



How Digitalization & AI is Reshaping Supply Chain Performance & Profitability

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Gurmeet Bhatia

Born/raised : Delhi, India (Capital of India) – North India region

US since : 1996

Homebase: Atlanta, GA

Education Background : Organic Chemistry, Economics, Human Behavior Science, Leadership/Organization development, Cognitive Intelligence

APICS Certified: Transformation in Supply Chain



Experience Summary:

- Consulting Experience: **31 years**
- Advisory/Transformation: 20+ years
- M&A Experience: 10+ years
- Supply Chain Experience: **40 years*** 😊

datavail

We've Done this for 18 years

1000+

Consultants focused on customer
success and Business Value Outcomes



1000+

Implementation
Experience

10+

Years Cloud
Experience

500+

Customers with
average lifespan
of 7+ years

12+

Focused
Industries

\$25M

Invested \$25M in IP that **improves** the
service experience and drives
efficiency

datAvail
TechBoost

datAvail
ServiceBoost

We are professional services firm that brings advisory depth and execution expertise helping organizations achieve real business outcomes through smarter use of data, applications, and AI. Partnering with clients to move faster, decide smarter, and operate better.

Strategic Advisory



Executive Vision
Alignment



Transformation
Readiness



Business/IT Process
Improvement



Data/Integration
Strategy

Project Services



Health
Checks &
Assessments



Accelerated
Cloud
Migrations



Data
Migration and
Conversions



Cloud
Consulting



Systems
Integration



Cost-value
Analysis



Regression
Testing



Upgrades



Optimization

Operational Managed Services



Managed
Services



Migrations,
Optimization,
Support



Service
Requests



Monitoring &
Incident
Response w/ SLAs



24x7 In-Office
Coverage



Proactive
Services
(Health, Tune)

Our Technology Partners

ORACLE

Partner



databricks

Microsoft
Partner

Our Service Catalog

Every engagement begins with Advisory services — aligning strategy, roadmap, and organizational change before delivery begins. That foundation drives three integrated practices that work as one connected solution, not separate service lines.

Advisory & Transformation

Strategy | Roadmap | Change Management

Data Management and AI

Trusted Data. Actionable Intelligence.

- Data strategy & governance
- Data Integration & Validation
- Analytics, BI & AI deployment
- ML/LLMs & predictive models

Cloud Services

Efficient. Resilient. Built to Scale.

- Cloud modernization & migration
- FinOps & cost optimization
- SRE & infrastructure automation
- AI Infrastructure Services

Enterprise Applications

Apps That Evolve With the Business.

- Digital transformation & modernization with AI enablement
- Managed application services
- System upgrades & integrations

Advisory: Business , Transformation & AI

Datavail's Advisory services helps organizations navigate the full journey from strategy to realized business value — combining advisory expertise, proven operating model design, and hands-on technology enablement.

Three Pillars. One Integrated Practice.

Business Advisory

Strategy & Value Creation

- Operating model design & optimization
- Growth strategy and market expansion
- Business case development & ROI modeling
- C-suite advisory & executive alignment
- Performance benchmarking & KPI frameworks

Transformation

Enterprise Change at Scale

- Digital & process transformation roadmaps
- Change management & adoption
- Technology platform selection & integration
- Agile delivery & program management
- Organizational redesign & capability build

AI Advisory

Intelligence-Driven Advantage

- AI strategy & use case prioritization
- Generative AI implementation & governance
- Predictive analytics & ML model deployment
- AI ethics, risk & responsible AI frameworks
- Data readiness & AI enablement programs

