3 Reimagining Supply Chains: AI-Powered Forecasting, Risk Management, and Human-AI Collaboration

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Abstract

As organizations grapple with unpredictable markets and evolving digital landscapes, Logistics ecosystem optimization has become a strategic imperative for organizations seeking resilience and agility. The current study discovers the AI's transformative influence in reconfiguring Operational networks enhanced through AI-driven forecasting and intelligent automation to dynamic risk management and human-AI collaboration. With the aid of the latest theory and evidence, the study integrates major developments in machine learning-fueled intelligent systems, language processing, and generative models and analyzes their implications for forecasting, inventory control, logistics, and environmental sustainability. Convergence with AI facilitates real-time assistance to decision-making, raises transparency through extended networks, and facilitates adaptive intervention for disruption. In addition, the research highlights the future face of human-AI collaboration, focusing on how effective collaboration between algorithmic and human intelligence can lead to innovation, ethical leadership, and operational excellence. While the potential of AI is immense, the research also identifies essential challenges like data quality, interoperability, trust, and transparency. Through multi-disciplinary analysis, the paper presents a rich agenda for research on precisely how AI can be further applied to constructing intelligent, resilient, and sustainable stock chains. The conclusions highlight that AI is not a hi-tech add-on but a normal change—redefining the very essence of supply chain architecture, coordination, and strategic vision.

Keywords: Artificial Intelligence, Supply Chain Optimization, Predictive Analytics, Human-AI Collaboration, Risk Management.

Introduction

In the fast-changing world of global markets, supply chain optimisation is now a necessity for those companies that want to be agile and competitive. The pandemic, coupled with political instability, has revealed how exposed traditional logistics systems are. Traditional models typically rely on rigid planning, isolated data systems, and reactive reaction to problems. Therefore, they fail in the wake of dynamic consumer demands, unanticipated shocks, and increasingly complex international supply chains. This is exactly where artificial intelligence steps in. AI presents powerful tools with which it shall transform the entire function of supply chains from predictions and stock control to logistics and risk management. Thus capacity allowed it could process huge volumes of data promptly - making intelligent predictions by automation of mundane tasks and quick decision making (Wamba, Akter & Edwards, 2020). These capabilities do not just heighten performance but enhance resilience through problem forecasting before optimization of resource usage and attaining flexibility (Stewart, 2023).With the help of these implements in their undertakings, businesses can handle doubt while staying competitive in a more and more lively market- (Abaku, Edunjobi, & Odimarha, 2024).

Recent study presents the growing influence of artificial intelligence on different elements of the supply chain. Teixeira, Ferreiram and Ramos (2025) discuss in detail the application of AI to support sustainability, automation and general resilience. Similarly, Choi, Wallace, and Wang (2021) describe big data analytics as being at the heart of operations management, illustrating how AI-powered insights are enhancing transportation and forecasting, alongside risk assessment. Overall, these results attest to continued change in how supply chains are organized, controlled, and responded to in light of shifting demands. While organizations grapple with the challenges of digitalization and merge AI into their logistics strategy, they have to deal with daunting challenges as much as they have promising prospects. This study draws upon current theoretical and practical perspectives to investigate how AI can facilitate the creation of smart, adaptive, and sustainable supply chains.

