

Turn Supply Chain Management Into a Competitive Edge

Overview of our education offering

Catena Strategies

In times of high volatility, it is time to build the truly lean and agile enterprise

- Today, many companies are faced with increasingly complex scenarios in managing their supply chains from purchasing through internal operations to distribution.
- Seamless integration of internal and external actors becomes a key for creating a high performance supply chain.
- Demand and supply patterns tend to be more volatile while customers expect shorter lead times, higher agility.
- At the same time, expectations towards financial and operational performance force companies to implement leaner processes, improve their working capital and reduce cost, all without hurting their service levels to the market.
- Companies that are successful in combining lean and agile operations with an integrated management approach that ties together the various functions of the company, enjoy much better flow and agility of their supply chain activities, resulting in better customer service, leaner inventories and better financial results.

- A global approach at their supply chain, product and information flows, from end to end
- Demand-driven pull systems protected by strategically chosen buffers
- Agile and lean, decoupled flows between buffers dampen variability and decouple lead times
- Bottlenecks, capacity constraint resources, and control points are protected and serve as anchors for planning
- Stock, capacity and time buffers create a predictable and agile system, promoting and protecting flow
- Operations, financial and Go-to-Market strategies are aligned to drive key business plan parameters for operations
- These parameters are aligned with planning and execution in a bi-directional way, ensuring that operations can purchase
- Actors from different functions closely cooperate in these processes: finance, sales & marketing, purchasing, production, distribution human resources, general management and share a common set of goals and key metrics

- These are the characteristics of a Demand Driven Adaptive Enterprise (DDAE) and a Demand Driven Operating Model (DDOM).
- The DDOM is a supply order generation, operational scheduling and execution model utilizing actual demand in combination with strategic decoupling and control points and stock, time and capacity buffers in order to create a predictable and agile system that promotes and protects the flow of relevant information and materials within the tactical relevant operational range (hourly, daily and weekly).
- A Demand Driven Operating Model's key parameters are set through the Demand Driven Sales and Operations Planning process to meet the stated business and market objectives while minimizing working capital and expedite related expenses. In consequence, the model spans from strategy to tactics to operations.

- Two learning options are available to those who want to build a strategic advantage based on superior supply chain performance with a DDOM:
- The **Demand Driven Leader Program (DDL)** equips middle, senior, and executive managers with the necessary logic, processes, measurements, and tools to implement a DDOM in their company. They learn how to design, implement and sustain a Demand Driven Supply Chain. The program spans planning, operations, distribution and finance.
- The **Demand Driven Planner Program (DDP)** equips planning personnel in supply chain planning and execution (procurement, manufacturing, distribution) and their immediate managers with the necessary logic, processes, measurements, and tools to design, plan and execute in a demand driven supply chain.
- While there is some overlap between the two programs (the material on DDMRP in the DDL is a shorter version of the DDP), the DDP provides detailed and thorough coverage of DDMRP while DDL is more in depth on the financial, measurements and Sales and Operations Planning aspects. The DDL also enables a company to build the necessary system to take full advantage of DDMRP and the demand driven philosophy in general.

The logic, processes, measurements, and tools to implement a DDOM and to design, implement and sustain a Demand Driven Supply Chain.

DEMAND DRIVEN LEADER

How to Achieve a Sustainable High Performance Supply Chain

- The 2-day Demand Driven Leader Training equips senior and mid-level operations and supply chain managers with the ability to design, implement and sustain a Demand Driven Operating Model.
- This training allows participants to build a highly effective, integrated operational leadership that enables close sensing of customer demand and fast adaptation of internal processes. It will strengthen skills in Sales and Operations Planning, Supply Chain planning and execution, finance, measurements, and control. Companies will be able to build a solid base for operational leadership in their market, thus improving its competitive position.
- This program will enable today's leaders and key personnel in organizations having supply chain or customer-oriented activity to improve the cooperation between management team members. Sales, finance and operational functions need to closely work together to create an integrated, aligned and synergistic systems so that material, information, and money can flow without any inhibition.

Upon completion, participants will be able to

- understand why planning as it is done today just doesn't work and how to fix it without reengineering the entire company;
- successfully navigate in an unpredictable market where demand is dynamic and creating a planning and execution environment that manufacturing can successfully follow while lowering your internal costs;
- create a lead time advantage over your competitors by understanding the key elements of reducing lead time;
- be able to align sales and operations through a demand driven sales and operations planning so that no sales opportunities are lost while working capital, space and capacity requirements are minimized;
- use smart metrics and financial decision making that guide strategic and tactic planning and execution towards support the flow of relevant materials and information thus improving the competitive position of your company;
- be able to identify and deal with “sacred cows” that inhibit system flow and profit potential – these are often the real limitations to flow in most systems

The program is delivered in 7 modules over 2 days.

