DIGITAL TRANSFORMATION IN LOGISTICS & SUPPLY CHAIN

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INTRODUCTION TO DIGITAL TRANSFORMATION IN LOGISTICS

- Key driver for digital transformation in logistics.

- Technologies Shaping the Future of Logistics.

- JBS logistics transformation Case study.

- Growth of Industry 4.0 technologies (IoT, AI, Big Data, etc.).

KEY DRIVERS OF DIGITAL TRANSFORMATION

- Efficiency and cost reduction.

- Customer expectations for faster deliveries.

- The rise of e-commerce and omnichannel logistics.

TECHNOLOGIES SHAPING THE FUTURE OF LOGISTICS

1. Internet of Things (IoT) for real-time tracking and monitoring.

2. Artificial Intelligence (AI) for predictive analytics and automation.

3. Blockchain for transparent and secure transactions.

4. Robotics and autonomous vehicles.

1. IOT IN LOGISTICS

- Real-time tracking of goods and assets.

- Temperature and condition monitoring in cold-chain logistics.

- Smart sensors and RFID tags.

2. AI AND PREDICTIVE ANALYTICS IN SUPPLY CHAIN

- Predicting demand and optimizing routes.

- Minimizing disruptions and enhancing decision-making.

- Reducing operational costs.

3. BLOCKCHAIN IN SUPPLY CHAIN

- Ensuring transparency and security across the supply chain.

- Reducing fraud and increasing trust in supply chain transactions.

- Applications in food safety, pharmaceuticals, etc.

4. ROBOTICS AND AUTOMATION IN WAREHOUSING

- Role of autonomous robots in warehousing and inventory management.

- Improving speed and efficiency of order fulfillment.

- Reducing human errors and costs.

CASE STUDY: JBS LOGISTICS TRANSFORMATION

• How JBS uses AI, automation, and robotics to streamline its logistics operations.

CHALLENGES IN DIGITAL TRANSFORMATION

- High initial investment and implementation complexity.

- Cybersecurity risks in digital logistics.

- Resistance to change and workforce skill gaps.

TOOLS & RESOURCES CURRENT:

❑ Using Our GPS Technology System :
- Control Routing and Optimize Trip No.
- Control the temperature of Delivery.
- Control Maintenance expenses.
- Control Fuel consumption

TOOLS & RESOURCES FUTURE:

- Implement POD (proof of delivery in Spot).
- Automation the full Routing Plan.
- Automate truck utilization
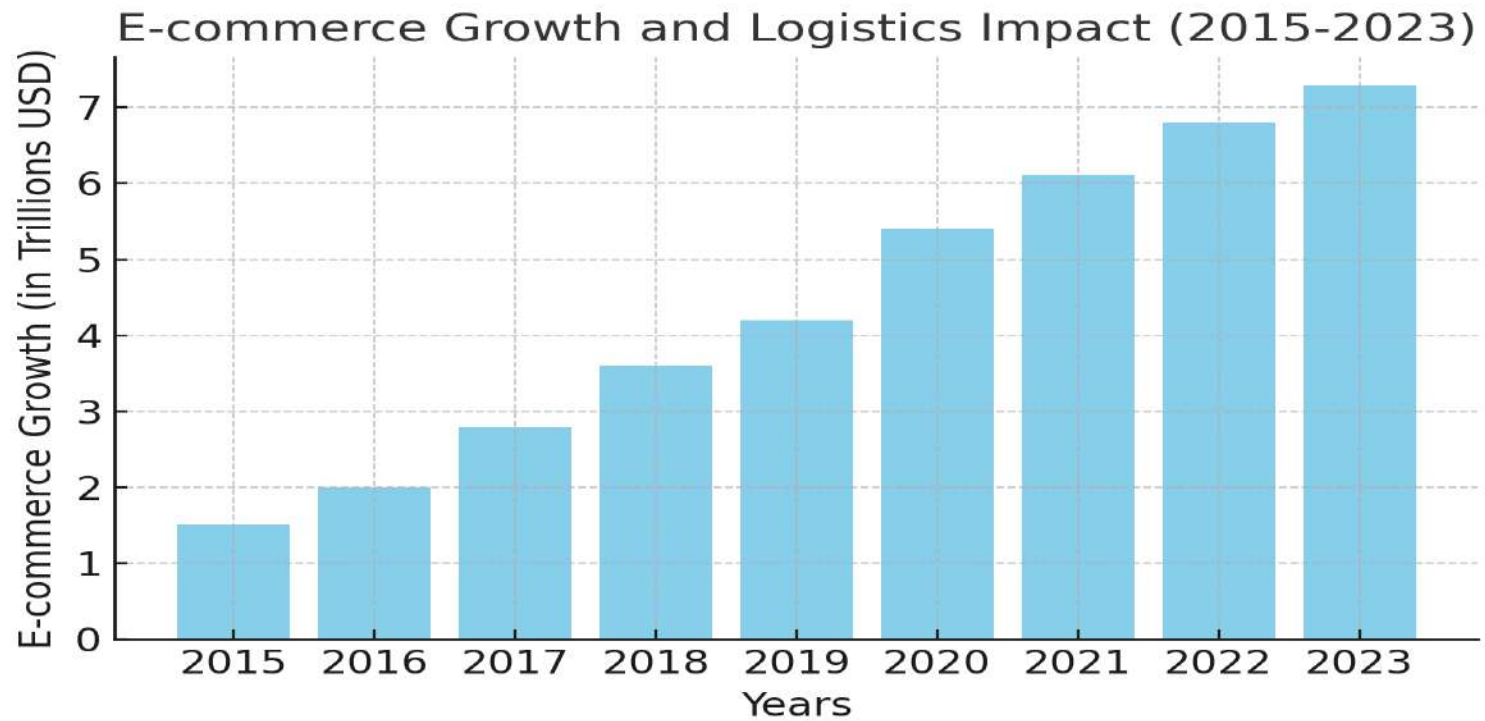- Road safety alert system
- WMS Execution.