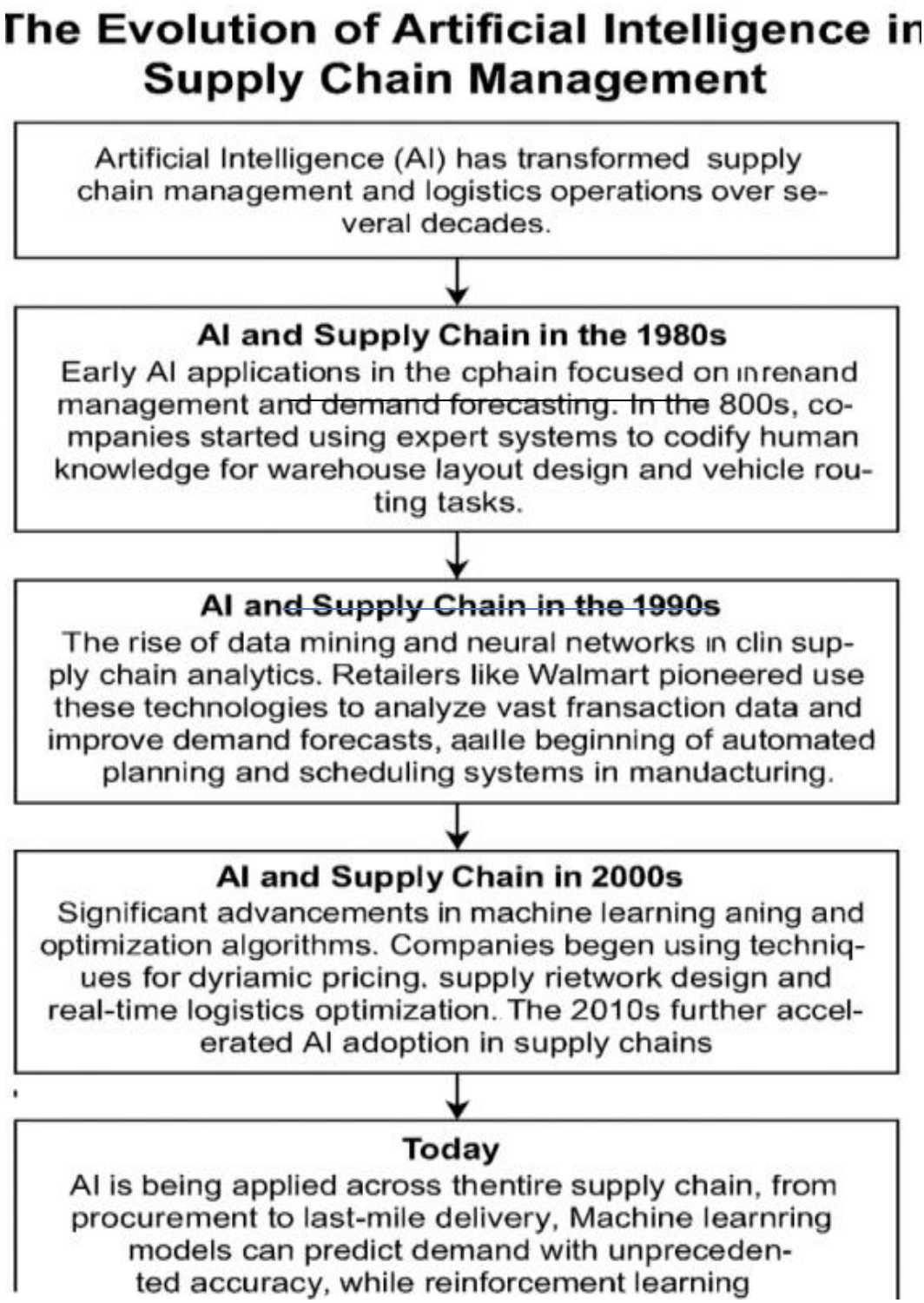

Figure 1: AI Progressions in Supply Chain Management (SCM)

Related Works

This study draws upon existing research into the ways in which intricate supply networks function and remain resilient (Ivanov & Dolgui, 2020). Its general purpose is to utilize the predictive and recommendation functionality of AI to enhance decision-making under uncertainty (Dubey et al., 2021; Smyth et al., 2024). Drawing on examples in logistics, forecasting, and inventory management, Min (2022) expounds the theoretical foundations of artificial intelligence (AI) in supply chains and its potential for automating and enhancing these processes. Blockchain integration is also more fashionable because it facilitates AI through greater transparency and traceability for the system (Queiroz et al., 2020).

