

## Data Driven Decision In Supply Chain Management

**Duration – 16 Hours**

### Program Description

This program equips supply chain and logistics professionals to make smarter, faster decisions by harnessing data, analytics, and Generative AI. Participants learn how to move from **descriptive** (what happened) to **diagnostic** (why it happened) to **predictive** (what will happen) analytics—and then combine these insights with **GenAI** for scenario exploration, decision support, and collaborative problem-solving. The course blends domain context (procurement, inventory, warehousing, transportation, distribution) with practical tooling, dashboards, and governance so learners can design repeatable, data-driven decision workflows end to end.

### Learning Goals

- Explain the role of data in logistics & supply chain decision cycles.
- Apply **descriptive analytics** to build visibility and KPI monitoring.
- Use **diagnostic analytics** for root-cause analysis and performance improvement.
- Build **predictive analytics** for demand, inventory, and risk forecasting.
- Employ **Generative AI** for scenario planning, recommendations, and decision support.
- Practice **prompt engineering** to elicit accurate, auditable outputs from LLMs.
- Integrate analytics outputs with **GenAI** workflows, dashboards, and planning tools.
- Design data pipelines and governance (quality, privacy, ethics) for reliable decisions.
- Communicate insights with clear visualizations and action-oriented narratives.
- Apply methods to real use cases through a capstone project.

### High-Level Course Topics

- Introduction to Data-Driven Decision Making in **Logistics & SCM**
- Supply Chain Data Landscape, Quality & Governance
- **Descriptive Analytics** for Supply Chain Visibility
- **Diagnostic Analytics** for Bottlenecks & Root-Cause Analysis
- **Predictive Analytics** for Forecasting & Risk
- (Optional) Prescriptive Analytics & Optimization Concepts
- **Generative AI in Supply Chain Decision Making**
- **Prompt Engineering for Decision Support**
- **Integrating Analytics with GenAI** (LLMs + BI/Planning/Apps)
- Dashboards & Data Visualization for Executives & Operators
- Use Cases: Procurement, Inventory, Warehousing, Transportation, Distribution
- Risk, Resilience & Scenario Analysis
- Responsible & Ethical AI in Supply Chains
- Capstone Project: End-to-End Data-Driven Decision Workflow

**Modules can be customized to suit client's specific needs and duration accordingly**