Security & Data Compliance

Certifications maintained and externally audited annually



**SOC1 TYPE II
Certified**



**SOC2 TYPE II
Certified**



**ISO 27001:2022
Information Security
Certified**



**ISO 27701:2019
Privacy
Certified**



**PCI SAQ-D
Self Assessment**



**ISO AI Certification
(In Process)**

Operate and adhere to controls for



**Executed and adhere to
numerous HIPAA
Business Associate
Agreements**



**Fully DORA controls
compliant and
monitored**



**Global Privacy and
Personal Information
Management System
certified as ISO 27701**



**US only delivery
models for ITAR
controlled data**



Agenda

01 The Evolution of Supply Chain: From Monolithic to Digital

02 Embracing Digitalization & AI in Supply Chain Today

03 Quick Wins & Long-Term Value in Supply Chain & Finance

04 Building a Dynamic, Collaborative Supply Chain

05 Navigating Market Dynamics with AI

06 Key Principles for the Digitalization Journey

The Supply Chain Evolution

Pre-2000

MONOLITHIC

- Siloed ERPs
- Paper-based POs
- Manual forecasting
- Weeks-long cycles
- Reactive only

Rigid. Slow. Fragile.

2000–2015

INTEGRATED

- SaaS ERP & Cloud EDI
- Global trade networks
- Lean manufacturing
- BPOs & S&OP adoption
- Multi-tier visibility

**Connected. Leaner.
Exposed.**

2015–2025

DIGITAL

- IoT & real-time data
- Cloud-native platforms
- ML demand sensing
- Digital twin modeling
- COVID exposed fragility

**Faster. Smarter.
Resilient.**

NOW → FUTURE

AI-INTELLIGENT

- Autonomous planning
- Self-healing networks
- Predictive risk mgmt.
- Finance-SC convergence

**This is where you
want to be.**

⚠ COVID-19 Shock 2020 — Exposed fragility everywhere

The Cost of Standing Still: What Inaction Really Means

⚠ Organizations delaying digitalization face a compounding disadvantage — not just in cost, but in talent, customers, and market share.

\$184B

Annual global supply chain disruption cost

Businesses without AI-driven risk monitoring absorb 3× more disruption costs than peers with real-time sensing capabilities

4-7% ↓

Gross margin gap vs. AI-enabled competitors

Manual forecasting errors, excess inventory carrying costs, and suboptimal pricing erode 4-7 margin points annually vs. AI-optimized peers

69%

Customers who won't reorder after a stockout

Without AI-powered inventory sensing, stockouts and service failures silently bleed customer lifetime value and brand equity

2x-3x

Longer decision cycles without AI decision support

Manually-driven supply chain teams take 2-3× longer to respond to disruptions; top talent increasingly chooses AI-enabled organizations

The question is no longer “Can we afford to invest in Digitalization/AI?” — it is “Can we afford NOT to?”

What the Research Says: Case for Digital/AI Transformation

MIT — 1,311 Global Firms Study

+17.3pp

Revenue Growth above industry avg

+14pp

Net margin above industry avg

⚠️ Only 22% of 1,311 global firms are “future-ready.”
78% have NOT completed digital business transformation — yet.

Stanford AI Index 2025 Report

#1 ROI

Supply Chain leads majority business functions for AI returns

53%

of SC orgs reported revenue increases from Gen AI in 2024

Digital & AI investments in supply chain deliver the highest rate of positive financial returns across all business functions.

Harvard 2024 Report

23%

More profitable vs. peers with AI-mature supply chains

6x

More likely to deploy AI widely across the org

AI-enabled distribution: 5–20% logistics cost ↓, 20–30% inventory ↓, 5–15% procurement spend ↓

The research is unanimous: digitally transformed organizations grow faster, earn more, and build supply chains that withstand shocks. The window to act is now.

