Humanoid robots are beginning to operate in real industrial settings. In 2024, BMW tested a humanoid on an assembly line in Spartanburg, where it performed physically taxing tasks such as inserting heavy, awkward sheet-metal parts into body fixtures with precision, improving safety and ergonomics. Unlike fixed industrial arms, humanoids can navigate human-centric environments and adapt to multiple tasks. Other efforts (Tesla's Optimus and several startups) signal broader momentum. Challenges remain (cost, reliability, safe human-robot collaboration), but early deployments show rapid improvement in manipulation and autonomy. The trajectory suggests expanding roles in logistics, manufacturing, and hazardous inspections – initiating a new era of flexible automation alongside human workers.

Source: ASSEMBLY Magazine

17. Elon Musk's Neuralink to start clinical trials of implanting brain chips in humans

Type: Weak Signal

Billionaire Elon Musk's company Neuralink is conceiving implants to be able to communicate with machines by thought. Neuralink's first clinical trials with a small number of human patients would be aimed at treating paralysis or paraplegia, the company's head surgeon Dr. Matthew MacDougall said. The neurotechnology firm aims to develop implants that can treat neural disorders and that may one day be powerful enough to put humanity on a more even footing with possible future superintelligent computers. Musk described Neuralink's chip, which is roughly 23 millimeters (0.9 inch) in diameter, as "a Fitbit in your skull with tiny wires." Neuralink wants to first use the device with people who have severe spinal cord injury to help them talk, type and move using their brain waves. The brain-chip startup had released footage on Friday appearing to show a monkey playing a simple videogame after getting implants of the new technology. Neuralink...

Source: WION

18. Batteries in Cars, Batteries in Grids

Type: Trend

Vehicles account for most demand, but batteries are increasingly prevalent in power grids. By the year 2030, passenger cars will account for the biggest share of global battery demand, at about 60%, followed by commercial vehicles (23%), according to the Global Battery Alliance. Also by 2030, consumer electronics (think iPhones and tablets), will shrink from more than a fifth of the global battery market to only a "marginal" share, according to the alliance. As global battery demand grows by an expected 25% annually from now until 2030, they will power not only increasingly electrified transportation, but will also facilitate a shift from fossil fuel power generation to more sustainable models - via the deployment of batteries in power grids (and more decentralized, off-grid applications). Renewable energy sources tend to be intermittent (the sun is not always shining on solar panels, for example), creating an important role for batteries as a...

Source: Future Today Institute

19. Robotaxi Expansion

Type: Trend

Robotaxis are entering a period of accelerated growth, driven by technological advancements, regulatory shifts, and shifting consumer sentiment. In 2024, Waymo doubled its weekly paid trips to 100,000 and expanded service to multiple new US cities, including Los Angeles, Austin, and Miami. Baidu's Apollo Go robotaxi division is on track to reach profitability in 2025, aided by its ability to cut vehicle costs to \$28,000—far lower than US competitors like Waymo, whose vehicles cost upward of \$150,000. Tesla is also entering the space, with plans to launch its own robotaxi service in Austin by mid-2025. However, regulatory challenges remain a key factor. Cruise, GM's self-driving unit, was forced to shut down after a high-profile accident led to regulatory scrutiny and loss of operational permits in California and Texas. Waymo faces a new federal investigation into 22 incidents involving its vehicles, per NHTSA. Despite these setbacks, data suggests that robotaxis...

Source: *The San Francisco Standard; TechCrunch; The Verge*

20. Battery Demand and Production

Type: Trend

Companies are investing billions of dollars in battery facilities to meet growing demand. The cost of batteries essential for manufacturing electric vehicles has plummeted during the past decade, from about \$1,400 per kilowatt hour to roughly \$100 per kilowatt hour - enabled by a massive scaling-up of production. In 2019, a Volkswagen executive told the New York Times that the German automaker was paying less than \$100 per kilowatt hour for batteries - a price generally accepted as the point where electric cars can start becoming more affordable than internal combustion models. Tesla was also reportedly on track to reach a cost of less than \$100 per kilowatt hour as of 2018. Between 2010 and 2018, total battery demand grew by 30% annually, reaching a total volume of 180 gigawatt hours, according to a report published in 2019 by the Global Battery Alliance. The market is expected to continue growing...

