Training Course on Supply Chain Digitalization and Resilience

Professional Development Training Course Outline

Category	CEOs and Directors	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today's volatile global landscape, characterized by unprecedented **disruptions** and rapid technological advancements, the imperative for **supply chain digitalization** and **enhanced resilience** has never been more critical. Organizations face constant challenges from geopolitical shifts, climate change impacts, cyber threats, and evolving consumer demands. This course provides a comprehensive deep dive into leveraging **cutting-edge technologies** and strategic frameworks to transform traditional supply chains into **agile, transparent, and robust Digital Supply Networks (DSNs)**. Participants will gain actionable insights to proactively manage risks, optimize operations, and foster a **sustainable competitive advantage** in an increasingly interconnected world.

Training Course on Supply Chain Digitalization and Resilience is designed to empower supply chain professionals with the knowledge and practical skills to navigate the complexities of modern global supply chains. By focusing on the integration of **Industry 4.0 technologies** like AI, IoT, Blockchain, and Big Data Analytics, the course will equip participants to build **predictive capabilities**, improve **end-to-end visibility**, and implement effective **risk mitigation strategies**. Through a blend of theoretical foundations and real-world **case studies**, attendees will learn to design and execute **resilient supply chain strategies** that ensure business continuity, drive operational excellence, and unlock new opportunities for **innovation and growth**.

Programme Curriculum

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Course Duration

5 days

Course Objectives

1. Understand the strategic imperative and roadmap for **digitalizing** the entire supply chain lifecycle.
2. Implement solutions for **real-time end-to-end visibility** across complex global networks.
3. Apply **Big Data Analytics, AI, and Machine Learning** for predictive forecasting and intelligent decision-making.
4. Explore **Blockchain technology** for enhanced transparency, traceability, and secure transactions.
5. Utilize **Internet of Things (IoT)** devices for asset tracking, condition monitoring, and optimized logistics.
6. Develop and execute strategies for creating **disruption-proof and agile supply chains**.
7. Identify, assess, and mitigate **supply chain risks** using advanced digital tools.
8. Understand the role of **Robotics Process Automation (RPA)** and autonomous systems in supply chain optimization.
9. Develop strategies for **multi-enterprise collaboration** and partner integration within Digital Supply Networks.
10. Explore how digitalization contributes to **environmental, social, and governance (ESG)** goals in supply chains.
11. Equip participants with the **leadership and change management skills** needed for digital supply chain transformation.
12. Address **cybersecurity threats** and implement robust protocols for protecting sensitive supply chain data.
13. Design and implement **agile methodologies** for rapid response to market fluctuations and unforeseen events.

Organizational Benefits

- Minimizing downtime and financial losses during disruptions.
- Reducing costs through automation, optimized processes, and predictive analytics.
- Gaining real-time insights for proactive and informed strategic choices.
- Building robust frameworks to anticipate, assess, and respond to various supply chain risks.
- Ensuring timely delivery and consistent product availability.

- Leveraging technology to unlock new business models and market opportunities.
- Contributing to corporate social responsibility and environmental goals.
- Better management of inventory, assets, and human capital.
- Fostering stronger, more transparent relationships with supply chain partners.

Target Audience

1. Supply Chain Managers and Directors.
2. Logistics and Operations Professionals
3. Procurement and Sourcing Specialists
4. IT and Digital Transformation Leaders
5. Risk Management Professionals
6. Business Analysts and Consultants.
7. Senior Executives.
8. Entrepreneurs and Start-up Founders.

Course Outline

Module 1: Foundations of Digital Supply Chains

- Understanding the Evolution: From traditional to Supply Chain 4.0 and Digital Supply Networks.
- Key Concepts: Digitalization, digitization, and digital transformation in supply chain.
- Drivers of Change: Geopolitical shifts, technological advancements, and consumer expectations.
- Benefits of Digitalization: Enhanced visibility, efficiency, and agility.
- Challenges of Implementation: Data silos, legacy systems, and skills gap.
- **Case Study:** *Siemens' Digital Enterprise Suite for End-to-End Visibility*: How Siemens leveraged its own digital tools to integrate its global manufacturing and supply operations, significantly improving data flow and real-time decision-making.

Module 2: Core Technologies for Digitalization

- Artificial Intelligence (AI) & Machine Learning (ML): Predictive analytics, demand forecasting, and autonomous decision-making.
- Internet of Things (IoT): Real-time asset tracking, condition monitoring, and smart warehousing.
- Blockchain Technology: Enhancing transparency, traceability, and trust across the supply chain.
- Big Data Analytics: Extracting actionable insights from vast datasets for optimization.
- Cloud Computing & Edge Computing: Enabling scalable infrastructure and distributed data processing.
- **Case Study:** *Maersk's TradeLens Platform (Blockchain)*: How Maersk, in collaboration with IBM, created a blockchain-enabled platform to digitize and streamline global shipping documentation, reducing transit times and enhancing transparency.

