

IZAICINĀJUMI

1. Digital freight platforms for transportation coordination

Elaborate ideas how online platforms can revolutionize freight management by enhancing connectivity, transparency, and efficiency in logistics operations.

Generate ideas for modern online platforms that streamline freight management by connecting shippers, carriers, and logistics providers for efficient collaboration.

Possible areas: real-time freight matching, dynamic pricing algorithms, end-to-end shipment visibility, and automated contract management.

2. Smart cold chain management using IoT and AI

Think how smart technologies can improve the reliability, efficiency, and transparency of cold supply chain logistics to meet the growing global demand for temperature-sensitive goods.

Generate ideas of integrated solutions for cold supply chain management that ensure temperature-sensitive goods (e.g., food, pharmaceuticals, vaccines) are transported and stored under optimal conditions.

Possible areas: route planning, IoT sensors for real-time temperature, humidity, and location monitoring, AI-driven predictive analytics for cargo security and route optimization.

3. Smart Snow Management for Sustainable Winter Mobility

Description: Latvia experiences heavy snowfall, significantly impacting transportation and mobility. This challenge invites teams to design solutions for smarter snow and ice management to ensure safe, efficient, and sustainable travel during winter months. Ideas could include real-time snow mapping using IoT sensors, predictive snow-clearing algorithms based on weather data, or apps that guide users to safer routes during snowstorms.

Relevance: With Latvia's winter conditions, ensuring smooth and safe mobility during snow seasons is a pressing local issue. This challenge aims to reduce the environmental impact of traditional snow-clearing methods and enhance mobility for all users, including pedestrians, drivers, and public transport passengers.

Source: [Snow annually takes Latvia by surprise](#): This article highlights the challenges of snow management and its impact on Latvia's mobility.

4. Dynamic Public Transport Scheduling and Routing

Description: In many Latvian cities, public transport schedules are static, leading to inefficiencies during off-peak hours or unexpected events. This challenge encourages teams to develop solutions for dynamic public transport management, incorporating real-time data such as passenger density, traffic conditions, and special event locations. Proposed solutions could range from adaptive scheduling systems to mobile apps for users to influence route adjustments based on demand.

Relevance: Improving the efficiency and user-friendliness of public transport can promote sustainable mobility and reduce reliance on private cars. This aligns with Latvia's goals for greener urban development and increased accessibility.

Sources: Comprehensive reform of public transport system in Latvia planned: <https://eng.lsm.lv/article/economy/transport/29.11.2023-comprehensive-reform-of-public-transport-system-in-latvia-planned>

The Refined and Complex Art of Transport Scheduling: <https://www.railbaltica.org/the-refined-and-complex-art-of-transport-scheduling>