THE FUTURE OF DIGITAL SUPPLY CHAIN

- Trends like green logistics.

- Role of sustainability and eco-friendly practices.
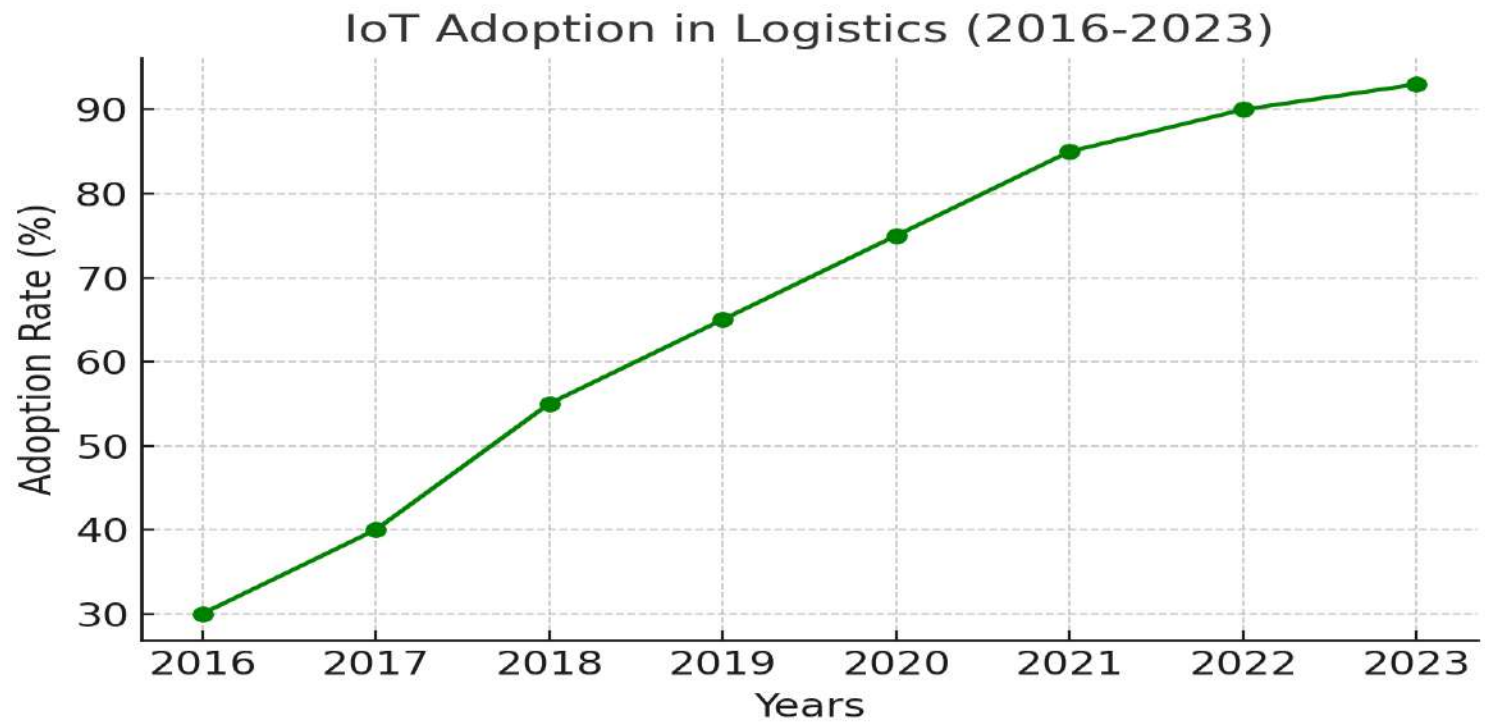
- Continued innovation in AI and robotics.

E-COMMERCE GROWTH AND LOGISTICS IMPACT

IOT ADOPTION IN LOGISTICS

CONCLUSION

- Importance of digital transformation in logistics.

- Adopt new technologies for better efficiency and competitiveness.