Module 1: The Need for Change

- The Rise of Complexity
- The Importance of Flow
- Variability and its impact on flow
- Change your thinking to embrace flow across the organization

Module 2: An Overview of Designing and Operating for Flow

Module 3: Demand Driven Material Requirements Planning

- Strategic inventory positioning and buffering
- Demand driven planning and collaborative execution
- Capacity planning
- What to expect from a good buffer
- MRP, Lean and DDMRP
- Implications for Distribution Networks

Module 4: Demand Driven Scheduling and Shop Floor Execution

Control points and critical operation steps

Time and capacity buffers

Module 5: Tactical Smart Metrics for Operations

Module 6: Demand Driven Sales and Operations Planning

Module 7: Demand Driven Strategic Control, Measurement and Adaptation

The logic, processes, measurements, and tools to design, plan, and execute in a demand driven supply chain.

DEMAND DRIVEN PLANNER

Supply Chain Design, Planning, and Execution for High Service Levels With Minimum Inventories

- The 2-day Demand Driven Planner training teaches the principles of Demand Driven MRP (DDMRP) and how these principles are applied to provide a sustainable competitive advantage for a manufacturing company.
- Demand Driven MRP (DDMRP) is the supply chain design, planning and execution core of a Demand Driven Operating Model, aligning resources and working capital to actual demand.
- For the first time in over 40 years, Material Requirements Planning (MRP) – the supply chain core of every ERP – is undergoing a fundamental improvement and generating very impressive results.
- Traditional material planning and control systems use detailed and sophisticated forecasts to procure materials and push manufacturing orders through the production and distribution system to the point of consumption (“Push and Promote”).

- “Push and Promote” approaches typically result in inventory fluctuating between overstocked and stock-out. Because this either wastes resources or precious demand, inventory turns from an asset to a liability. The consequences are unacceptable inventory and service level performance and high expedite-related wastes.
- DDMRP is meant to help you resolve this material planning and synchronization challenge. It combines the strengths from MRP, DRP, Lean, and the Theory of Constraints and introduces some innovative techniques to visually signal inventory positions, and synchronize supply with the actual demand pull. It dampens variability and reduces lead times across the supply chain. DDMRP uses a “Position and Pull” logic. This speeds up the flow of relevant materials and information across the supply chain. Shortages of critical items are eliminated while overall inventory levels are dramatically reduced and expedite related expenses are minimized.
- As a result, the operational results and financial performance of a company improve dramatically.

This program will enable supply chain planners and their managers to design and manage a demand driven supply chain by positioning inventory in strategic places, protecting availability with dynamic buffers and promoting flow.

Upon completion, participants will be able to

- Understand why planning as it is done today just doesn't work and how to fix it without reengineering the entire company.
- How to deal with an unpredictable market where demand is dynamic and creating a planning and execution environment that manufacturing can successfully follow while lowering your internal costs.
- Create a lead time advantage over your competitors by understanding the key elements of reducing lead time.
- Leverage inventory in ways not understood prior which go beyond just simply placing stocks everywhere (“position, protect and pull”).
- Learn about how those firms that are pioneers in DDMRP are just simply better than their competitors in supply chain performance

Module 1: Planning in the Modern World

Module 2: The Importance of Flow

Module 3: Unlocking a Solution - Decoupling

Module 4: Becoming Demand Driven

Module 5: Strategic Inventory Positioning

Module 6: Distribution Network Positioning

Module 7: Buffer Profiles and Levels

Module 8: Dynamic Buffer Adjustments

Module 9: Demand Driven Planning

Module 10: Highly Visible and Collaborative Execution

Module 11: DDMRP and the Operational Environment

Module 12: Demand Driven Sales and Operations Planning

Module 13: Program Summary

Module 1: Planning in the Modern World

- The MRP Revolution, Evidence of a Problem, and the New Normal

Module 2: The Importance of Flow

- Plossl's First Law
- Demonstrate Flow's importance in industry
- Plossl's Law Caveat
- The Bullwhip Effect

Module 3: Unlocking a Solution - Decoupling

Module 4: Becoming Demand Driven

- “MRP versus Lean” Conflict
- What “Demand Driven” really means
- Demand Driven Operating Model
- Demand Driven MRP

