Digital Supply Chain and Logistics Optimization Training Course



14 - 18 Dec 2026

Cairo

3700 € (Per Person)

Ref: #DT2695_273333

Course Introduction / Overview:

The global business landscape is undergoing a radical transformation, driven by technology and data. Traditional supply chains are evolving into complex, interconnected digital ecosystems, where efficiency, visibility, and agility are paramount for survival and growth. This course provides a comprehensive exploration of the digital supply chain and logistics optimization, moving beyond theoretical concepts to deliver practical, actionable strategies. As influential academic Martin Christopher argues in his seminal work, "Logistics & Supply Chain Management," modern competition is not between companies but between their supply chains. This principle is more relevant than ever in the digital age. This program, offered by BIG BEN Training Center, is meticulously designed to equip professionals with the skills to navigate this new paradigm. Participants will delve into key enabling technologies such as IoT, AI, and blockchain, learning how to leverage data analytics for predictive forecasting, inventory control, and network optimization. The curriculum focuses on building resilient, responsive, and sustainable supply chain operations that can withstand disruption and create a significant competitive advantage in a volatile global market.

Target Audience / This training course is suitable for:

- Supply Chain Managers and Directors.
- Logistics and Distribution Managers.
- Procurement and Sourcing Professionals.
- Operations Managers and Supervisors.
- Warehouse and Inventory Managers.
- IT Professionals involved in supply chain systems.
- Data Analysts focused on logistics and operations.
- Business Consultants specializing in supply chain transformation.
- Project Managers overseeing logistics and technology integration.

Target Sectors and Industries:

- Manufacturing and Industrial Production.
- Retail and E-commerce.
- Third-Party Logistics (3PL) and Freight Forwarding.
- Pharmaceuticals and Healthcare.
- Automotive and Aerospace.
- Fast-Moving Consumer Goods (FMCG).
- Technology and Electronics.
- Government, Public Sector, and Defense Agencies.
- Agriculture and Food Production.

Target Organizations Departments:

- Supply Chain Management.
- Logistics and Transportation.
- Procurement and Sourcing.
- Warehousing and Distribution.
- Operations Management.
- Information Technology (IT).
- Planning and Forecasting.
- Customer Service and Order Fulfillment.
- Finance and Cost Control.

Course Offerings:

By the end of this course, the participants will have able to:

- Analyze the core components and architecture of a modern digital supply chain.
- Evaluate the impact of disruptive technologies like IoT, AI, and blockchain on logistics operations.
- Implement data analytics techniques for improved demand forecasting and inventory optimization.
- Develop strategies to enhance end-to-end supply chain visibility and traceability.
- Design and manage smart warehouse operations using automation and WMS technology.
- Optimize transportation and last-mile delivery for cost efficiency and customer satisfaction.
- Formulate risk management and resilience strategies for complex global supply chains.
- Integrate sustainability and green logistics principles into supply chain design.
- Lead digital transformation initiatives within their logistics and supply chain departments.
- Utilize performance metrics and KPIs to drive continuous improvement in logistics.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, interactive, and highly practical, ensuring that participants can immediately apply their learning in a professional context. This course moves beyond traditional lectures to foster a dynamic learning environment built on active participation and real-world problem-solving. Sessions will incorporate a blend of expert-led presentations, in-depth case study analyses of leading global companies, and collaborative group workshops. Participants will engage in hands-on exercises and simulations that mirror the challenges of digital supply chain management, allowing them to test strategies for logistics optimization in a risk-free setting. Emphasis is placed on peer-to-peer learning through facilitated discussions and brainstorming sessions, enabling attendees to share experiences and gain diverse perspectives. Continuous feedback from the instructor and a focus on developing actionable plans ensure that each participant leaves with not only new knowledge but also the confidence and tools to implement tangible improvements within their organization's supply chain operations.

Course Agenda (Course Units):

Unit One: Foundations of the Digital Supply Chain

- Introduction to Supply Chain Management 4.0.
- The evolution from traditional to digital supply chains.
- Key drivers and benefits of digital transformation in logistics.
- Mapping the digital supply chain ecosystem.
- Core components: visibility, agility, and orchestration.
- Understanding the role of data as a strategic asset.
- Challenges and barriers to digital adoption.

Unit Two: Enabling Technologies in Modern Logistics

- The Internet of Things (IoT) for real-time tracking and monitoring.
- Artificial Intelligence (AI) and Machine Learning (ML) in forecasting.
- Blockchain for transparency, security, and traceability.
- Cloud computing and SaaS models for SCM platforms.
- Robotics and automation in warehousing.
- Digital twins for supply chain simulation and modeling.
- Big data infrastructure for logistics analytics.

Unit Three: Data Analytics and Supply Chain Intelligence

- Leveraging big data for strategic decision-making.
- Predictive analytics for demand sensing and inventory management.
- Prescriptive analytics for logistics optimization.
- Developing key performance indicators (KPIs) for the digital age.
- The concept and application of a supply chain control tower.
- Techniques for data visualization and reporting.
- Ensuring data quality and governance in the supply chain.

Unit Four: Optimizing Core Logistics and Procurement Functions

- Digital procurement and strategic sourcing (Procurement 4.0).
- Smart warehousing: automation, WMS, and robotics.
- Intelligent Transportation Management Systems (TMS).
- Strategies for optimizing last-mile delivery.
- Managing reverse logistics in an e-commerce environment.
- Network design and optimization in a digital context.
- Collaborative planning, forecasting, and replenishment (CPFR).

Unit Five: Strategy, Resilience, and Future Trends

- Building a resilient and agile supply chain.
- Supply chain risk management and mitigation strategies.
- Integrating sustainability and green logistics principles.
- The circular economy and its impact on supply chain design.
- Ethical considerations in the automated supply chain.
- Change management for successful digital transformation.
- The future of logistics: autonomous vehicles, drones, and hyper-automation.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

As supply chains become increasingly automated and data-driven, what is the evolving role of human decision-making and ethical considerations in logistics management?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by offering a holistic and strategic perspective on digital supply chain management, moving beyond a narrow focus on individual technologies. While many programs concentrate solely on the technical aspects of tools like AI or blockchain, this curriculum emphasizes the critical integration of technology, process, and strategy. It is built on the academic principle that technology is an enabler, not a solution in itself. The content is designed to bridge the gap between IT and operations, empowering participants to not only understand new technologies but also to build a compelling business case for their adoption and lead change management effectively. Furthermore, the course places a strong emphasis on contemporary challenges such as supply chain resilience and sustainability, equipping professionals with the foresight to build robust and ethical operations. Instead of just teaching software functionalities, we focus on developing the analytical and strategic thinking skills required to design, manage, and continuously optimize the complex, data-rich supply chains of the future, ensuring a lasting and transferable skill set.