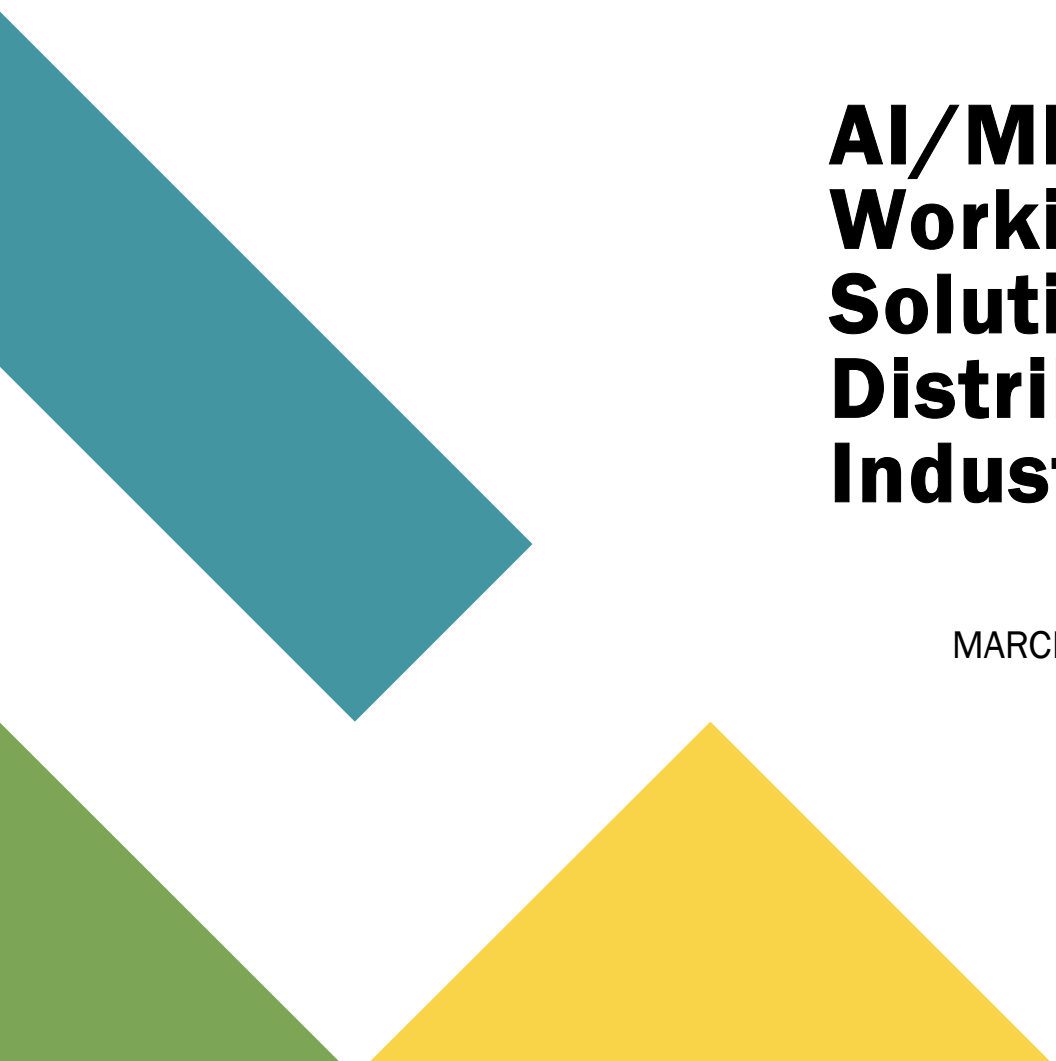




AI/ML Based Inventory & Working Capital Optimization Solution for the Distribution & Logistics Industries

MARCH 2026 – Alpha Release Target Date



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Agenda

- Business Challenges
- Our Solution
- Key Business Outcomes
- Competitive Differentiation of our Solution
- Timeline & Methodology for client on-boarding



