

EMERGING BUSINESS MODELS IN THE AUTOMOTIVE INDUSTRY

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Tesla exemplifies a new generation of companies reshaping the global automotive industry through disruptive innovation, sustainability, and vertical integration. The company's influence goes beyond vehicle manufacturing, integrating artificial intelligence, energy solutions, and digital ecosystems into a unified operational model.

Its strategic departure from combustion engines to full electric vehicle (EV) production, along with the creation of an international charging network and energy products like Powerwall and Solar Roof, showcases a broader transformation agenda. Tesla's direct-to-consumer (DTC) model, digital-only sales strategy, and software-driven vehicle management mark a radical shift in automotive commerce [1].

Innovation lies at the heart of Tesla's model: investment in AI for autonomous driving and manufacturing optimization, custom-built hardware like Dojo chips, and real-time over-the-air updates that extend functionality without physical intervention. In 2024 alone, Tesla invested over USD 4.5 billion in R&D to advance battery technology, robotics, and software systems [1].

Tesla's sustainability vision includes a roadmap to carbon neutrality by 2030. Key initiatives include full electrification of the product line, battery recycling programs, solar energy generation, and the use of renewable energy in all Gigafactories [2]. These actions are supported by measurable reductions in CO₂ emissions and expanding market presence in regions like China and the United States.

The company's marketing approach also breaks convention. Tesla relies on viral media, Elon Musk's personal brand, and social engagement rather than traditional advertising [2]. This creates a strong identity-driven brand community that fuels organic growth. Tesla's case demonstrates how convergence of AI, digital infrastructure, green technologies, and non-traditional branding forms the basis for a new business model in the automotive sector.

This evolving approach reflects broader economic and technological shifts, where value creation relies not only on product innovation but also on ecosystem thinking and customer experience. As global environmental and digital standards tighten, companies like Tesla serve as experimental grounds for the transition toward more sustainable and intelligent mobility systems. Their example illustrates how competitive advantage increasingly depends on a company's ability to align business growth with technological agility and social responsibility.

References:

1. Tesla. Tesla Annual Report 2024 [Electronic resource]. *Tesla* : website. Available at: <https://ir.tesla.com> (Accessed: 01.04.2025).
2. Tesla. Tesla Impact Report 2024 [Electronic resource]. *Tesla* : website. Available at: <https://www.tesla.com/impact> (Accessed: 01.04.2025).