Future generative AI innovations will transform practice in supply chain management by facilitating real-time scenario planning, adaptive optimisation, and more dynamic coordination (Li et al., 2024; Wu et al., 2025). AI-based optimisation in practice applications are detailed by Grover (2025), and Ivanov and Dolgui (2025) propose the Internet of Behaviours—implying that behavioural information may further extend AI-driven supply chain plans. Based on Dubey et al. (2024), benchmarking is another field that is observing a rise in the application of generative AI. The technology promises new mechanisms to gauge performance and resilience. There remain a series of challenges that must be overcome, regardless of these promising developments.

First pertaining to records we'd want to track, interoperability, (Fosso W ensuring data quality of the data-digitized AI Wave Raise 2024). Jackson et al. (2024) and Li et al. (2024) suggest capability-based frameworks with a stress on developing strong infrastructure and increased coordination among various fJackson and Li (2024) offer frameworks with an emphasis on developing strong infrastructure and greater coordination between departments—two aspects where old school supply chains tend to fall short. Although generative AI can be used to support sustainability objectives (Li et al., 2024), its application is still in the early stages and not widespread across sectors.

Meanwhile, experts such as Jackson and Li (2024) observe that supply chains of most companies continue to lack infrastructure as well as departmental coordination. They recommend policies to develop such capabilities. Generative AI can also help make supply chains sustainable (Li et al., 2024), but it is still in its early development stages and not being utilized on a universal scale to all sectors.

Table: 1 Summary Table of Key Works on AI in Supply Chain Management

References	Proposed Approach	Limitations Identified
Ivanov & Dolgui (2020)	Conceptual modeling of intertwined supply networks to extend resilience toward survivability	Limited empirical validation; lacks integration with real-time operational data
Min (2022)	Theoretical exploration of AI applications in logistic chain operatons such as predicting and logistics	Does not address generative AI; minimal focus on behavioral and ethical dimensions
Queiroz et al. (2020)	Systematic literature review on blockchain integration for transparency and traceability in SCM	Scalability and interoperability issues; limited exploration of AI-blockchain synergy
Dubey et al. (2021)	Framework for predictive maintenance using AI to enhance operational reliability	Focused narrowly on maintenance; lacks broader supply chain applicability
Smyth et al. (2024)	Systematic review and agenda-setting for AI-driven prescriptive analytics to improve resilience	Conceptual emphasis; lacks empirical studies and industry-specific deployment cases
Wu et al. (2025)	Theoretical framework outlining generative AI's transformative potential in SCM	Early-stage theorization; limited empirical support and sectoral differentiation
Grover (2025)	Application-focused study on AI-enabled optimization for improving supply chain efficiency	Optimization-centric; lacks integration with behavioral, ethical, or sustainability goals
Ivanov & Dolgui (2025)	Conceptual model introducing Internet of Behaviors to enrich supply chain decision-making	Implementation challenges; concerns around data privacy and behavioral data usage
Dubey et al. (2024)	Development of a benchmarking framework using generative AI for evaluating SCM practices	Framework lacks standardization; limited cross-sector validation
Fosso Wamba et al. (2024)	Exploratory study on ChatGPT and generative AI benefits and challenges in SCM operations	Surface-level insights; lacks technical depth and governance mechanisms
Jackson et al. (2024)	Architecture based on capabilities for using generative AI in operations and supply supply chain administration	Requires robust infrastructure; limited discussion on ethical and regulatory safeguards

Li et al. (2024)	Theoretical model emphasizing coordination and dynamism in generative AI-enabled SCM	Coordination complexity; scalability and adaptability issues in dynamic environments
Li et al. (2024)	Analysis of the effects of generative AI on sustainable supply chain performance based on practice	Underdeveloped sustainability metrics; lacks longitudinal and cross-industry evidence
Ivanov & Dolgui (2020)	Conceptual modeling of intertwined supply networks to extend resilience toward survivability	Limited empirical validation; lacks integration with real-time operational data
Min (2022)	Theoretical exploration of AI applications in supply chain functions such as forecasting and logistics	Does not address generative AI; minimal focus on behavioral and ethical dimensions
Queiroz et al. (2020)	Systematic literature review on blockchain integration for transparency and traceability in SCM	Scalability and interoperability issues; limited exploration of AI-blockchain synergy
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Artificial Intelligence in Supply Chain Optimization

New technologies added to supply chain management are bringing about a significant change. Organizations are avoiding slow, inflexible systems in favor of quick, agile ones. This section of the report highlights how these technologies—largely AI—are capable of enabling better decision-making. It also illustrates how AI can aid forecasting and provides actionable advice on how to solve actual supply chain issues.

