

**AI IN**



# **12 MINUTES FOR TRANSPORTATION**



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# MOTIVATION - WHY AI?

Optimizing route planning

Enhancing safety features

Reducing operational costs

Improving customer experience

Facilitating autonomous vehicle development



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# 2/24 INDUSTRY

Public Transit Systems  
Freight and Logistics  
Automotive Manufacturers  
Aviation Industry  
Maritime Transportation



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# STRATEGIC TRENDS

Autonomous vehicles

AI in traffic management

Drone delivery services

Electric vehicle integration

Predictive maintenance

AI in logistics optimization

Smart public transit systems

AI-powered navigation apps

Sustainable transportation technologies

Enhanced aviation safety with AI



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# WHY CHANGE?

Urban congestion  
Environmental concerns  
Safety improvements  
Efficiency demands  
Technological evolution



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# LEADING THE CHANGE

Tesla (Autonomous electric vehicles)

Waymo (Self-driving technology)

Maersk (AI in shipping logistics)

DHL (AI in freight logistics)

Boeing (AI in aviation systems)



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# DIGITAL TRANSFORMATION

Self-driving cars and trucks  
AI in traffic flow optimization  
Predictive maintenance in aviation  
AI-driven route optimization  
Smart ticketing systems  
AI in maritime navigation  
Real-time tracking in logistics  
AI for enhanced in-flight experiences  
Drones for delivery and surveillance  
AI in train scheduling



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# AI DISRUPTION

Autonomous vehicles reducing accidents

AI for dynamic routing in logistics

Real-time traffic prediction and management

AI in predictive vehicle maintenance

Enhanced flight safety systems

AI in efficient public transit planning

Personalized travel experiences

AI in cargo loading optimization

AI for fuel efficiency in aviation

AI-assisted parking solutions



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# GREAT EXAMPLES OF AI

Tesla's Autopilot for self-driving  
Uber's AI algorithms for ride-hailing  
Google Maps' AI for traffic prediction  
Kiva robots in Amazon warehouses  
Rolls Royce's AI in ship management  
Airbus's AI for flight operations  
Hyperloop's AI in high-speed transit  
Skywise by Airbus for maintenance optimization  
DJI drones for logistics and surveillance  
AI in Singapore's smart public transit

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# 9/24 ECOSYSTEM REQUIREMENTS

Robust digital infrastructure  
Policy and regulatory frameworks  
Public-private partnerships  
Skilled workforce in AI and transportation  
Collaboration between tech and transport sectors

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# AI SUSTAINABILITY

Lower carbon emissions with AI efficiency

AI in optimizing fuel consumption

Reduced traffic congestion

AI for efficient public transit systems

Enhancing electric vehicle adoption



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# NEW RISKS - ETHICAL, LEGAL, SOCIAL

Cybersecurity threats in autonomous systems  
Ethical concerns in AI decision-making  
Job displacement in traditional roles  
AI reliability and safety in transport  
Data privacy in passenger information



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# AI MISUSE EXAMPLES

AI-driven autonomous vehicle hacking  
Misleading AI in ride-hailing pricing  
AI biases in traffic management systems  
Unauthorized surveillance using drones  
Manipulation in AI-based logistics



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# THREE AI DILEMMAS

Should AI fully control autonomous vehicles?  
How to balance AI efficiency and job impacts?  
Ensuring fair AI access in public transportation?



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# ORGANIZATIONAL REQUIREMENTS



Strategic vision for AI integration  
Investment in AI technology and research  
Skilled personnel for AI development  
Strong cybersecurity measures  
Collaborative ecosystem with tech partners

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# 15/24 STEP BY STEP APPLICATION

Identify AI use cases in transport  
Invest in AI technology and infrastructure  
Train staff on AI tools and ethics  
Implement AI solutions in phases  
Regularly assess and update AI systems

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# BEST PRACTICES

Prioritize safety in AI applications

Focus on customer-centric AI solutions

Collaborate with AI and transport experts

Gradual implementation with constant feedback

Uphold ethical standards in AI use



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# AI TOOLS & MODELS

Machine learning for traffic prediction  
Neural networks in autonomous driving  
AI algorithms for dynamic routing  
Reinforcement learning in drone navigation  
Predictive analytics in fleet management



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# 18/24 USEFUL DIGITAL TWINS

Digital twins of vehicles for testing  
Virtual models of traffic systems  
AI-based airport operation simulations  
Digital replicas of logistics networks  
Virtual shipping routes and port models

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COOL

NORWEGIAN CASES

**Imove: Subscription-based EV services.**

**Meshcrafts: Smart EV charging platform.**

**Easee: Manufactures smart EV charging robots.**

**Hy5: Innovates with hydrogen power solutions.**

**Voi Technology: Urban electric scooter sharing.**

**Nabobil: Peer-to-peer car sharing service.**

**Hyre: Electric car rental platform.**



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# GLOBAL LEADERS

United States (Autonomous vehicle technology)  
China (High-speed rail, electric vehicles)  
Germany (Automotive innovation)  
Singapore (Smart public transit)  
Japan (Advanced robotics in transportation)



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# FUTURE JOBS

AI transportation system analysts

Autonomous vehicle safety specialists

AI-driven fleet management coordinators

Urban mobility planners

AI ethics officers in transportation



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# THE FUTURE OF AI

Full autonomy in vehicles  
AI-integrated public transit systems  
AI in reducing transportation emissions  
Global AI-driven logistics networks  
Enhanced safety features in transport



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# RECOMMENDED READING

"Autonomy" by Lawrence D. Burns

"Traffic: Why We Drive the Way We Do" by Tom  
Vanderbilt

"The Big Data-Driven Business" by Russell Glass,  
Sean Callahan

"Machine Learning and AI for Healthcare" by  
Arjun Panesar

"The Master Algorithm" by Pedro Domingos

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# GOOD TED TALKS

"How autonomous cars will reshape cities" by  
Wanis Kabbaj

"The future of flying robots" by Vijay Kumar

"The ethical dilemma of self-driving cars" by  
Patrick Lin

"How AI can save our humanity" by Kai-Fu Lee

"How we're teaching computers to understand  
pictures" by Fei-Fei Li



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**WHAT WOULD  
YOU ADD?**

*LET ME KNOW!*



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