Module 5: Strategic Inventory Positioning

- Six Positioning Factor
- Decoupled Lead time
- Matrix Bill of Material

Module 6: Distribution Network Positioning

- Unique Distribution Positioning Factors
- Compare and contrast demand driven to push and promote
- Positioning across a supply chain

Module 7: Buffer Profiles and Levels

- Inventory – Asset or Liability
- Buffer Profiles
- Buffer Zones
- Calculating Buffer Levels

Module 8: Dynamic Buffer Adjustments

- Recalculated Adjustments
- Planned Adjustments
- Manual Adjustments
- Factors for Planning Adjustment Factors

Module 9: Demand Driven Planning

- Part Planning Designations
- DDMRP Planning Process
- Supply Order Generation for Stocked Items
- DDDRP Supply Order Generation Considerations
- Supply Generation for Non-Stocked Items
- Decoupled Explosion
- Prioritized Share

Module 10: Highly Visible and Collaborative Execution

- Challenging Priority by Due Date
- Buffer Status Alerts
- Synchronization Alerts
- Execution Collaboration

Module 11: DDMRP and the Operational Environment

- DDMRP Strategic Buffer Criteria
- DDMRP and Safety Stock
- DDMRP and Order Point
- DDMRP and Scheduling
- DDMRP and WIP Priority Management
- Compare/contrast MRP, Lean and DDMRP

Module 12: Demand Driven Sales and Operations Planning

- DDS&OP
- Analytics for Master Settings changes and model improvement
- DDS&OP protection for critical strategic impacts

Module 13: Program Summary

- Program Summary
- Expected Benefits of DDMRP
- Get Started with DDMRP

Program attendees should review the following:

- Chapters 1-4 and 22-29 and Appendices B & C of *Orlicky's Material Requirements Planning 3/E* (Ptak and Smith, McGraw-Hill, 2011).
- Chapters 1-4, 11 and Appendix A of *Demand Driven Performance – Using Smart Metrics* (Smith and Smith, McGraw-Hill, 2013)

White papers from Demand Driven Institute:

[Lean Finds a Friend in DDMRP](#)

[Standing On the Shoulders Of A Giant](#)

[New Rules for the 21st Century Supply Chain](#)

[Replenishment Buffers vs. Safety Stock](#)

[The State of Demand Driven MRP](#)

[The Average Question](#)

[DDMRP Buffer Explanation and Simulation](#)

[Demand Driven MRP and Master Production Scheduling](#)



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We deliver consulting and training solutions to help our clients improve efficiency and effectiveness of their strategies in operations management, in manufacturing, supply chain and project management.

We are enablers and drivers of significant and sustainable benefits.

Performance. Delivered. Now.

As a leading international management consulting firm we offer services that drive measurable improvements in the efficiency and effectiveness of our clients' operations. We offer strategic and tactical expert advisory as well as on-site consulting and implementation services, supporting all facets of operations and supply chain management.

We use and deliver state-of-the-art, proven solutions and have a successful track record in improving business performance in supply chain, operations, and project organizations world-wide, creating significant competitive advantage for our clients.

With our team of experienced consultants, we look beyond the surface of the situation to deliver solutions that are tailored to our clients' unique needs and situation and that address the core problems instead of the symptoms. We work with your experts on a solution that you own. As subject matter and change management experts, we deliver a successful transition from your current mode of operation to one that delivery superiors results in a sustainable way.

Our clients improve return on capital employed, profitability, competitive position and growth with through high-performance solutions delivering shorter lead times and time to market and higher productivity at lower cost.

Our approach is deeply rooted in modern, innovative management philosophies and technology such as the Theory of Constraints, Demand Driven MRP, and visual project management.

By focusing on the key leverage points in your environment, we delivery dramatic performance improvements quickly, typically within weeks.

That's why we call it: **Performance. Delivered. Now.**

CDDP endorsed by Gartner

Benefit	Typical improvements
Improved customer service	<ul style="list-style-type: none"> Users consistently achieve 97-100% on time fill rate performance
Lead time compression	<ul style="list-style-type: none"> Lead time reductions in excess of 80% have been achieved in several industry segments
Right-sizes inventory	<ul style="list-style-type: none"> Typical inventory reductions of 30-45% are achieved while improving customer service Eliminates 'bi-modal' inventory distribution – “Too much of the wrong – too little of the right”
Lowest total supply chain cost	<ul style="list-style-type: none"> Costs related to expedite activity and false signals are largely eliminated (fast freight, partial ships, cross-ships, schedule break-ins)
Easy and intuitive	<ul style="list-style-type: none"> Planners see priorities instead of constantly fighting the conflicting messages of MRP