Core Capabilities of AI in Supply Chains

Artificial intelligence enables computers to learn from experience and identify helpful patterns. In supply chain management, it helps companies make better

demand forecasting, alter delivery routes on a whim as needed, and manage inventory more effectively in real time.

- **Machine Learning and Pattern Recognition**

By processing historical and real-time data, machine learning algorithms learned to detect patterns in customer demand, supplier punctuality, and shipping delay. It empowered companies to anticipate potential issues and align their activities to rectify the issue prior to occurrence.

- **Reinforcement Learning for Adaptive Systems**

Reinforcement learning simulations reproduce different supply chain situations, allowing methods to figure out the optimum methods by experience and trial. This is especially useful in complicated, multi-agent systems where choices have to weigh cost, speed, and redundancy.

- **Autonomous process coordination and language-aware systems**

NLP makes it possible to automate communication between supply chain nodes—like deciphering provider contracts or decrypting complaints from customers—synchronizing work and decreasing human bottlenecks.

Smart AI-based Advisory Platforms

New technology is assisting supply chain managers in handling uncertainty more effectively. They take data from within the firm and external sources such as weather, international news, and market information. The data allows managers to make better decisions and act more quickly on changes.

- **On-the-fly diagnostics and alert dissemination**

Smart systems enable businesses to have their supply chains in real time, enhance their ability to react faster, and keep all of this in the open. They warn against issues such as delay in delivery or stock low in real-time so that issues may be resolved early before they bring about further delays.

- **Scenario Planning and Risk Assessment**

Advanced DSS software predicts several future alternatives, allowing managers to examine cost-vs.-speed-vs.-risk trade-offs. The ability is needed for uncertain market management and continuity.

Predictive and Prescriptive Analytics

Reasoning and prescriptive analytics are augmented with AI, allowing supply chains to progress from hindsight to foresight—and from insight to action.

- **Drawing on Data-Driven Models to Predict Market Demand**

When you actually do go back and look at history of auction numbers, seasonality, and all that kind of thing that happens outside of the business, AI models

can make predictions on demand a whole lot better than how we used to do it. You're not out of product as frequently, there's less excess trash just sitting around in warehouses, and it's an awful lot easier to keep customers happy without breaking your budget.

- **Prescriptive Analytics for Optimization**

These don't just guess what might happen—rather, they suggest what to do. That may mean changing delivery routes, shifting production schedules, or calling an extra supplier. What's valuable is that they work from real-time data and real goals. And because things don't tend to stay the same for very long, guidance also changes, which makes it easier for teams to keep up and react quickly.

Strategic Implications

The use of smart machines for supply chain optimization is not a scientific one—it is strategic. Companies that have access to AI get improved visibility, speedier response times, and more fault-tolerant operations. Furthermore, AI enables a shift from linear, smart networks with the capability of self-calibration and recursive learning.

AI-Powered Supply Chain Visibility

With today's interconnectivity in the world and fast market pressures, logistics networks prominence has come to be a precursor of operational competence and strategic agility. Visibility refers to the ability of organizations to trace behind, monitor, and observe the flow of goods, information, and finance flows throughout the whole supply chain, from raw material purchasing to delivery. Traditional systems are bound to fail while offering timely visibility, particularly in the case of complicated, multi-level networks extending across continents with a number of stakeholders in the loop. This limited transparency leaves the systems vulnerable to inefficiencies and delays in disruption response, as well as increased exposure to such threats as fraud, counterfeiting, and violations of regulations.

