

Executive Summary OrangeX Manufacturing:

The executive summary of the report includes the following key points:

- 1. The development strategy for the FormulaX Beta Version, a biodiesel-driven and biofuel truck vehicle, involves several stages, including conceptualization, design, comprehensive review, prototyping, team coordination, continuous improvement, marketing, and regulatory compliance.
- 2. OrangeX LLC is an Engineering design, manufacturing, and Artificial Intelligence firm that creates innovative Engineering automobiles and AI Generative social media engines.
- 3. OrangeX Manufacturing focuses on Green Vehicles Manufacturing, specifically FormulaX Trucks that utilize hybrid fuel sources.
- 4. The global Automotive Market Size is projected to reach \$6 trillion by 2030, with the USA accounting for 20% of the total market.
- 5. Biofuels Driven Vehicles account for a \$40 billion market in the USA, with 6% of total vehicles using biofuels.
- 6. Biodiesel blends up to 5% (B5) are generally safe for most diesel engines, but higher blends may face compatibility issues and require engine modifications.
- 7. The social need for Biofuels Driven Vehicles is to reduce dependence on petroleum and transition to renewable fuels.
- 8. The global Automotive Biofuels Market is driven by rising fuel prices, environmental concerns, and government regulations.
- 9. The market includes bioethanol and biodiesel, with bioethanol produced through fermentation and biodiesel made by combining vegetable oil or animal fat with alcohol.
- 10. Several cars, such as Chevrolet Colorado, Ford Transit Cargo Van, GMC Terrain, Jaguar XE 20D, and Range Rover Velar S D180, are compatible with biodiesel.
- 11. OrangeX Manufacturing offers custom manufacturing, easy leasing models, and less carbon emissions as value propositions for Green Vehicles.
- 12. OrangeX Manufacturing aims to achieve net-zero emissions through carbon capture technology and the use of algae-based capture for CO2 emissions.
- 13. OrangeX Manufacturing plans to establish a biodiesel refueling station on Mars for OrangeX Rockets, which could create significant job opportunities.
- 14. OrangeX Manufacturing envisions a custom car manufacturing model with various options and choices for customers.
- 15. For hybrid car battery manufacturing, OrangeX Manufacturing plans to do business with Redwood Materials Inc.
- 16. The proposal for Technology Optimization Outsourcing for Custom Car Making in Pakistan, which involves collaborating with specialized companies to create OrangeX Vehicles and allow customers to order cars with custom requirements.
- 17. The suggestion to introduce a multi-company collaborative framework to reduce supply chain risks and create better supply chain networks, similar to Amazon's Supply Chain Network.
- 18. The idea of leveraging existing steel manufacturing companies in Pakistan and the USA to produce car chassis and other steel components for automobiles.



- 19. The goal of challenging established automotive giants like Tata and positioning OrangeX LLC, USA as an American car brand in Pakistan.
- 20. The proposal to establish a joint venture with Tesla to set up an Electric Car Manufacturing Plant in Pakistan in collaboration with OrangeX LLC, USA.
- 21. The comparison of two product models: one involving multi-company collaboration and the other involving leased components, discussing their financial stability, features, pros, and cons.
- 22. The statement about the speed of Orange being faster than the speed of light and the mention of Orange as a biological organism that breathes biofuels.
- 23. The inclusion of references to articles and a car lease payment calculator.
- 24. The strategy emphasizes the integration of a high-performance biodiesel engine and biofuel truck features, with a multidisciplinary team of professionals working together to generate innovative ideas and develop detailed 3D models using Solidworks.
- 25. The design is thoroughly reviewed for functionality, efficiency, and safety, utilizing simulation tools and finite element analysis to optimize performance and durability. The prototype is then manufactured using state-of-the-art facilities and high-quality materials sourced from suppliers.
- 26. Team coordination and management are crucial, with a project management system implemented to streamline communication and task allocation. Cross-functional collaboration is encouraged to leverage the diverse expertise within the team.
- 27. Continuous improvement and iteration are key aspects of the strategy, with a feedback loop established to incorporate insights from prototype testing and user feedback. Agile development methodologies are employed to adapt to changing requirements and market trends.
- 28. Marketing and stakeholder engagement are important for creating awareness and generating interest in the FormulaX Beta Version. Feedback from potential customers, investors, and regulatory bodies is gathered to ensure alignment with market demands.
- 29. Regulatory compliance is a priority, with close collaboration with regulatory authorities to ensure adherence to environmental and safety standards. Any challenges or concerns are proactively addressed to facilitate a smooth market entry.
- 30. The combination of mechanical engineering and generative AI can be applied to the design and manufacturing of FormulaX Trucks that utilize a mix of renewable biodiesel and conventional fuel sources. This approach optimizes hybrid powertrain systems, selects suitable materials, designs aerodynamics, manages energy, customizes manufacturing, enables predictive maintenance, optimizes routing, analyzes environmental impact, provides driver assistance, and reduces emissions.
- 31. The document also highlights various technical challenges associated with biofuel-driven vehicles, such as material recyclability, smart mechanical materials, self-driving mechanisms, advanced sensors and controls, combustion performance, and ceramic applications.
- 32. The report suggests joint venture ideas for each component of green cars, such as collaborations with Toyota for the diesel engine and powertrain, German companies for suspension and brakes systems, and partnerships with Google for driverless car technology and GPS.



