Demand Forecasting and Planning with ERP Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today's highly volatile and competitive global markets, the ability to accurately anticipate customer needs is paramount for supply chain resilience and profitability. T Demand Forecasting and Planning with ERP Training Course addresses the critical intersection of Demand Forecasting and Enterprise Resource Planning (ERP) systems. Poor planning leads to the costly "bullwhip effect," resulting in excess inventory carrying costs, stock-outs, and customer dissatisfaction. Digital transformation in the supply chain mandates that professionals move beyond basic spreadsheets, adopting predictive analytics, Machine Learning (ML), and real-time Demand Sensing technologies integrated within modern ERP frameworks like SAP S/4HANA or Oracle Cloud.

This intensive program empowers participants to master sophisticated statistical forecasting methods and leverage their ERP system's full potential for Integrated Business Planning (IBP). Participants will learn to clean, transform, and analyze big data, select the optimal forecasting models, and collaboratively refine baseline forecasts through the Sales & Operations Planning (S&OP) process. By focusing on practical application and real-world case studies, this training provides the data-driven decision-making skills necessary to optimize inventory levels, enhance forecast accuracy, and ensure robust resource allocation across the entire value chain, driving significant business optimization and competitive advantage.

Programme Curriculum

Demand Forecasting and Planning with ERP Training Course

Introduction

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Course Duration

5 days

Course Objectives

1. Master the application of Predictive Analytics and Machine Learning (ML) models for superior Demand Forecasting.
2. Design and implement a robust, cross-functional Integrated Business Planning and S&OP process.
3. Utilize core ERP system functionalities for Master Data Management and demand data extraction.
4. Apply advanced Time Series Analysis and Causal Forecasting methods to handle complex demand patterns like seasonality and trend.
5. Enhance Forecast Accuracy using industry-standard error metrics such as MAPE, MAD, and WMAPE.
6. Implement Demand Sensing and Real-Time Data Analytics to quickly adapt to market shifts and volatility.
7. Define and optimize Safety Stock and Buffer Stock strategies to mitigate demand uncertainty and risk.
8. Integrate promotional activities and new product introductions (NPI) into the baseline forecast accurately.
9. Develop a Data Cleansing and transformation strategy for reliable input into forecasting models.
10. Strategically align the demand plan with Financial Planning and Resource Allocation to ensure enterprise-wide consistency.
11. Troubleshoot and refine the demand process within the ERP environment for Supply Chain Optimization.
12. Establish and monitor Key Performance Indicators (KPIs) for continuous improvement in demand management performance.
13. Lead and facilitate effective Consensus Forecasting meetings, driving accountability and buy-in across commercial and operational teams.

Target Audience

1. Demand Planners and Forecasters
2. Supply Chain Analysts and Managers
3. S&OP and IBP Process Owners
4. Inventory and Procurement Managers
5. ERP Super-Users and Functional Consultants
6. Logistics and Operations Professionals
7. Sales, Marketing, and Finance Managers involved in budgeting
8. Business Data Analysts and Reporting Specialists

Course Modules

Module 1: Foundational Demand Planning & ERP Context

- Defining Demand Planning, Forecasting, and the S&OP Cycle.
- The Bullwhip Effect and its financial impact on the organization.
- The role of the ERP system in capturing and managing Master Data
- Understanding the different types of demand and the planning hierarchy.
- Case Study: Analyzing a global CPG company’s inventory spiral due to unmanaged demand volatility and lack of a structured S&OP.

Module 2: Statistical Forecasting Methodology

- Qualitative and Quantitative Forecasting methods
- Applying fundamental Time Series Analysis
- Techniques for identifying and modeling Seasonality, Trend, and Outliers/Lifts.
- Introduction to Regression Analysis for Causal Forecasting
- Case Study: Selecting the best-fit statistical model for a retail chain's top 10 SKUs, using actual ERP historical sales data.

Module 3: Advanced Analytics and Data-Driven Forecasting

- Preparing and cleaning large ERP datasets.
- Introduction to Machine Learning algorithms for enhanced predictions.
- Implementing Demand Sensing using short-term, real-time data sources
- Utilizing ERP/BI tools for advanced Scenario Planning and simulation.
- Case Study: A technology manufacturer uses Machine Learning on both ERP sales history and external web traffic data to improve New Product Introduction (NPI) forecasting.

Module 4: ERP Integration and Process Execution

- Navigating key ERP transactions/screens for demand data extraction and forecast input
- Managing different forecast versions within the ERP system's planning area.
- The mechanics of translating the demand plan into the Master Production Schedule and MRP.
- Using ERP tools for Forecast Value Added analysis to measure planner and system contribution.
- Case Study: Simulating an end-to-end cycle in an ERP sandbox environment, from data download to forecast version upload and MRP run.

Module 5: Collaborative Planning and S&OP

- The 5-Step S&OP Process.
- Techniques for achieving Consensus Forecasting and managing cross-functional bias.
- Integrating commercial plans into the baseline forecast.
- Measuring and improving Forecast Collaboration and communication effectiveness.
- Case Study: Facilitating a simulated Executive S&OP meeting for a food and beverage company, focusing on resolving a demand-supply mismatch for a key seasonal product.

Module 6: Measuring and Managing Forecast Accuracy

- Core Forecast Error Metrics calculation
- Establishing organizational KPIs for demand planning performance and setting stretch targets.
- Tracking Forecast Bias and root-cause analysis for systematic over- or under-forecasting.

- Implementing a Continuous Improvement framework for demand process refinement.
- Case Study: A pharmaceutical distributor analyzes 12 months of forecast vs. actuals to identify a persistent positive bias in a specific sales channel, leading to a process change.

Module 7: Inventory and Risk Management

- Connecting the demand forecast to Safety Stock calculations and inventory policy settings within the ERP.
- Strategies for managing Demand Uncertainty and lead time variability.
- Product Lifecycle Management and its impact on forecasting: Launch, Growth, Decline, End-of-Life.
- Scenario Planning for supply chain disruptions and risk mitigation.
- Case Study: A high-tech component manufacturer uses probabilistic forecasting to set optimal safety stock levels in their ERP, achieving a 15% reduction in inventory while maintaining target service levels.

Module 8: The Future of Demand Planning

- Exploring IBP as the evolution of S&OP.
- The shift to Prescriptive Analytics and AI-driven decision support systems.
- The role of Big Data and external indicators in forecasting.
- Future ERP capabilities: Real-time supply chain visibility and digital twins.
- Case Study: Reviewing the transformation journey of a major e-commerce player that moved from a traditional planning model to an AI-Driven Forecasting system.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

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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