AI as a Catalyst for Intelligent Visibility

Artificial intelligence (AI) delivers timely, data-grounded insights across the total supply chain operation such that it becomes a revolutionary response to these challenges. AI Platforms can take in huge volumes of structured and unstructured data from a great diversity of sources including RFID tags, IoT devices, and ERP systems as well as outside information like weather or geopolitical alerts replacing legacy tracking systems dependent on static data feeds with scheduled refreshes. They are able to do pattern analysis in real time forecast anomalies and provide actionable insights using advanced analytics and machine learning algorithms. Disruptions can be predicted well ahead of time reacting fast this feature helps organizations shift the mode from reactive to proactive supply chain management.

- **Isolated Data Silos Integration**

Among the most major applications of AI in logistics, better predictability visibility enabled for through possible convergence of various data silos is. Supply chain information in the majority of firms are disparate across geographies, systems, and departments, and it is not possible to construct a picture of operations. AI algorithms are able to bridge those different datasets and provide a unified, dynamic image of the supply chain. Such group visibility promotes greater coordination between suppliers, manufacturers, distributors, and retailers, compressing lead times and enhancing the service levels. It can give advance notice of demand swings and stock shortfalls so that procurement teams can adjust their sourcing plans, and later on, real-time shipment visibility is made available so that logistics managers can re-route deliveries due to traffic congestion or port holds.

- **Improving Transparency and Traceability**

Another key element of supply chain visibility that AI fortifies is transparency. With greater pressure from customers and regulators for sustainable and responsible sourcing, organizations will need to show where and how their products arrived. Through traceability, AI technology accurately maps supply chains by tracing every node and transaction in between. It becomes extremely valuable in industries wherein origin and compliance are of high importance, i.e., electronics, food products, and drugs. By using AI in the validation of credentials for suppliers, tracking the conditions under which something is manufactured, validations of certifications, companies can build up stakeholder confidence and reduce reputational damage.

Also, AI lets get hold of sight not only over physical moves but also over cash and info deals. Wise setups can watch payment rounds spot gaps in bills and give signs on possible fraud or mistakes. NLP apps can check deals, mails, and client words to find hidden risks or chances. These capabilities marry logistics world visibility with that of the tactical and strategic decision-making worlds, permitting a coherent thread from end to end in the supply chain performance for leaders.

However welcome their advent, growing pains accompany implementing AI-driven visibility. Data quality and interoperability constitute formidable challenges when retrofitting old platforms to play nice with shiny new AI systems. Accurate, timely, consistent input data must be verified before any insights can be deemed trustworthy. Stakeholder trust improves once moral dilemmas like algorithmic bias, data privacy, and transparency in AI decision-making are addressed. The organization will also have to invest in acquiring the right talent and other infrastructures as simple components of embracing AIs: data scientists, cloud computing capability, cybersecurity solutions.