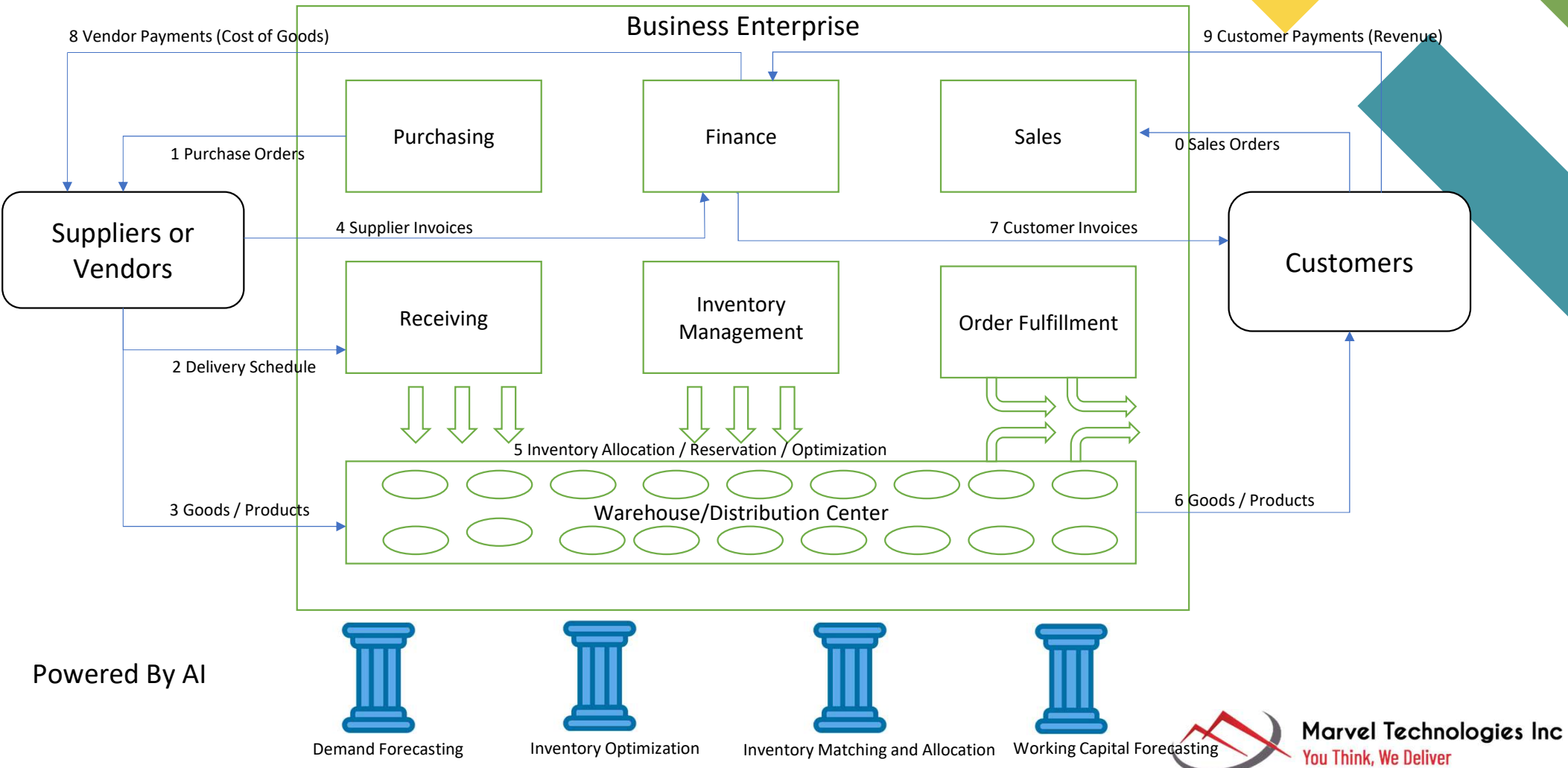
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Business Context

