AIIN 12 MINUTES FOR LOGISTICS





1/24 MOTIVATION - WHY AI?

Enhancing supply chain efficiency
Predictive analytics for demand forecasting
Automated warehouse operations
Real-time tracking and delivery optimization
Reducing operational costs



2/24 INDUSTRY



Supply Chain Management
Warehouse Operations
Freight Transportation
Inventory Management
Last-mile Delivery Services



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3/24 STRATEGIC TRENDS

Al-driven supply chain optimization Autonomous delivery vehicles **Drone technology in logistics Blockchain for transparency** Internet of Things (IoT) integration **Predictive analytics for inventory** Robotics in warehouse operations AI in route planning Sustainable logistics practices **Data-driven customer service**



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4/24 WHY CHANGE?

Customer expectation growth
Global supply chain complexity
Efficiency in operations
Sustainability demands
Competitive advantage



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5/24 LEADING THE CHANGE

Amazon (Advanced logistics technology)
DHL (Al in supply chain)
UPS (Logistics and package delivery)
FedEx (Courier delivery services)
Maersk (Global shipping logistics)



6/24 DIGITAL TRANSFORMATION

Autonomous trucks and drones AI in global route optimization Robotics for warehouse automation Machine learning in demand forecasting IoT for real-time tracking Blockchain for supply chain transparency Al-driven inventory management Smart sensors for cargo monitoring Al in logistics data analytics Electric vehicles for sustainable delivery

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7/24 AI DISRUPTION

Self-driving vehicles in delivery Al for optimized warehousing layout Predictive maintenance of logistics vehicles AI in efficient route planning **Drone-based delivery systems** Al for real-time supply chain adjustments Robotics in picking and packing Data analytics for customer insights Al-driven logistics management platforms Al in cross-border trade facilitation

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8/24 GREAT EXAMPLES OF AI

Amazon's Al-driven logistics management UPS's ORION system for route optimization DHL's robotics in warehouses Alibaba's AI in global trade facilitation FedEx's autonomous delivery robots Kiva Systems (Amazon Robotics) order fulfillment ClearMetal's AI in supply chain optimization Einride's autonomous electric trucks JD.com's drone delivery service Ocado's AI-powered grocery fulfillment

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9/24 ECOSYSTEM REQUIREMENTS

Advanced data analytics infrastructure
Collaboration between tech and logistics
companies
Skilled workforce in Al and logistics
Regulatory framework for autonomous transport
Sustainable technology investment

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10/24 AI >>> SUSTAINABILITY

Reduced carbon emissions with AI efficiency
AI in optimizing delivery routes
Sustainable warehousing operations
Waste reduction in supply chains
Eco-friendly packaging with AI analysis







11/24 NEW RISKS - ETHICAL LEGAL, SOCIAL

Cybersecurity threats in automated system
Job displacement concerns
Dependence on AI for critical decisions
Data privacy in logistics operations
AI biases affecting supply chain decisions



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12/24 AI MISUSE EXAMPLES

Al-driven unfair competitive practices
Unauthorized surveillance in logistics
Manipulation of Al for illicit trade
Biased Al in logistics decision-making
Over-reliance on Al predictions



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13/24 THREE AI DILEMMAS

Al automation vs. human employment in logistics?

Balancing efficiency with environmental impact?

Ensuring data privacy in Al-driven logistics?





14/24 ORGANIZATIONAL REQUIREMENTS

Leadership commitment to AI integration
Continuous investment in AI technology
Collaboration between logistics and tech sectors
Skilled personnel for AI operations
Strong focus on cybersecurity and data privacy

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15/24 STEP BY STEP APPLICATION

Identify AI applications in logistics
Invest in appropriate AI technology
Train staff in AI and logistics
Implement AI tools in operations
Regularly assess and adapt AI solutions





16/24 BEST PRACTICES







17/24 AI TOOLS & MODELS

Machine learning for demand forecasting
Neural networks in route optimization
Al algorithms for inventory management
Predictive analytics in fleet management
Decision trees for logistics problem-solving

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18/24 USEFUL DIGITAL TWINS

Digital twins of logistics networks
Virtual models of warehouses
Al simulations for supply chain management
Digital replicas of transport vehicles
Virtual last-mile delivery scenarios

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19/24 COOL NORWEGIAN CASES

Oda: Online grocery logistics.

Dropr: Last-mile delivery solutions.

ShipMonk: Maritime logistics digitalization.

Porterbuddy: Same-day delivery service.

Mixmove: Cloud-based logistics optimization.



20/24 **GLOBAL LEADERS**

United States (Innovative logistics technolog China (Massive e-commerce logistics) Germany (Efficient supply chain management) Singapore (Hub for global trade logistics) Netherlands (Advanced transportation and logistics)

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21/24 FUTURE JOBS

Al logistics strategists
Autonomous vehicle operators
Supply chain data analysts
Sustainability managers in logistics
Al technology specialists in logistics



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22/24 THE FUTURE OF AI

Al-driven global supply chain networks
Advanced Al in sustainable logistics
Al for real-time demand-response logistics
Enhanced customer experience with Al

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23/24 RECOMMENDED READING

"The New (Ab)Normal: Reshaping Business and Supply Chain Strategy" by Yossi Sheffi "Supply Chain Management: Strategy, Planning, and Operation" by Sunil Chopra, Peter Meindl "Logistics & Supply Chain Management" by Martin Christopher
"The Al Advantage" by Thomas H. Davenport "Al Superpowers" by Kai-Fu Lee (Perspectives on Al's impact)

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24/24 GOOD TED TALKS

"What intelligent machines can learn from a school of fish" by Radhika Nagpal "The future we're building — and boring" by Elon Musk (Al and future of transport) "How supply chain transparency can help the planet" by Markus Mutz "The mind behind Tesla, SpaceX, SolarCity..." by **Elon Musk** "How AI can help shatter barriers to equality" Jamila Gordon

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WHAT WOULD YOU ADD? LET ME KNOW!