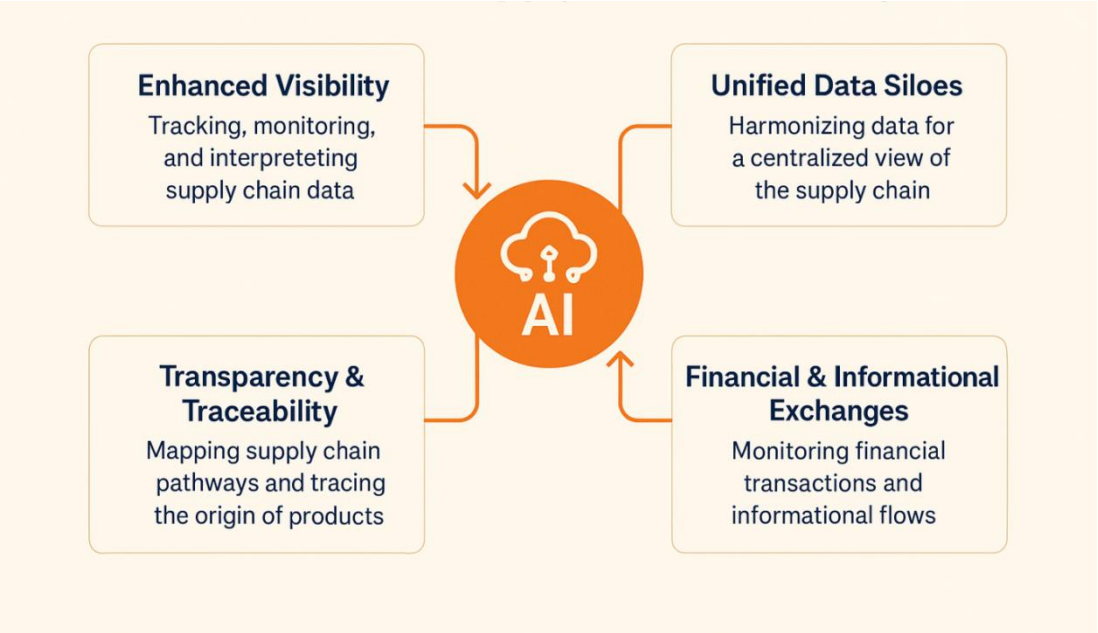

Figure 2: Machine Learning Integration in Logistics Workflow

AI-Driven Supply Chain Risk Management

Supply chain risk management is rapidly emerging as a strategic concern to businesses that wish to advance continuity, resilience, and competitiveness under conditions of a progressively uncertain world economy. Demand volatility, cybercrime, natural disasters, and geo-political tensions are among the risks that can inflict significant financial damage, disrupt operations, and destroy consumer confidence. The interactive and dynamic nature of supply chains in this age makes the traditional risk management techniques that rely mainly on past experience, human instincts, and static contingency plans obsolete. Artificial intelligence (AI) bridges this void by offering proactive risk avoidance and dynamic response as well as risk detection and analysis.

Supply chain resilience artificial intelligence applies predictive analytics, machine learning algorithms, and real-time information streams to find risk and forecast disruption beforehand. Unlike static systems that react to incident after the fact, AI models are able to scan huge sets of internal processes and external feeds—weather patterns, social media sentiment, supplier metrics, and geopolitical changes—to forecast probable risks. They allow businesses to transition from reactive firefighting to proactive planning so that risk management can become data-driven and dynamic.

- **Modeling Interdependencies and Dynamic Risk Prioritization**

One of the greatest advantages that AI has in this regard is that it can simulate complex interdependencies across supply chains. Supply chains are far from linear; there are many layers of distributors, suppliers, and service providers, each having a risk profile of their own. AI can also simulate cascading effects—i.e., the effect of a delay in raw material delivery on production schedules, buffer stocks, and downstream customer satisfaction. By defining these interdependencies, AI enables decision-makers to visualize not just discrete hazards but also system weaknesses that threaten the whole system.

Besides, AI facilitates dynamic risk ranking and scoring. Machine learning is capable of refreshing risk profiles on an auto-loop with fresh information and therefore, efforts can be directed towards the most significant risks. For example, when there is a weakening of the financial position of a supplier or political unrest in a region, AI systems are able to detect such a pattern and propose alternative sources of supply. Such prompt response is the most critical in very dynamic industries like electronics, pharma, and food logistics.

- **Scenario Planning, Communication, and Resilience Building**

Another core aspect where artificial intelligence sits in the center of the process is supply chain resilience, scenario planning, and stress testing. Organizations will be able to test the strength of their contingency planning through gap analysis in preparedness via simulations with the AI application software that runs harbor closure to cyber-attack disruption scenarios. It could then be guided by simulations to support decisions such as supplier diversification and building safety stock or even investing in digital twins for strategic assets. This lays short-term risk while building long-term resilience.

Another critical use is stakeholder coordination and risk communication. Semantic engines powered by AI understand text using advanced NLP, and software can devour news feeds, regulatory announcements, and messaging from vendors to identify applicable risk indicators. These findings can be disseminated department to department and partner to partner, promoting a more coordinated, open response to changing risks. AI-based dashboards and visualization tools further support situational awareness, allowing decision-makers to make informed decisions under conditions of high stress.