Supply Chain AI Maturity Assessment

Assess readiness across six core supply chain domains — from operational data foundations to autonomous AI-driven decision making

SCM DOMAIN	01 Nascent <i>AI-Unaware</i>	02 Emerging <i>AI-Exploring</i>	03 Developing <i>AI-Scaling</i>	04 Advanced <i>AI-Integrated</i>	05 Leading <i>AI-Native</i>
 Demand Planning & Forecasting	Manual, spreadsheet-based forecasting. No data integration across channels.	Statistical models in place. Some ERP integration. High error rates.	ML-based demand sensing. Multi-source data feeds. Improving accuracy. 	Real-time AI forecasting across channels. Scenario planning automated. 	Autonomous demand-shaping AI. GenAI for market signal interpretation.
 Inventory Optimization	Static reorder points. Excess inventory & frequent stockouts.	Basic safety stock models. Limited visibility across network.	Dynamic safety stock with ML. Multi-echelon inventory emerging. 	AI-driven inventory balancing. Automated replenishment across sites. 	Autonomous inventory positioning. Self-correcting supply buffers.
 Procurement & Sourcing	Manual PO processes. Reactive sourcing. No spend analytics.	Basic spend categorization. Supplier scorecards emerging. 	AI-assisted sourcing decisions. Contract analytics in use.	Predictive spend analytics. Automated supplier risk scoring. 	Autonomous procurement agents. GenAI contract negotiation support.
 Logistics & Transportation	Manual route planning. Reactive carrier selection. No visibility.	TMS in place. Basic tracking. Limited predictive ETA capability. 	AI route optimization. Carrier performance analytics. IoT integration. 	Dynamic load optimization. Predictive disruption management.	Autonomous logistics orchestration. Real-time multi-modal optimization.
 Manufacturing & Production	Fixed production schedules. Reactive maintenance. Manual QC.	Basic OEE tracking. Some preventive maintenance programs.	Predictive maintenance AI. Quality ML models. MES integration. 	AI-driven production scheduling. Closed-loop quality control.	Lights-out manufacturing AI. Digital twin with autonomous ops.
 Supplier Intelligence	Supplier data in spreadsheets. No risk visibility. Reactive issues.	Supplier portals in place. Basic risk registers. Annual reviews. 	AI supplier risk scoring. External data feeds. Tiered visibility. 	Predictive disruption alerts. Multi-tier supply mapping with AI. 	Autonomous supplier collaboration. Real-time risk & ESG intelligence.

READINESS GUIDE:

-  Nascent — Immediate Action Needed
-  Emerging — Foundation Building
-  Developing — Scale & Govern
-  Advanced — Optimize & Expand
- 

How the Industry is Embracing AI

- **Planning & Forecasting:** ML demand sensing integrates POS, weather & macro signals — 30-50% error reduction
- **Procurement Intelligence:** Automated supplier scoring, spend analytics, contract risk flags
- **Warehouse & Fulfillment:** Robotic picking, vision-AI QC, autonomous replenishment
- **Transportation & Logistics:** Dynamic routing saves 15-25% fuel costs, real-time carrier scoring
- **Finance Integration:** Real-time landed cost, AI-driven working capital & cash flow models

Digitalization & AI Adoption in Supply Chain: Executive Summary

Proven Business Impact

30-50% Forecast error reduction	20-35% Inventory cost reduction
60-80% Faster invoice processing	15-25% Logistics cost savings

The Bottom Line for Executives

AI is no longer a pilot project — it is core infrastructure • Supply chain + Finance convergence drives the biggest ROI • Every quarter of delay widens the competitive gap

Supply Chain & Finance: Quick Wins vs. Long-Term Value

Quick Wins

- **Automated Invoice Matching & AP Processing**
70-80% faster processing; AI-driven 3-way matching
- **ML Demand Forecasting at SKU Level**
Safety stock reduction in weeks on high-turnover SKUs
- **Supplier Portal & Collaboration Hub**
70% less email; centralized POs, ASNs & exceptions
- **Real-Time Cash Flow Dashboard**
ERP + bank + AR/AP in single unified treasury view
- **Exception-Based Replenishment Alerts**
AI flags stockout & overstock before they hit the P&L

