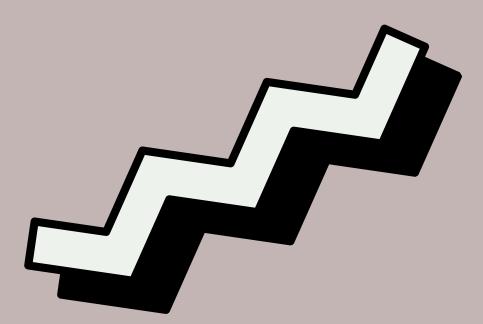


APPLICATION OF STRUCTURED INNOVATION

-- INNOVATIVE SOLUTIONS FOR SUSTAINABLE URBAN MOBILITY

Group 14

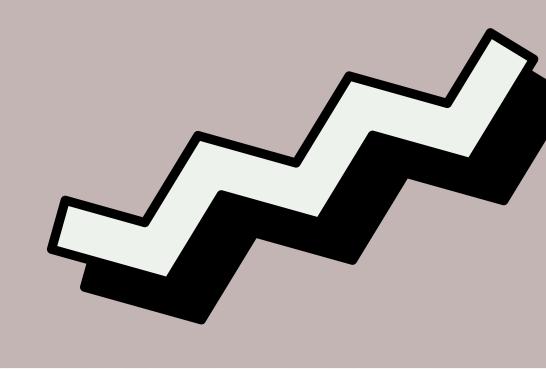
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Introduction & Motivation



In today's rapidly urbanizing world, the challenge of sustainable urban mobility has become increasingly critical. With the rise in population density and congestion, coupled with environmental concerns, there is a pressing need for innovative solutions to address these issues. In this poster, we explore how structured innovation methods can be applied to tackle this complex problem.



Application Scenario



Consider a bustling metropolis grappling with traffic congestion and air pollution. Leveraging structured innovation methods, a team of entrepreneurs and innovation managers embarks on a journey to revolutionize urban mobility:

Methodology



1. Design Thinking:

This human-centered approach emphasizes empathy, ideation, and prototyping. By understanding the needs and pain points of urban commuters, we can generate creative solutions that prioritize user experience and sustainability.

2. TRIZ (Theory of Inventive Problem Solving):

TRIZ provides a systematic method for problem-solving by analyzing contradictions and identifying inventive principles. By applying TRIZ to urban mobility challenges, we can uncover unconventional solutions to optimize transportation systems and minimize resource consumption.

3. Lean Startup Methodology:

This approach advocates for rapid experimentation and iterative development to validate ideas and minimize waste. By adopting a lean startup mindset, urban mobility initiatives can quickly test hypotheses, pivot as needed, and scale successful solutions efficiently.

Reference:

Lichtenhaler U. A conceptual framework for combining agile and structured innovation processes[J]. Research-Technology Management, 2020, 63(5): 42-48.
Du Preez N D, Louw L. A framework for managing the innovation process[C]//PICMET'08—2008 Portland International Conference on Management of Engineering & Technology. IEEE, 2008: 546-558.

1. Empathy Interviews: Engage with commuters to understand their pain points, such as long commute times and unreliable public transportation.
2. Ideation Workshops: Brainstorm innovative solutions, such as a ride-sharing platform optimized for carpooling routes or a network of electric scooters for short-distance travel.
3. Prototype Development: Create prototypes of the proposed solutions and conduct pilot tests to gather feedback from users and stakeholders.
4. Iterative Improvement: Continuously refine and iterate based on user feedback, integrating sustainable practices like electric vehicles and renewable energy sources.

Conclusion



The application of structured innovation methods offers promising avenues for addressing the challenges of sustainable urban mobility. By prioritizing user needs, leveraging inventive problem-solving techniques, and embracing iterative development, we can create transformative solutions that enhance both the efficiency and sustainability of urban transportation systems. Together, let's pave the way towards a greener, more accessible future for our cities.