Distribution & Logistics Industry

Distribution and Logistics Industry – Business Context



Business Challenges

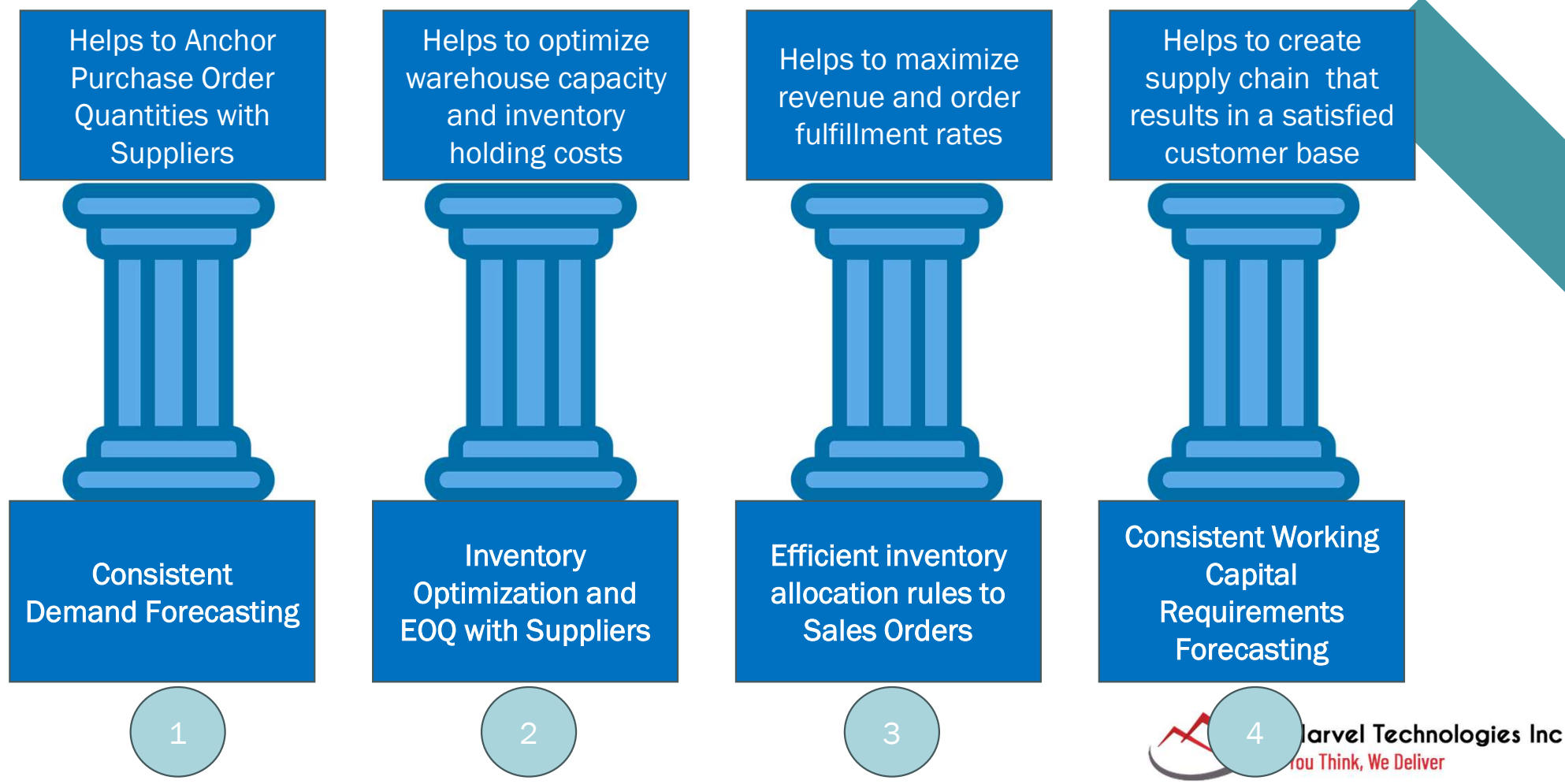
- Forecasting Customer Demand
- Sourcing Reliable Suppliers
- Maintaining optimal inventory positions in warehouses
- Minimizing 'stock-out' situations for customer orders
- Maximizing 'order fulfillment rate' for customer orders
- Optimal allocation of inventory to customer orders to maximize revenue
- Optimizing working capital needs : Service Level Vs. Working Capital Trade off



Our Solution

Enhancing your presentation

A solution built on the four pillars of Supply Chain Optimization



Solution Architecture Overview

1

AI/ML Based Demand Forecasting

- Multiple SKUs
- Multiple Warehouse Locations
- Multiple Suppliers
- Delivery Lead Time Variability
- Modeling for
 - External Regressors
 - Industry Indices

2

Supply Chain Digital Twin Engine to simulate business transaction flows

- Supplier Sourcing
- Supplier Deliveries
- Supplier Invoice Processing
- Inventory to Sales Order Allocation
- Replenishment order modeling
- Ship and Invoice Customers