In addition, integrating AI into current risk management practices involves organizational and cultural change, such as re-skilling teams, re-casting work flows, and facilitating ethical governance of AI systems. Algorithmic transparency and accountability for results are needed in order to establish trust with stakeholders.

Human-AI Collaboration in Supply ain Management

The use of AI in supply chain management does not aim to replace humans but to enhance them in their tasks. AI machines excel at observing a lot of data, learning patterns, and being good predictors of what comes next. they include an intuitive sense of the situation, and moral judgment, and it is a superior form of decision-making. Artificial intelligence can see unexpected patterns of demand, but only the human analyst will know if changes are for the seasons, politics, or advertising. This integration enables companies to return to work faster and more accurately after issues. Artificial intelligence can create several different alternatives in real-time and give decision-makers multiple options based on fact. Individuals then weigh these options based on their long-term strategy, plans, and needs of stakeholders. As a result of this cooperation, repeat supply chains become responsive, proactive systems.

- **Streamlining Operations and Resource Deployment**

Improved process precision and process optimization are among the most notable measurable advantages of human-AI collaboration. Ineffective processes like inventory management, order processing, and routing optimization can be optimized with AI-based software. Because they keep learning from fresh data as well as past trends, such systems make real-time changes in an attempt to maximize production with minimal waste. So that automation is ever in coordination with corporate objectives as well as moral criteria, humans must be accountable for these systems. A machine learning may produce a recommendation against deliveries for the sake of cost savings, but a human supervisor would make a decision to override it in the interest of sustainability or customer satisfaction. Supply chain functions can be lean and ethical due to this tension between algorithmic improvement and human ethics. By giving managers better visibility into suppliers' performance, lead times, and level of risk exposure, AI also becomes strategically wiser in the aspect of resource allocation as it empowers them to make wise future decisions.

- **Managing the Issues of Trust and Transparency**

Trust. That would probably be the most important of all. Supply chain managers cannot take recommendations made by AI if the rationale for a particular choice is not well articulated. Where transparency can easily generate resistance, misalignment, and inadequate utilization of the real capabilities of AI, organizations must invest further in explainable models that will be able to provide reasons for decision-making. Education solutions disabusing people of how AI functions and digital literacy among supply chain personnel are equally vital. Data quality and bias. Low quality inputs result in biased output because an AI system is only as smart as the inputs it is given. Human oversight in data source authentication, anomaly correction, and ensuring that AI models learn from the real world. Lastly, it all calls for

the development of a partnership culture—humans and machines learning from one another—required to unlock the optimum potential of AI in supply chain management.

- **Fostering Innovation and Strategic Agility**

When artificial intelligence and human work together, the supply chains become a fount of innovation. Artificial intelligence can fill in by finding value through large amounts of data on consumer patterns, industry trends, and competitor actions. Humans take these ideas and make new partnerships, products, and business models because of their creativity and contextual understanding of the subject matter. For example, if AI picks up on increased demand for eco-friendly packaging material from one region of the country it can notify supply chain managers to return and restructure their logistics or source even more environmentally friendly sources. This level of strategic agility is what matters in a world of uncertainty today. Similarly, humans plus AI working together can deliver continuous improvement. To improve models to better, truer, and more responsive models to meet new conditions, strong loops between human opinion and AI results are very valuable. By implementing the cyclical process, organisations foster leadership, cultural, and supply chain resilience.

Conclusion

By enabling faster response and propelling better decision-making, AI transforms supply chains. AI enables organisations to control uncertainty by streamlining logistics, providing more accurate forecasts, revealing hidden patterns, and enabling risk avoidance early on. We can enhance stakeholder engagement, planning responsiveness, and gain more strategic options by connecting generative AI with behavioural data.

But paired with human intelligence, AI truly comes into its own. The secret of success lies in striking the ideal balance between speed and ethics, precision and context, and automation and judicious monitoring. We can build a future in which humans and AI move forward together by building trust, making data more trustworthy, and making systems operate well together. The future of competitive, sustainable, and eco-friendly supply chains will be characterized by that collaboration.

