

# TechWorld 2025: Big Data, Computer Science and Information Technologies

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## **The Convergence of AI and Supply Chain Resilience: Current Practices and Future Paradigms**

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The integration of artificial intelligence (AI) into supply chain management signifies a transformative shift in business approaches to forecasting, planning, and operational efficiency. As organizations strive to enhance their competitive advantage and adapt to increasingly complex global markets, AI technologies present promising solutions to longstanding challenges within the supply chain domain.

During this session we examine the potential impact of AI on supply chain management, with a particular emphasis on its applications in demand forecasting, inventory optimization, and adaptive decision-making processes. By leveraging machine learning algorithms and advanced data analytics, companies are positioned to achieve unprecedented levels of accuracy in predicting market trends and consumer behavior.

Moreover, the implementation of AI-driven systems is anticipated to significantly enhance inventory management, reducing waste and optimizing stock levels across the supply chain network. As these technologies continue to evolve, the prospect of autonomous decision-making systems capable of rapid adaptation to market disruptions and changes presents an exciting frontier for supply chain resilience and agility.