3

Financial Journal Entries posting by the Digital Twin Engine to keep track of General Ledger Balances

- Inventory
- Accounts Payable
- Accounts Receivable
- Cost of Goods Sold
- Revenue
- Cash

4

Comprehensive KPI Analytics Layer

- Working Capital Trends
- Order Fill Rate
- Stock out Days
- Cash to Cash Cycle
- Inventory Turns



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Solution Components

- AI/ML Models to create accurate Demand Forecasting
- Supply-Chain Digital Twin Simulation of the business processes
- Financial Journals Posting Integration
- Reinforcement Learning Based Optimization of Inventory Positions
- Multiple SKU / Multiple Warehouse Locations Support
- KPI Dashboards that depict trends in
 - Working Capital
 - Order Fill Rate
 - Stock Out Days

Key Business Outcomes



Expected Key Business Outcomes

- 10–25% Inventory Reduction
- 2–5% Fill Rate Improvement
- 20–40% Stock-out Reduction
- 10–20 Day Cash-to-Cash Improvement

Financial ROI Model

- Assumptions:
 - Annual Revenue: \$250M
 - Inventory Reduction: 15%
 - Inventory Carrying Cost: 20%
 - Stock-out Reduction: 3% Revenue Recovery
 - Working Capital Improvement: 18 Days
 - Estimated Annual Impact: \$12M–\$18M

Competitive Differentiation of our Solution

- Finance-integrated digital twin
- Closed-loop AI optimization
- Scenario comparison engine
- Visualize KPI for what-if scenarios
- Integration with client's operational systems is least invasive
- Provides a view into what the future operations would look like through its KPI Dashboards

Versus

Traditional ERP and the integrated planning systems within these ERP systems merely providing a 'rear view mirror' view of the business with their KPI Dashboards

Timeline for a Client Proof of Validation – 6 Weeks Structured Onboarding

Phase 1 – Data Intake (Week 1)

We securely ingest:

- Supplier Master (lead times, variability, payment terms)
- Product Master (cost, price, service targets)
- Customer Master (order patterns, payment terms)
- Warehouse Master (capacity, constraints)
- Historical Sales Orders (12–24 months)
- Optional: historical PO & receipt data

No system integration required — flat file extracts are sufficient.

Phase 2 – Model Configuration (Week 2-3)

- Demand forecasting model selection
- Seasonality & volatility calibration
- Lead-time variability modeling
- Service level targets configuration
- Working capital parameters
- All assumptions validated with client stakeholders.

Phase 3 – Digital Twin Simulation (Week 4-5)

We simulate:

- Forecast-driven sourcing decisions
- Supplier delivery variability
- Inventory allocation & shipment logic
- Financial posting impact (Inventory, AR, AP, Cash)
- KPI computation:
 - Fill rate
 - Stock-out days
 - Cash-to-cash cycle

Phase 4 – Executive Validation (Week 6)

Deliverables:

- Baseline vs Optimized comparison
- Working capital release estimate
- Service improvement impact
- Sensitivity analysis (conservative vs best case)
- ROI model

Outcome:

- Quantified, data-backed business case before any production deployment.



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What The Client Receives (PoV Outputs)

Proof of Validation Deliverables

Operational Impact

- Service level improvement %
- Reduction in stock-out days
- Inventory reduction %
- SKU-level service heatmap

Financial Impact

- Working capital released (\$)
- Cash-to-cash cycle improvement (days)
- AR/AP impact analysis
- Sensitivity model (Best / Expected)

Executive Dashboard (Power BI)

Client receives interactive dashboards:

- Inventory trend
- Fill rate trend
- Cash balance trend
- Scenario comparison
- Reorder policy insights

Deployment Roadmap

If approved:

- API-based ERP integration
- Automated forecasting pipeline
- Continuous RL optimization
- Multi-warehouse rollout

In summary, our solution offers the client:



Risk-Free Engagement Model

- Fixed-fee PoV engagement
- No ERP modification
- Secure data handling
- Full transparency of modeling logic
- Clear exit criteria



And our clients can expect:

- ✓ Low-risk entry
- ✓ Measurable business outcome
- ✓ Fast time to insight
- ✓ Finance-visible value
- ✓ Data-driven credibility



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