Strategic Wins

- **Autonomous Supply Chain Planning**
Self-correcting AI-driven S&OP; human oversight for exceptions only
- **Integrated Business Planning with Finance**
Break SC-Finance silos; unified P&L-aware planning
- **Resilient Multi-Tier Supplier Network**
AI-mapped N-tier visibility; rapid re-sourcing when Tier 1 disrupts
- **Digital Twin of the Supply Chain**
Simulate “what-if” network scenarios before committing capital
- **Sustainability & ESG at Scale**
AI tracks Scope 3 emissions, carbon footprint & ethical sourcing

Datavail in Action: Hospitality Industry Digital Orchestration

Integrating Procurement, Inventory, Supply Planning, Warehouse & POS-Driven F&B Forecasting into a unified digital supply chain

What Datavail Built & Delivered	
Procurement Intelligence	Unified vendor master, AI-driven 3-way PO matching and supplier performance scoring across properties
Inventory & POS Forecasting	Real-time par-level management; ML models integrating PMS, POS & events data to predict covers and ingredient demand
Warehouse & Receiving	Digitized workflows, expiry-date tracking, FIFO enforcement, waste analytics — connected to finance for real-time COGS visibility
Finance & AP Integration	Automated invoice matching, property-level P&L visibility and supply chain cost attribution from ERP to outlet-level margin reporting

Critical KPIs & Industry Benchmarks	
8-10% Food Cost Reduction Target: 15-18%	88-93% F&B Demand Forecast Accuracy Target: ≥90% at 7-day horizon
70% PO Cycle Time Reduction From 3-5 days to <24 hrs	97% Invoice Auto-Match Rate vs. ≥95% benchmark

Outcome: 18-22% reduction in total F&B supply chain cost | Real-time property P&L visibility | Guest satisfaction improvement

Datavail in Action: Fleet, Logistics & Asset Intelligence

One of the largest auto/truck rental & logistics companies globally

What Datavail is Building & Delivering

Fleet Supply Chain Planning

AI demand sensing integrating reservation data, SLAs & utilization signals — 30-90 day vehicle class demand forecasts by depot

Asset Distribution & Rebalancing

Dynamic engine optimizes fleet repositioning across depots, minimizing deadhead miles and cost while maximizing utilization by asset class

Predictive Maintenance & Depreciation

Telematics-fed ML predicts maintenance events; usage-based depreciation model aligned to GAAP/IFRS and real-world utilization curves

Finance & Supply Chain Convergence

Single integrated P&L per asset class: revenue, maintenance cost, depreciation, repositioning & idle cost — plus AI-timed disposal recommendations

Critical KPIs & Industry Benchmarks

+11pp

Fleet Utilization Lift

From 68% to 79%+; \$M revenue impact per unit

22%

Repositioning Cost Reduction

Demand imbalances predicted 2-3 weeks ahead

9%

Depreciation Accuracy Gain

Overstatement reduced; better quarter-close P&L

6-11%

Asset Disposal Price Uplift

AI-timed disposals vs. prior process

Impact: +11pp utilization lift | 22% repositioning cost reduction | 9% depreciation accuracy improvement | Positive P&L within 6 months

10 Principles Every Organization Must Remember

1

Data before AI — clean, connected data is the foundation; AI is the multiplier

2

Start with pain, not technology — solve real business problems, not AI showcases

3

People + AI beats AI alone — augment planners, don't replace their judgment

4

Collaboration is non-negotiable — break silos between supply chain, finance & commercial

5

Measure outcomes, not outputs — track P&L impact, not AI usage metrics

6

Resilience over efficiency — build in redundancy; lean is not always mean

7

Govern your AI — model explainability, bias audits, and human override are mandatory

8

Invest in change management — the tech is the easy part; adoption is the hard part

9

Think ecosystem — your supply chain is only as smart as your partners' data sharing

10

Never stop learning — the AI landscape evolves monthly; build a continuous innovation culture

The Future of Supply Chain is Intelligent.

The question is not whether to embrace AI, it's how fast you move.

Start small. Scale fast. Never stop optimizing.

Questions? Let's continue the conversation.

