

Case Study

Enabling AI-Driven Supply Chain Planning with SAP IBP



The Client

A large manufacturing and distribution enterprise is struggling to keep pace with dynamic market demand, supply volatility, and rising inventory costs. Facing growing pressure to modernize, the organization needed to transition from reactive, spreadsheet-heavy legacy tools to predictive, scalable, and intelligent supply chain operations.

The Challenge

- Manual, disconnected planning processes unable to adapt to real-time market changes
- Inaccurate demand forecasts across multi-product lines leading to stockouts and overstock
- Limited visibility and constrained alignment across demand, supply, and inventory functions
- Slow cycle times for integrated Sales & Operations Planning (S&OP)
- Lack of predictive analytics and AI utilization for scenario planning and disruption response

About Cogent Infotech

Founded in 2003, Cogent Infotech is a trusted, award-winning firm with **23+ years** of experience, **150+** government contracts, **10,000+** projects, and a **96% employee retention rate**. Recognized as an SBA Small Business and MBE-certified, we deliver excellence through diverse talent, AI-driven recruitment, and cooperative contracts like **NASPO Value Point** and **TIPS-USA**.



Solution and Process

- **SAP IBP Deployment** Cloud-based implementation unifying demand, supply, inventory, and S&OP into a single platform, fully integrated with existing ERP systems for real-time data flow.
- **AI-Powered Demand Forecasting** Deployment of machine learning-driven demand sensing and statistical forecasting algorithms to drastically improve accuracy and reduce latency.
- **Scenario-Based What-If Analysis** Implementation of SAP IBP's simulation tools, allowing planners to proactively assess and navigate the impacts of supply disruptions and market variability.
- **Inventory Optimization** Automated, multilevel inventory optimization designed to balance customer service levels while minimizing holding costs.
- **Applied Learning & Change Management** Structured hands-on labs, workshops, and data governance frameworks using real business scenarios to ensure rapid user adoption and process standardization.

TECHNOLOGIES

- ARIA™ (Cogent AI Talent Intelligence Platform)
- SAP Integrated Business Planning (IBP)
- Machine Learning & Predictive Analytics
- ERP Systems Integration
- Cloud Analytics Dashboards

Why It Worked

- **Robust Technology** SAP IBP effectively unified siloed planning functions with powerful predictive analytics and machine learning.
- **Holistic Approach** Implementation was paired tightly with structural change management and data governance.
- **User Empowerment** Hands-on applied learning enabled planners to transition confidently from spreadsheets to AI-driven decision-making.

Outcome

- Achieved a **30% improvement** in demand forecast accuracy within 6 months
- Realized a **25% reduction** in inventory carrying costs through multilevel optimization
- Cut S&OP planning cycle times by **40%** through unified, automated workflows
- Elevated planner productivity with AI-assisted insights, automated alerts, and reduced data reconciliation
- Enhanced organizational responsiveness, enabling rapid adjustments to supply and demand volatility

