Data-Driven Operations Decisions Training Course

Professional Development Training Course Outline

Category	Logistics and Supply Chain Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today’s fast-paced business environment, organizations face unprecedented challenges in optimizing operational efficiency and making informed decisions. Data-Driven Operations Decisions Training Course equips professionals with the tools and techniques necessary to leverage data analytics, predictive modeling, and performance metrics to drive operational excellence. By integrating data science with operations management, participants will learn to enhance decision-making processes, reduce operational risks, and increase productivity. This course emphasizes actionable insights from real-time data, enabling organizations to achieve measurable outcomes and maintain a competitive edge.

This comprehensive training explores key areas such as demand forecasting, resource optimization, supply chain analytics, and process improvement. Participants will gain expertise in data visualization, statistical analysis, and key performance indicators (KPIs) to identify trends, anticipate operational bottlenecks, and implement effective solutions. With a mix of case studies, hands-on exercises, and collaborative projects, the course provides a practical approach to transforming data into strategic decisions. By the end of this program, participants will possess the analytical mindset and technical skills required to make high-impact, evidence-based operational decisions.

Programme Curriculum

Data-Driven Operations Decisions Training Course

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Course Objectives

1. Develop proficiency in data-driven decision-making frameworks for operations management
2. Master predictive analytics and forecasting techniques for resource planning
3. Apply statistical and machine learning models to optimize operational processes
4. Analyze operational KPIs to identify areas for improvement and efficiency
5. Utilize data visualization tools for real-time operational monitoring
6. Implement supply chain analytics for demand and inventory management
7. Conduct risk assessment and mitigation strategies using operational data
8. Leverage big data and business intelligence tools for strategic planning
9. Design and monitor operational dashboards for informed decision-making
10. Integrate IoT and sensor data for predictive maintenance and process control
11. Evaluate operational performance through simulation and scenario analysis
12. Formulate data-backed strategies for cost reduction and process improvement
13. Develop leadership skills for fostering a data-driven organizational culture

Organizational Benefits

- Improved operational efficiency and productivity
- Enhanced accuracy in forecasting and resource allocation
- Reduced operational risks and downtime
- Streamlined supply chain and inventory management
- Data-backed strategic planning and decision-making
- Cost optimization and waste reduction
- Better customer satisfaction through improved service delivery

- Real-time operational insights and monitoring
- Increased competitiveness and market responsiveness
- Cultivation of a data-driven organizational culture

Target Audiences

1. Operations Managers and Supervisors
2. Supply Chain and Logistics Professionals
3. Business Analysts and Data Analysts
4. Process Improvement Specialists
5. Production and Manufacturing Managers
6. Project Managers and Coordinators
7. IT and Business Intelligence Professionals
8. Decision-Makers and Executives

Course Duration: 5 days

Course Modules

Module 1: Introduction to Data-Driven Operations

- Overview of data-driven operations strategies
- Key performance metrics and KPIs
- Role of analytics in operational decision-making
- Data governance and quality management
- Case study: Implementing data-driven practices in manufacturing
- Hands-on activity: Identifying critical operational data

Module 2: Data Collection and Management

- Types of operational data and sources
- Data cleaning, preprocessing, and validation
- Data storage and management best practices
- Ensuring data accuracy and integrity
- Case study: Centralized data management in supply chains
- Practical exercise: Building a reliable operations dataset

Module 3: Predictive Analytics for Operations

- Introduction to forecasting models
- Time series analysis for demand prediction
- Regression models for operational trends
- Predictive maintenance analytics
- Case study: Predicting inventory shortages in retail
- Simulation activity: Forecasting operational outcomes

Module 4: Process Optimization Techniques

- Lean operations and Six Sigma methodologies
- Bottleneck analysis and process mapping
- Resource allocation and scheduling optimization
- Scenario analysis for operational decisions
- Case study: Reducing production downtime using analytics
- Practical exercise: Optimizing a process workflow

Module 5: Supply Chain and Inventory Analytics

- Demand forecasting and inventory control
- Supplier performance evaluation
- Logistics optimization and route planning
- Data-driven decision-making for procurement
- Case study: Enhancing supply chain efficiency in FMCG
- Hands-on activity: Developing an inventory analytics model

Module 6: Operational Risk and Performance Analysis

- Risk identification and mitigation strategies
- KPI monitoring for operational performance
- Operational dashboards and reporting tools
- Root cause analysis using data analytics
- Case study: Mitigating operational risks in manufacturing
- Exercise: Creating a risk assessment matrix

Module 7: Data Visualization and Dashboarding

- Principles of data visualization for operations

- Tools for operational dashboards (Power BI, Tableau)
- Creating interactive visualizations
- Monitoring operational KPIs through dashboards
- Case study: Real-time operational insights in logistics
- Hands-on activity: Building an operational dashboard

Module 8: Case Studies and Strategic Decision Making

- Review of data-driven decision-making frameworks
- Cross-industry operational case studies
- Translating analytics into strategic actions
- Data-driven leadership in operations
- Case study: Transforming decision-making in a multi-plant operation
- Group exercise: Solving an operations problem using data analytics

Training Methodology

- Instructor-led presentations and lectures
- Hands-on exercises and practical workshops
- Real-world case studies for applied learning
- Group discussions and collaborative projects
- Use of industry-standard analytics tools
- Scenario simulations for operational decision-making

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

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