References

Teixeira, A. R., Ferreira, J. V., & Ramos, A. L. (2025). Intelligent supply chain management: A systematic literature review on artificial intelligence contributions. Information, 16(5), 399. https://doi.org/10.3390/info16050399

Stewart, O. (2023). AI-powered supply chain optimization: Enhancing resilience through predictive analytics. International Journal of AI, BigData, Computational and Management Studies, 4(2), 102. https://doi.org/10.63282/3050-9416.IJAIBDCMS-V4I2P102

Abaku, E. A., Edunjobi, T. E., & Odimarha, A. C. (2024). Theoretical approaches to AI in supply chain optimization: Pathways to efficiency and resilience. International Journal of Science and Technology Research Archive, 6(1), 92–107. https://doi.org/10.53771/ijstra.2024.6.1.0033

Sanders, N. R., Wood, J. D., & Croson, R. (2019). The digital supply chain: Harnessing AI for competitive advantage. Journal of Business Logistics, 40(3), 229–240.

Wamba, S. F., Akter, S., & Edwards, A. (2020). AI-enabled decision support systems in supply chain management: A review and research agenda. *International Journal of Information Management*, 52, 102064.

Choi, T. M., Wallace, S. W., & Wang, Y. (2021). Big data analytics in operations management. *Production and Operations Management*, 30(3), 839–860.

Ivanov, D., & Dolgui, A. (2020). Viability of intertwined supply networks: Extending the supply chain resilience angles toward survivability. *International Journal of Production Research*, 58(10), 2904–2915.

Min, H. (2022). Artificial intelligence in supply chain management: Theory and applications. *Journal of Supply Chain Management*, 58(1), 5–18.

Queiroz, M. M., Telles, R., & Bonilla, S. H. (2020). Blockchain and supply chain management integration: A systematic review of the literature. *Supply Chain Management: An International Journal*, 25(5), 641–654.

Dubey, R., Gunasekaran, A., Childe, S. J., & Papadopoulos, T. (2021). Artificial intelligence for predictive maintenance in supply chains: A framework and research agenda. *Computers & Industrial Engineering*, 153, 107060.

Smyth, C., Dennehy, D., Wamba, S. F., Scott, M., & Harfouche, A. (2024). Artificial intelligence and prescriptive analytics for supply chain resilience: A systematic literature review and research agenda. *International Journal of Production Research*, 62(23), 8537–8561

Wu, H., Li, G., & Ivanov, D. (2025). The transformative power of generative AI for supply chain management: Theoretical framework and agenda. *Frontiers of Engineering Management*, 12, 425–433.

13.Grover, N. (2025). AI-enabled supply chain optimization. *International Journal of Advanced Research in Science, Communication and Technology*, 28–44.

Ivanov, D., & Dolgui, A. (2025). Internet of behaviors: Conceptual model and implications for supply chain and operations management. *International Journal of Production Research*, 63(1), 1–8.

Dubey, R., Gunasekaran, A., & Papadopoulos, T. (2024). Benchmarking operations and supply chain management practices using generative AI: Towards a theoretical framework. *Transportation Research Part E: Logistics and Transportation Review*, 189, 103689.

Fosso Wamba, S., Guthrie, C., Queiroz, M. M., & Minner, S. (2024). ChatGPT and generative artificial intelligence: An exploratory study of key benefits and challenges in operations and supply chain management. *International Journal of Production Research*, 62(16), 5676–5696.

Jackson, I., Ivanov, D., Dolgui, A., & Namdar, J. (2024). Generative artificial intelligence in supply chain and operations management: A capability-based framework. *International Journal of Production Research*, 62(17), 6120–6145.

Li, L., Liu, Y., Jin, Y., Cheng, T. E., & Zhang, Q. (2024). Generative AI-enabled supply chain management: The critical role of coordination and dynamism. *International Journal of Production Economics*, 277, 109388.

19.Li, L., Zhu, W., Chen, L., & Liu, Y. (2024). Generative AI usage and sustainable supply chain performance: A practice-based view. *Transportation Research Part E: Logistics and Transportation Review*, 192, 103761.

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