Source: *Future Today Institute*

21. General-Purpose Robots

Type: Trend

General-purpose robots are evolving rapidly, fueled by AI breakthroughs, advanced sensory systems, and increased investment. Companies like Figure AI and Sanctuary AI are leading the charge with humanoid robots designed for diverse applications, from warehouse logistics to eldercare. Figure AI's Figure 02, tested at a BMW facility, demonstrates real-world adaptability, while Sanctuary AI's Phoenix, equipped with haptic sensors and AI control, learns new tasks through simulation and demonstration. Meanwhile, China's Agibot has claimed the mass production of nearly 1,000 humanoids, signaling a push toward large-scale deployment. A major bottleneck in general-purpose robotics is training, but new AI-driven approaches are accelerating progress. MIT's Heterogeneous Pretrained Transformers, inspired by large language models, allows robots to learn from vast, diverse datasets, improving their adaptability to novel tasks. Similarly, RoboCat, a self-improving AI agent, can train robotic arms in as few as 100 demonstrations, significantly reducing the need for human oversight. These developments suggest...

Source: *TechCrunch; MIT - Massachusetts Institute of Technology*

22. Daily Automation

Type: Trend

Advanced robots are being used to automate simple to complex tasks. Trend - Robotics companies are launching advanced robots capable of automating tasks in the workplace and the home. These robots have dexterous limbs, precision accuracy, and reliable problem-solving skills. Businesses are using these to automate simple and menial to complex jobs in the workplace. Insight - Some of the most undesirable tasks in the workplace and in the home are menial, repetitive duties. The agents responsible for these tasks often burnout of their jobs quickly, leading to high turnover rates in the workplace, or tasks left unfinished in the home. Given the simplicity of many of these tasks, businesses desire automated solutions that alleviate strain from workers to focus energy on more complex tasks. Robotics brands are launching dexterous, capable robots in response.. At Tesla's 2023 shareholders meeting, Elon Musk introduced the Optimus robot, signaling a shift from electric...

Source: *Trend Hunter; New Atlas; 1X Technologies; The Indian Express; FOURIER-Robotics; Medium; Sanctuary AI; DesignTAXI*

23. Assistive amusement park robots

Type: Trend

Enhancing the guest experience at theme parks is not just limited to data collection, applications, and customer experience management systems. Enter the latest generation of theme-park robots, which go beyond animatronic experiences to also enhance service touchpoints and operations. Robots-as-a-Service are coming to interactive exhibits and theme parks. Japanese startup Avatarin uses robots powered by an edge AI platform to serve as surrogates for remote visitors. The bots can be steered remotely from a user's home computer, allowing the virtual guest to experience museums from anywhere in the world. No stranger to the use of robots at its parks, Disney has several applications in the works, including soft robots that provide interactive guidance or entertainment to guests in its stores, humanoid robots that can conduct stunts to allure audiences, and drone displays and shows by Dronisos that light up the night sky. Disney has even submitted a patent for what...

Source: *Future Today Institute*

24. Behavioral Shifts and Mobility Demand

Type: Trend

The trend of Behavioral Shifts and Mobility Demand delves into the dynamic interplay between evolving work habits, such as the widespread adoption of remote work, alterations in lifestyle choices, and shifts in consumer preferences, all of which significantly influence the demand for various mobility solutions. This trend acknowledges the profound impact that societal changes, accelerated by technological advancements and global events like the COVID-19 pandemic, have on how people choose to move within and between urban environments. Remote work, initially a necessity during the pandemic, has become a preferred mode of operation for a significant portion of the workforce, reducing the need for daily commutes and altering peak travel times. Lifestyle choices, including an increased focus on health, wellbeing, and environmental sustainability, have led to a higher demand for active mobility options, such as cycling and walking, as well as a surge in interest for green transportation alternatives. Consumer preferences...

Source: *IF - ORION.AI*

25. Guochao Goes Global

Type: Trend

Consumers are increasingly turning to Chinese brands. The term guochao or “national wave” is used to describe the popularity of indigenous brands among Chinese consumers. Recent years have seen Chinese brands such as Shein and Temu become more popular internationally, and BYD vies with Tesla to be the biggest EV maker in the world. This is despite attempts by governments in the US, Canada and EU to impose tariffs on Chinese-made goods. At the same time, Chinese culture more broadly is becoming increasingly popular, with the wider celebration of Lunar New Year and the embrace of Chinese fashion and C-beauty. Views on Chinese brands are growing more positive. While still lagging behind their US- and British-made counterparts on many metrics, Chinese-made products are increasingly seen by consumers as offering good quality, in addition to the value for money they were already known for. Strikingly, among younger Americans, attitudes to Chinese...

Source: *Foresight Factory*

26. Provide value to drivers on the journey to EV adoption

Type: Trend

The future of cars may be electric, but 2024 proved to be a rocky year. After a period of hype, many auto manufacturers announced aggressive timelines for launching new BEVs. Now, some are walking back or delaying some of their commitments, and EV purchases seem to have hit a plateau. Even industry giants like Tesla are facing difficulties: Its stocks slid in 2024, prompting the company to lower vehicle prices, expand into new markets and introduce new models. What's causing the slowdown? Cost and convenience continue to play a factor for prospective buyers. EVs are still more expensive than gas-powered cars, making them feel like luxury purchases. Charging infrastructure remains a significant challenge, and many customers worry that they won't have ready access to charging points when they need them. Charging an EV also comes with installation plus residential electricity costs, especially in regions where electricity is more expensive...

