Advanced Last-Mile Delivery and E-commerce Logistics Training Course



21 - 25 Dec 2026

Barcelona

5900 € (Per Person)

Ref: #PSC2478_133227

Course Introduction / Overview:

The rapid expansion of the digital marketplace has fundamentally transformed consumer expectations, placing immense pressure on the final stage of the supply chain, the last-mile delivery. This critical phase is now the primary battleground for customer loyalty and brand reputation. This course provides a comprehensive exploration of advanced strategies for optimizing both e-commerce logistics and last-mile delivery operations. Drawing on principles discussed by leading academics like Dr. Alan McKinnon in works such as "Logistics and Supply Chain Management", the curriculum delves into the intricate balance between cost, speed, and service quality. Participants will move beyond theoretical knowledge to gain practical skills in designing resilient logistics networks, leveraging cutting-edge technology, and implementing customer-centric delivery solutions. BIG BEN Training Center has designed this program to equip professionals with the foresight to navigate urban logistics challenges, manage complex reverse logistics, and prepare for future disruptions, ensuring their organizations can thrive in the competitive e-commerce landscape. This training is an essential investment for mastering the complexities of modern fulfillment and achieving operational excellence from the warehouse to the customer's doorstep.

Target Audience / This training course is suitable for:

- Logistics and Supply Chain Managers.
- E-commerce Operations Directors.
- Warehouse and Fulfillment Supervisors.
- Distribution Center Managers.
- Supply Chain Analysts and Planners.
- Retail Operations Professionals.
- Last-Mile Delivery Coordinators.
- Procurement and Sourcing Specialists.
- Entrepreneurs in the e-commerce sector.
- Operations and Business Development Managers.

Target Sectors and Industries:

- E-commerce and Online Retail.
- Third-Party Logistics (3PL) and Fourth-Party Logistics (4PL) Providers.
- Courier, Express, and Parcel (CEP) Services.
- Traditional Retail with Omnichannel Operations.
- Fast-Moving Consumer Goods (FMCG).
- Pharmaceutical and Healthcare Distribution.
- Food and Grocery Delivery Services.
- Governmental and Public Sector Postal Services.
- Manufacturing and Distribution Companies.

Target Organizations Departments:

- Logistics and Distribution.
- Supply Chain Management.
- Operations Management.
- E-commerce and Digital Sales.
- Warehouse and Fulfillment.
- Customer Service and Experience.
- Procurement and Sourcing.
- Strategic Planning and Business Development.
- Information Technology (IT) supporting logistics systems.

Course Offerings:

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

- Develop a strategic framework for optimizing last-mile delivery operations.
- Analyze and select appropriate e-commerce fulfillment models for different business needs.
- Implement advanced inventory management techniques to reduce costs and improve service levels.
- Utilize data analytics for effective delivery route planning and network optimization.
- Evaluate and integrate emerging logistics technologies such as AI, IoT, and autonomous vehicles.
- Design and manage an efficient reverse logistics and return management process.
- Enhance the customer experience through improved delivery transparency and communication.
- Mitigate risks within the e-commerce supply chain.
- Apply sustainable and green logistics principles to last-mile operations.
- Formulate a future-proof logistics strategy that aligns with organizational goals.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, immersive, and practical, ensuring participants can translate learned concepts into actionable strategies. This course moves beyond traditional lectures, employing a blended learning approach that includes expert-led presentations, in-depth case study analyses of leading e-commerce companies, and collaborative group workshops. Participants will engage in simulation exercises that challenge them to solve real-world last-mile delivery problems, such as optimizing delivery routes and managing unexpected disruptions. Interactive sessions, facilitated discussions, and peer-to-peer learning are central to the program, encouraging the exchange of ideas and experiences. Practical problem-solving activities will focus on key areas like warehouse layout design, technology selection, and returns process mapping. Continuous feedback from the instructor and peers is integrated throughout the course to foster a dynamic and supportive learning environment, empowering attendees to master the complexities of modern e-commerce logistics with confidence.

Course Agenda (Course Units):

Unit One: Foundations of Modern E-commerce Logistics

- The evolution of e-commerce and its impact on the supply chain.
- Understanding the critical role of last-mile delivery in customer satisfaction.
- Key performance indicators (KPIs) for e-commerce logistics.
- Mapping the end-to-end e-commerce supply chain.
- Core components of a logistics network design.
- Challenges in urban logistics and last-mile delivery.
- The financial implications of an inefficient last-mile.

Unit Two: E-commerce Fulfillment and Warehouse Management

- Comparing different fulfillment models like dropshipping, 3PL, and in-house.
- Strategic design and layout of an e-commerce fulfillment center.
- Introduction to Warehouse Management Systems (WMS).
- Advanced inventory management techniques (ABC, JIT, EOQ).
- Order picking and packing optimization strategies.
- Slotting strategies for improved warehouse efficiency.
- Automation and robotics in the modern warehouse.

Unit Three: Strategic Last-Mile Delivery Optimization

- Analysis of last-mile delivery models (crowdsourcing, drones, PUDO points).
- Implementing dynamic route planning and optimization software.
- Strategies for managing and reducing transportation costs.
- Leveraging the gig economy for flexible delivery capacity.
- Real-time tracking and visibility for enhanced control.
- Managing carrier relationships and performance.
- Addressing the unique challenges of hyperlocal and on-demand delivery.

Unit Four: Enhancing Customer Experience and Managing Returns

- The link between delivery performance and customer loyalty.
- Developing effective customer communication strategies.
- Managing delivery exceptions and service recovery.
- Designing a seamless and cost-effective reverse logistics process.
- Best practices for processing, sorting, and dispositioning returns.
- Turning the returns experience into a competitive advantage.
- Data analytics for understanding return patterns and reasons.

Unit Five: Future-Proofing Logistics with Technology and Sustainability

- The role of AI and machine learning in predictive logistics.
- Implementing IoT for asset tracking and condition monitoring.
- Exploring the potential of blockchain for supply chain transparency.
- Developing a sustainable and green logistics strategy.
- Strategies for reducing the carbon footprint of last-mile delivery.
- Supply chain risk management and building resilience.
- Creating a long-term strategic roadmap for logistics innovation.

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 autonomous vehicles and drone delivery become more viable, how will they reshape not only urban logistics infrastructure but also consumer expectations and the regulatory landscape for last-mile delivery?

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

This course distinguishes itself by adopting a holistic and forward-looking perspective on e-commerce logistics, moving beyond mere operational tactics to instill a strategic mindset. Unlike programs that focus narrowly on specific software or technologies, this training emphasizes the integration of strategy, technology, and customer experience. It provides a deep dive into the complex interplay between warehouse management, inventory control, and the final mile, ensuring participants understand the entire fulfillment ecosystem. The curriculum is uniquely structured to address both current challenges and future trends, dedicating significant time to emerging technologies like AI and IoT, as well as the critical importance of sustainability in modern logistics. By focusing on real-world case studies and practical problem-solving frameworks rather than abstract theory, the course equips participants with the analytical skills to design and implement robust, flexible, and cost-effective logistics solutions. It cultivates leaders who can not only manage daily operations but also strategically navigate the future of e-commerce delivery.