



Optimizing Supply Chains with Business Intelligence Training Course

Ref: #BUI4974



Course Introduction / Overview:

This course provides a comprehensive exploration of applying Business Intelligence (BI) principles to revolutionize supply chain and logistics operations. In today's volatile market, data-driven decision-making is no longer an advantage but a necessity for survival and growth. This program is meticulously designed to bridge the gap between raw supply chain data and actionable strategic insights. Participants will journey from foundational concepts of supply chain management and BI to advanced predictive and prescriptive analytics techniques. We will delve into the strategic frameworks discussed by leading academics like Sunil Chopra in his seminal work, "Supply Chain Management: Strategy, Planning, and Operation," and demonstrate how modern BI tools can bring these strategies to life. The curriculum focuses on practical applications, enabling professionals to enhance visibility, improve forecasting accuracy, optimize inventory, reduce transportation costs, and mitigate risks. BIG BEN Training Center has developed this course to empower participants to transform their supply chains into resilient, agile, and cost-effective networks, capable of navigating complexities and capitalizing on new opportunities through the power of intelligent data analysis.

Target Audience / This training course is suitable for:



- Supply Chain Managers and Planners.
- Logistics and Distribution Coordinators.
- Business Intelligence and Data Analysts.
- Operations Managers and Supervisors.
- Procurement and Sourcing Specialists.
- Inventory Control Managers.
- IT Professionals supporting SCM systems.
- Finance and Cost Accountants focused on logistics.
- Consultants in the supply chain and logistics field.

Target Sectors and Industries:

- Manufacturing and Industrial Production.
- Retail and Consumer Packaged Goods (CPG).
- E-commerce and Direct-to-Consumer (DTC) businesses.
- Third-Party Logistics (3PL) and Freight Forwarding.
- Pharmaceutical and Healthcare Supply Chains.
- Automotive and Aerospace Industries.
- Food and Beverage Distribution.
- Governmental agencies and public sector logistics.
- Energy and Utilities sectors.

Target Organizations Departments:



- Supply Chain Management.
- Logistics and Transportation.
- Procurement and Purchasing.
- Operations and Production.
- Inventory Management and Warehousing.
- Information Technology (IT) and Data Analytics.
- Finance and Controlling.
- Strategic Planning and Business Development.
- Customer Service and Order Fulfillment.

Course Offerings:

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

- Develop and monitor key performance indicators (KPIs) for supply chain efficiency.
- Analyze supply chain data to identify bottlenecks, inefficiencies, and cost-saving opportunities.
- Apply descriptive analytics to create insightful dashboards and reports for logistics operations.
- Utilize predictive analytics for more accurate demand forecasting and inventory planning.
- Implement data-driven strategies for transportation and route optimization.
- Evaluate and manage supply chain risks using quantitative analysis techniques.
- Enhance supply chain visibility and transparency through integrated data systems.
- Leverage BI tools to support strategic sourcing and supplier performance management.
- Formulate a comprehensive BI strategy tailored to their organization's supply chain goals.
- Communicate data-driven insights effectively to stakeholders to influence strategic decisions.

Course Methodology:



The training methodology at BIG BEN Training Center is designed to be highly interactive, engaging, and application-oriented. We believe that adult learning is most effective when it combines theoretical knowledge with practical implementation. This course moves beyond traditional lectures to create a dynamic learning environment. Sessions will be a blend of expert-led presentations, real-world case study analyses of supply chain challenges, and interactive group discussions where participants can share their unique experiences and insights. A significant portion of the course is dedicated to hands-on workshops and practical exercises, allowing participants to work with sample datasets and BI concepts to solve simulated logistics problems. This experiential approach ensures that attendees not only understand the theory but also develop the confidence to apply these skills directly in their professional roles. Our instructors facilitate a collaborative atmosphere, providing continuous feedback and encouraging peer-to-peer learning to ensure a rich and comprehensive educational experience for everyone involved.

Course Agenda (Course Units):

Unit One: Foundations of BI in Supply Chain Management

- Introduction to Business Intelligence and its role in modern business.
- Core concepts of Supply Chain Management (SCM).
- The strategic intersection of BI and SCM.
- Identifying key performance indicators (KPIs) for logistics and supply chain.
- Understanding the SCOR (Supply Chain Operations Reference) model.
- Data sources in the supply chain (ERP, WMS, TMS).
- Challenges in supply chain data management and quality.



Unit Two: Data, Tools, and Descriptive Analytics

- The BI technology stack for supply chain.
- Introduction to data warehousing and data marts.
- Overview of leading BI platforms (e.g., Power BI, Tableau).
- Principles of effective data visualization for SCM.
- Building interactive supply chain dashboards.
- Techniques for inventory and warehouse performance analysis.
- Analyzing transportation and freight cost data.

Unit Three: Diagnostic Analytics for Root Cause Identification

- Moving from "what happened" to "why it happened".
- Root cause analysis techniques for supply chain disruptions.
- Analyzing the bullwhip effect with data.
- Supplier performance and procurement analytics.
- Order fulfillment and cycle time analysis.
- Cost-to-serve analysis for customer and product profitability.
- Using statistical methods to diagnose operational issues.

Unit Four: Predictive Analytics for Forecasting and Planning

- Introduction to predictive modeling in SCM.
- Advanced demand forecasting techniques (time series, regression).
- Predictive inventory management and safety stock optimization.
- Predictive maintenance for logistics assets and fleets.
- Predicting transportation delays and lead times.
- Introduction to machine learning concepts for SCM.
- Scenario planning and "what-if" analysis.

Unit Five: Prescriptive Analytics and Strategic Implementation



- Introduction to prescriptive analytics and optimization.
- Network design and route optimization models.
- Prescriptive approaches to inventory and sourcing strategies.
- Leveraging BI for supply chain risk management and resilience.
- Analytics for sustainable and green logistics.
- Developing a BI roadmap and strategy for your organization.
- The future of analytics in SCM (AI, Digital Twins, Control Towers).

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 complex and global, how can prescriptive analytics move beyond simple cost optimization to balance resilience, sustainability, and customer satisfaction simultaneously?

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



This course distinguishes itself by offering a holistic and strategic perspective that bridges the critical gap between data science and practical supply chain operations. While many courses focus narrowly on mastering a specific BI tool, our program emphasizes the application of analytical thinking to solve real-world, complex logistics challenges. We move beyond the "how" of creating dashboards to the "why" of strategic decision-making, empowering participants to ask the right questions of their data. The curriculum is uniquely structured to mirror the analytical maturity journey, progressing logically from descriptive reporting to the forward-looking power of predictive and prescriptive analytics. It incorporates case studies on contemporary issues like supply chain resilience, the bullwhip effect, and last-mile delivery optimization. By focusing on the strategic implementation of a BI framework rather than just technical skills, this course equips leaders to drive tangible business value, foster a data-driven culture within their teams, and build supply chains that are not only efficient but also agile and intelligent.