

Trends Shaping the Future of Supply Chain Management





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Introduction:

Supply chains, much like living organisms, need to evolve to survive. New technology, like robotic process automation RPA, cloud computing, and artificial intelligence AI, replaces weak links and alters the supply chain software market at large. This course will explore the most important trends that are impacting supply chain management today and will provide you with the knowledge and skills you need to adapt to these changes and stay ahead of the competition.

Course Objectives:

At the end of this course, the participants will be able to:

- Identify the most important trends that are shaping the future of supply chain management.
- Explain how these trends are impacting the way businesses operate.
- Develop strategies for adapting to these changes and staying ahead of the competition.
- Blockchain will see more use throughout supply chains globally.
- Supply chains will focus more on resilience and risk management to deal with post-pandemic disruptions.
- Digital supply chain twins will give decision-makers digital environments to view real-time input from their physical supply chains.
- Supply chain as a service SCaaS providers will see a boom in adoption.
- Circular supply chains will help turn operations into zero-waste environments.
- Cloud SCM solutions will continue to grow in popularity.

Targeted Audience:

- Supply chain managers
- Logistics professionals
- Business leaders
- Anyone who is interested in learning more about the future of supply chain management.

Course Outlines:

Unit 1: The Rise of Artificial Intelligence

- Artificial intelligence AI is rapidly changing the way businesses operate, and supply chain management is no exception. AI is being used to automate tasks, improve decision-making, and optimize supply chains.
- In this unit, you will learn about the different ways that AI is being used in supply chain management, and you will develop strategies for using AI to improve your own supply chain.
- Artificial intelligence AI on the other hand, attempts to mimic aspects of human intelligence and can @learn@
 on its own to assist with more complex, challenging tasks
- Al and automation are valuable tools that can speed up your supply chain and remain competitive in your niche.

Unit 2: The Growth of the Internet of Things IoT



- The Internet of Things IoT is another major trend that is impacting supply chain management. IoT devices are being used to collect data about products, shipments, and other aspects of the supply chain. This data can be used to improve visibility, reduce costs, and improve customer service.
- In this unit, you will learn about the different ways that IoT is being used in supply chain management, and you will develop strategies for using IoT to improve your own supply chain.
- The supply chain has historically been like a black box for enterprises, with customers not knowing about their goods¹ condition.
- IoT can be used to improve warehouse management, fleet tracking, inventory control, and even technological and mechanical maintenance.

Unit 3: The Demand for Sustainability:

- Consumers are becoming more and more concerned about sustainability, and businesses are responding by making their supply chains more sustainable. This includes using more sustainable materials, reducing waste, and improving energy efficiency.
- In this unit, you will learn about the different ways that businesses can make their supply chains more sustainable, and you will develop strategies for making your own supply chain more sustainable.
- Switch to alternative energy sources like hydrogen, electric or hybrids for your logistical vehicles whenever possible, and choose suppliers that use green transportation methods for your raw goods.
- Determine the biggest risk to sustainability within your product line or industry sector.

Unit 4: The Need for Agility:

- The global economy is becoming increasingly volatile, and businesses need to be able to adapt quickly to changes in demand, supply, and other factors. This requires agile supply chains that can quickly respond to changes.
- In this unit, you will learn about the different ways that businesses can make their supply chains more agile, and you will develop strategies for making your own supply chain more agile.

Unit 5:Digitization

- Digitization refers to the practice of putting information into a digital format. When it comes to securing the future of the supply chain, digitization is non-negotiable
- Digital manufacturing ecosystems are ultimately highly beneficial for your organization is bottom line.
- This is also a major trend in e-SCM or Electronic Supply Chain Management.

Unit 6: Circular Supply Chain:

- Traditionally, supply chains have been thought of as linear: starting as raw materials, goods flow in a straight line through the supply chain until they are finished, disposable products.
- The circular supply chain model certainly helps with sustainability efforts, but it also has economic benefits for your organization.
- Strengthened professional relationships and increased reliance on technology including AI and IoT can also help your efforts to operate a circular supply chain.

Unit 7: Cloud-Based Solutions:

- cloud-based software solutions are the way of the future in supply chain management.
- Traditional and localized supply chain management solutions won to tit. To stay competitive, you need accurate, agile, and accessible solutions for your organization.
- Software-as-a-Service SaaS models are beneficial for supply chain management.



Unit 8: Blockchain

- BlockchainIs database structure can set supply chains up for success with end-to-end transparency.
- Blockchain leverages chunks or Dblocks of data, whereas normal databases store their information in tables.
- Improved materials tracking from a source, through the supply chain, to the customer.
- Reductions in paperwork and administrative processes.
- Increased transactional security and visibility with suppliers and subcontractors.
- Better fraud detection and prevention for high-value items.

Unit 9: Robots and Automation:

- Autonomous mobile robots AMRs transform supply chain trends and adapt the ion of modern robotics in the supply chain comes with a few obvious benefits.
- Automation carries an, albeit understandable, the stigma for snatching up jobs
- It takes over low-value tasks while allowing you to re-focus more on high-priority tasks and challenges.