- 33. The technology development chart outlines the manufacturing processes and testing/simulation procedures for various components of the OrangeX car, including chassis and body structure design, powertrain and engine, biodiesel engine optimization, body shell development, and other accessories.
- 34. The report also mentions the challenges and opportunities associated with CAD/CAM manufacturing, the key components of a biodiesel vehicle, and unique ideas for the OrangeX startup, including the use of the Golden Ratio in logo designs and the incorporation of solar power and biofuels in hybrid sports cars.
- 35. The executive summary concludes by highlighting the potential of biodiesel and hybrid fuel sources in creating efficient, cost-effective, and environmentally friendly vehicles. It suggests that OrangeX can leverage its expertise in mechanical engineering, generative AI, and renewable fuels to develop FormulaX Trucks that meet market demands and contribute to a more sustainable future for the automotive industry.
- 36. Funding and financials: The initial funding target for OrangeX Manufacturing is \$100 million per project/startup for 0.1% equity. The founder has bootstrapped over \$500,000 to \$1 million for initial infrastructure. The company plans to seek \$10 million to \$15 million in Series A funding by Spring 2024. The financial valuation of OrangeX Manufacturing is projected to increase from \$1 billion to \$1 trillion over a period of 10 years, with an annual growth rate of approximately 107.28%.
- 37. Business plan and financials: The company plans to start with 40 employees and produce 30 cars initially. The leasing model for the cars ranges from \$400 to \$800 per month for 36 months, with a down payment. The major earning model for OrangeX Manufacturing is to earn \$21 million through sales or car lease installments to support 300 employees.
- 38. Design, development, and manufacturing: AutoCAD, SolidWorks, and Ansys are the primary software used for designing and simulating the various components of OrangeX vehicles. The company aims to create a perfect picture for OrangeX works by utilizing data obtained from NASA, SpaceX, and other sources.
- 39. Management plan summary: The initial plan for employee hiring in 2025-2026 is to have 10 to 20 employees and produce 25 cars. The major functions of the team include design engineers, manufacturing engineers, assembly technicians, and a sales and marketing team. By 2030, the company aims to have 300 employees, including executives, production managers, engineers, R&D team, sales team, accounts team, HR team, and marketing team.
- 40. Manufacturing targets: The company plans to produce a total of 1 million cars by the year 2040, with incremental targets each year. The founder has previous experience in marketing and branding student cars, which will contribute to the success of OrangeX Manufacturing.
- 41. Technology optimization: The document discusses the Technology Optimization Outsource Manufacturing/Sales & Manufacturing Model for Pakistan and the USA. It proposes a collaborative approach involving multiple companies to create OrangeX Vehicles. The document highlights the benefits of this approach, such as maximizing car performance, reducing costs, and offering customization options for customers. It also suggests leveraging existing steel manufacturing companies for car chassis production and establishing



- partnerships with Tesla for electric car manufacturing. The document emphasizes the financial potential of the project and the social and economic impact it can have.
- 42. Marketing strategies: The document briefly mentions marketing and promotions in the USA, stating that the speed of Orange is faster than the speed of light and highlighting that Orange is a biological organism that breathes biofuels.
- 43. Overall, OrangeX Manufacturing aims to secure funding, develop and manufacture high-quality vehicles, and achieve significant growth in the coming years. The company's business plan includes a comprehensive strategy for design, development, and manufacturing, as well as financial projections and management plans. The proposed technology optimization model and marketing strategies further enhance the potential success of OrangeX Manufacturing in the green vehicle market.