Source: *Publicis Sapient*

27. CarOS

Type: Trend

As CarOS (car operating systems) become central to the driving experience, automakers are reclaiming control of the tech behind them. Historically, tech giants like Google and Apple dominated the in-car software space through Android Auto and Apple CarPlay. General Motors is leading this new charge by eliminating CarPlay and investing heavily in its own Ultifi software, a bold move aimed at owning the user experience and unlocking new revenue streams. Honda, too, is developing its proprietary Asimo OS, leveraging AI to enhance automation and driver assistance. Meanwhile, Volkswagen's VW.os and Tesla's proprietary software continue to evolve, reflecting a broader industry trend toward in-house solutions. China is emerging as a CarOS powerhouse, with Polestar partnering with Xingji Meizu Group to tailor an OS for the Chinese market, while Xpeng Motors and Huawei collaborate on AI-driven systems with predictive maintenance and natural language processing. BMW, in contrast, is refining its Panoramic iDrive...

Source: *Future Today Institute*

28. Autonomous Futures

Type: Trend

From vehicles and humanoids to accessibility devices and vacuum cleaners, autonomous tech is leading the charge across industries. Autonomous innovation was a prominent feature during the 2025 Consumer Electronics Show (CES). During Nvidia's CEO keynote speech, Jensen Huang said, "It is very, very clear, autonomous vehicles have finally arrived," pointing to success from Waymo and Tesla. Waymo posted on X (formerly Twitter) in October 2024 that the Waymo One was already providing over 150,000 paid trips every week and believes the future of autonomous rides is here and growing. McKinsey has predicted autonomous driving could create \$300 billion to \$400 billion in revenue by 2035. At CES, a broad spectrum of autonomous vehicles and software was on show. Japanese mobility company Tier IV showcased its autonomous bus, featuring "a new data-sharing platform designed to scale the development of autonomous driving AI." Zoox gave live demos by providing robotaxi rides to...

Source: VML Intelligence;MIT Technology Review;The Verge;The Verge;MacTrast;TechCrunch;Daily Mail Online;Daily Mail Online;Daily Mail Online;The Atlantic;The Verge;FOX 7 Austin;The Verge;Los Angeles Times;The Washington Post;Futurism;The Verge;The Verge;The Verge;Los Angeles Times;New York Post;The Conversation;The Verge;TNW;TechCrunch;The Verge;Silicon Republic

29. Rise of Global Oligarchs

Type: Wildcard

Rise of global oligarchs, i.e., a handful of people who largely control the economy and politics, may reach alarming levels in the coming years. The world is struggling with a deepening "polycrisis" that necessitates prompt actions and extensive funding. But as nation-states seem to be heading towards bankruptcy without prospects of necessary tax revenues or hope of growing the economy, the middle class is weakening, and most of the liquid money is flooding to a handful of billionaires at an accelerating pace, we are in a vicious cycle. Nation-states and international organisations may have to obey the rule of the emerging global oligarchy to survive. Oligarchy itself is not a new power structure. Wealthy individuals have always had a higher level of consciousness about their own economic interests and social status than individuals from lower classes. For example, the Russian oligarchs, who emerged with the collapse of the Soviet Union,...

Source: The Washington Post;Caproasia;World Socialist Web Site;TheStreet;CNBC;The Guardian

30. Toyota commits \$70 bln to bolster electrification, shares rally

Type: Weak Signal

TOKYO, Dec 14 (Reuters) - Toyota Motor Corp (7203.T) on Tuesday committed 8 trillion yen (\$70 billion) to electrify its automobiles by 2030, half of it to develop a battery electric vehicle (BEV) line-up, as it looks to tap a growing market for zero-emission cars. But the world's biggest carmaker, which is a relative latecomer to full electric cars, said it expected annual BEVs sales to reach only 3.5 million vehicles by the end of the decade, or around a third of its current vehicle sales. That is less than bigger rivals such as Europe's No. 1 carmaker Volkswagen (VOWG_p.DE), which in July predicted that half of its global vehicle sales will be battery-powered cars by that date. Even so, shares in Toyota and group companies Toyota Tsusho (8015.T) and Denso (6902.T) rallied on Wednesday, leading gains on the benchmark Nikkei 225 index (.N225). Toyota advanced 4.06% while Toyota Tsusho...