Module 3: Supply Chain Resilience Strategies

- Defining Resilience: The ability to withstand, adapt, and recover from disruptions.
- Risk Identification & Assessment: Mapping vulnerabilities and potential disruption points.
- Mitigation & Contingency Planning: Developing proactive strategies and backup plans.
- Building Agility & Adaptability: Implementing flexible processes and responsive networks.
- Scenario Planning & Stress Testing: Preparing for unforeseen events through simulation.

- **Case Study:** *Toyota's Multi-Tier Supplier Network Post-Fukushima*: How Toyota learned from natural disasters to diversify its supplier base and implement robust business continuity plans, making its supply chain more resilient.

Module 4: Digital Tools for Enhanced Visibility and Collaboration

- Control Towers & Digital Dashboards: Centralized platforms for real-time monitoring and insights.
- Supplier Relationship Management (SRM) Platforms: Digitalizing supplier interactions and performance management.
- Multi-Enterprise Collaboration Networks: Facilitating seamless data sharing and communication among partners.
- Digital Twin Technology: Creating virtual replicas of physical supply chain assets for simulation and optimization.
- Geospatial Analytics: Leveraging location intelligence for risk assessment and logistics optimization.
- **Case Study:** *Procter & Gamble's Control Tower Initiative*: How P&G implemented a global supply chain control tower to gain real-time visibility into inventory, demand, and shipments, enabling faster responses to disruptions.

Module 5: Optimizing Operations with Digital Solutions

- Smart Warehousing & Logistics: Robotics, automation, and intelligent inventory management.
- Digital Procurement: E-procurement, intelligent sourcing, and contract management.
- Predictive Maintenance: Using IoT and AI to anticipate equipment failures and prevent downtime.
- Last-Mile Delivery Optimization: Route planning, drone delivery, and autonomous vehicles.
- Circular Economy Principles: Integrating digital tools for waste reduction and resource efficiency.
- **Case Study:** *Amazon's Robotics and Automation in Fulfillment Centers*: How Amazon utilizes advanced robotics and automation to streamline its warehousing and fulfillment operations, enabling rapid order processing and delivery.

Module 6: Data-Driven Decision Making & Analytics

- Data Collection & Integration: Strategies for gathering and unifying disparate data sources.
- Data Quality & Governance: Ensuring accuracy, reliability, and security of supply chain data.
- Predictive & Prescriptive Analytics: Moving beyond descriptive data to forecasting and recommending actions.
- Business Intelligence (BI) Dashboards: Creating intuitive visualizations for key performance indicators (KPIs).
- Ethical AI & Data Privacy: Addressing concerns related to data usage and algorithmic bias.
- **Case Study:** *Walmart's Use of Big Data for Demand Planning*: How Walmart leverages vast amounts of sales data, social media trends, and external factors to refine its demand forecasts, minimizing stockouts and overstock.

Module 7: Cybersecurity and Risk in Digital Supply Chains

- Understanding Cyber Threats: Common attack vectors and vulnerabilities in digital supply chains.
- Implementing Cybersecurity Frameworks: Best practices for protecting data and systems.

- Data Encryption & Access Control: Securing sensitive information and limiting unauthorized access.
- Third-Party Risk Management: Assessing and mitigating risks from suppliers and partners.
- Incident Response & Recovery Planning: Developing protocols for effective crisis management.
- **Case Study:** *NotPetya Cyberattack on Maersk (2017)*: An examination of the devastating impact of the NotPetya ransomware attack on Maersk's global operations and the lessons learned in strengthening cybersecurity for critical infrastructure.

Module 8: Leading Digital Supply Chain Transformation

- Change Management in Digitalization Projects: Overcoming resistance and fostering adoption.
- Building a Digital-First Culture: Shifting mindsets and promoting innovation.
- Talent Development & Upskilling: Addressing the skills gap for the future of supply chain.
- Strategic Roadmapping: Developing a phased approach to digital transformation.
- Measuring Success & ROI: Defining metrics and demonstrating the value of digital initiatives.
- **Case Study:** *Schneider Electric's "Tailored Sustainable Connected 4.0" Program*: How Schneider Electric transformed its global supply chain through digitalization, focusing on sustainability, connectivity, and employee empowerment, leading to significant efficiency gains.

Training Methodology

This training program employs a highly interactive and practical methodology to ensure maximum learning and engagement:

- **Interactive Lectures & Presentations:** Core concepts and theoretical foundations.
- **Real-World Case Studies & Discussions:** Analyzing successful implementations and learning from challenges.
- **Group Exercises & Workshops:** Hands-on activities to apply learned concepts.
- **Simulations & Role-Playing:** Experiential learning to practice decision-making under pressure.
- **Guest Speakers:** Insights from industry leaders and experts.
- **Q&A Sessions:** Facilitating open discussion and clarification of doubts.
- **Practical Tools & Templates:** Providing actionable resources for immediate application.
- **Blended Learning Approach:** Combining in-person sessions with online resources and pre-course materials (where applicable).

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now