Source: Reuters

31. Elon Musk says we should completely rethink government on Mars to get rid of special interests and 'coercion of politicians'

Type: Weak Signal

Elon Musk says there should be a direct democracy without representatives on Mars. He told a podcast that the eventual colony should get rid of "special interests" and "coercion of politicians." Musk also said SpaceX's plan to land humans on Mars should happen within 10 years. Morning Brew Insider recommends waking up with, a daily newsletter. Loading Something is loading. Thanks for signing up! Access your favorite topics in a personalized feed while you're on the go. download the app Email address By clicking "Sign Up," you also agree to marketing emails from both Insider and Morning Brew; and you accept Insider's Terms and Privacy Policy Click here for Morning Brew's privacy policy. Elon Musk says human settlement on Mars could be a second chance to build a better government. The billionaire Tesla and SpaceX CEO told podcaster Lex Fridman in a wide-ranging, 2.5-hour interview that putting humans on Mars...

Source: *Business Insider*

32. Jaguar To Turn All Electric By 2025; Land Rover to introduce 6 EVs in the next 5 years.

Type: Weak Signal

Jaguar will pivot away from its heritage to become a full electric car brand within five years, while its Land Rover stablemate will have six EVs by 2025, the British company announced this morning. The first all-electric Land Rover was due in 2024, Jaguar Land Rover CEO Thierry Bolloré admitted, to be followed by five more in rapid fire within two years. The announcement makes Jaguar the biggest legacy OEM to commit its future to electric cars, following similar announcements from Volkswagen Group-owned Bentley and BMW Group-owned Rolls-Royce. JLR would scrap its freewheeling attitude to chassis architectures to develop just three future model platforms, one of which would remain exclusive to the more luxury-oriented Jaguar brand. Bolloré today admitted the company was likely to sacrifice volume for profit on the journey to a zero-emission target of 2039 for the two premium brands, and zero tailpipe emissions by 2036. The company,...

Source: *HardwareZone*

33. A New Non-Alignment

Type: Weak Signal

This essay first appeared in GREEN, a journal from Groupe d'études géopolitiques. In March of this year, as Russia's war in Ukraine intensified, China's Foreign Minister Wang Yi made a trip to New Delhi to speak with his Indian counterpart S. Jaishankar. "If China and India spoke with one voice, the whole world would listen," Wang argued. "If China and India joined hands, the whole world would pay attention." The geopolitical scales soon started to tilt India's way. By April, European Commission President Ursula von der Leyen had made her first trip to Delhi, where she laid the groundwork for several weeks of frenetic EU-India dealmaking for a sweeping agenda ranging from defense to green manufacturing. The following month, in a whirlwind three-day tour of Germany, Denmark and France, Prime Minister Narendra Modi won concessions that Indian policymakers have coveted for well over two decades, ranging green-energy investments, tech transfers,...

Source: *Phenomenal World*

34. Road to Autonomous Driving

Type: Trend

The journey towards autonomous driving technology is marked by significant advancements, leading us towards a future where fully-autonomous vehicles will revolutionize transportation. These vehicles are set to enable "car-as-a-service" fleets, offering on-demand services akin to Uber but without the need for human drivers. This evolution will not only transform our approach to mobility but also the very design and functionality of vehicles themselves. As we edge closer to this future, we can anticipate a dramatic transformation in vehicle shapes and sizes. Autonomous cars are poised to become functional "third spaces," offering amenities for entertainment, sleeping, or even serving as mobile meeting rooms. This reimaging of vehicles will turn drive time into productive periods for work or leisure. Leading the charge in this field are companies like Tesla, Waymo (a subsidiary of Alphabet), and GM-Cruise, among others, who are actively developing fleets for these "car-as-a-service" models. This advancement is expected to...

Source: ITONICS;Peter Diamandis

35. Solar Satellites

Type: Wildcard

Emrod has just demonstrated its wireless power beaming technology to Airbus and the European Space Agency (ESA) as part of the ESA's new push toward 24-hours-a-day space-based solar power. The idea of space-based solar is not new. The problem has always been size; you'd need transmitters and receivers about 2 km (1.2 miles) in diameter to shift a couple of gigawatts of energy down to Earth from a geostationary orbit some 36,000 km (22,370 miles) away. Building an array that size on Earth would be a huge challenge. Building one in space? Yikes. Emrod says its near-field energy beams could get the job done much more efficiently than competing technologies. But Emrod founder Greg Kushnir also thinks there's a much cheaper and easier way to satisfy European – and indeed global – renewable energy needs: by setting up a global wireless energy matrix capable of beaming power instantaneously around the...

Source: New Atlas;Via Satellite;World Economic Forum (WEF);Space.com;SpaceNews;SMH.com.au;Forbes
