

Improving Inventory Performance

12 April 2016



NorthFind
PARTNERS

Transformation at work.

Welcome!



NorthFind
PARTNERS
Transformation at work.



"It was someone from corporate's idea to improve our inventory turns."

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WWW.ANDERSTOONS.COM



"I don't get it. Every time I try to take inventory, I nod off!"



NorthFind Partners



NorthFind is a global partnership of supply chain practitioners with experience spanning nearly every vertical.

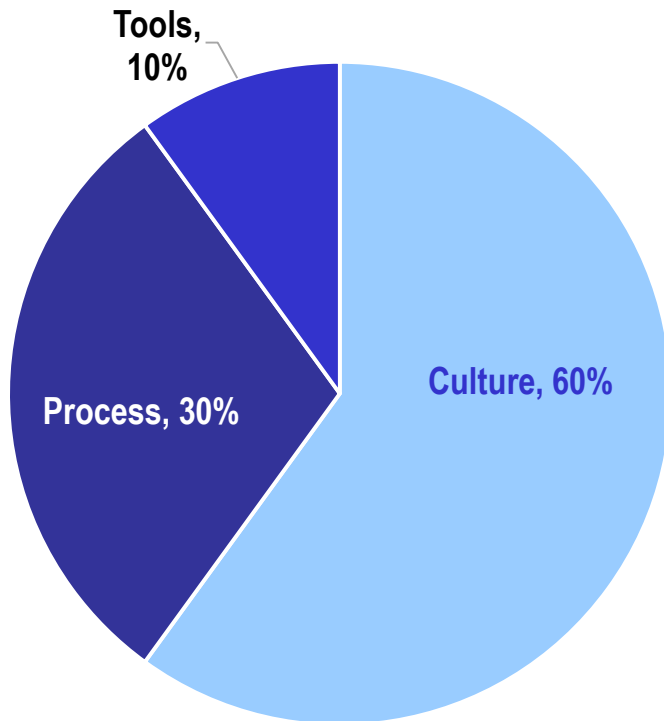
- We provide leading edge consultation driven by actionable analysis and real-world solutions.
- Our goal is to use our wealth of experience and technical expertise to quickly diagnose operational deficiencies, minimize downtime, and maximize profitability.

What clients are saying: *"...brings the most practical approach to rolling out a comprehensive Sales & Operations Planning process I've ever seen in my career...focuses on the value proposition and ROI..."* –Karon Evanoff **VP of Supply Chain, HID Global**

We are practical, comprehensive, and focused on ROI



Recipe For Success



Driving Culture Change

- Exec communication & support
- Cross functional boot camps
- Org structure/resources alignment

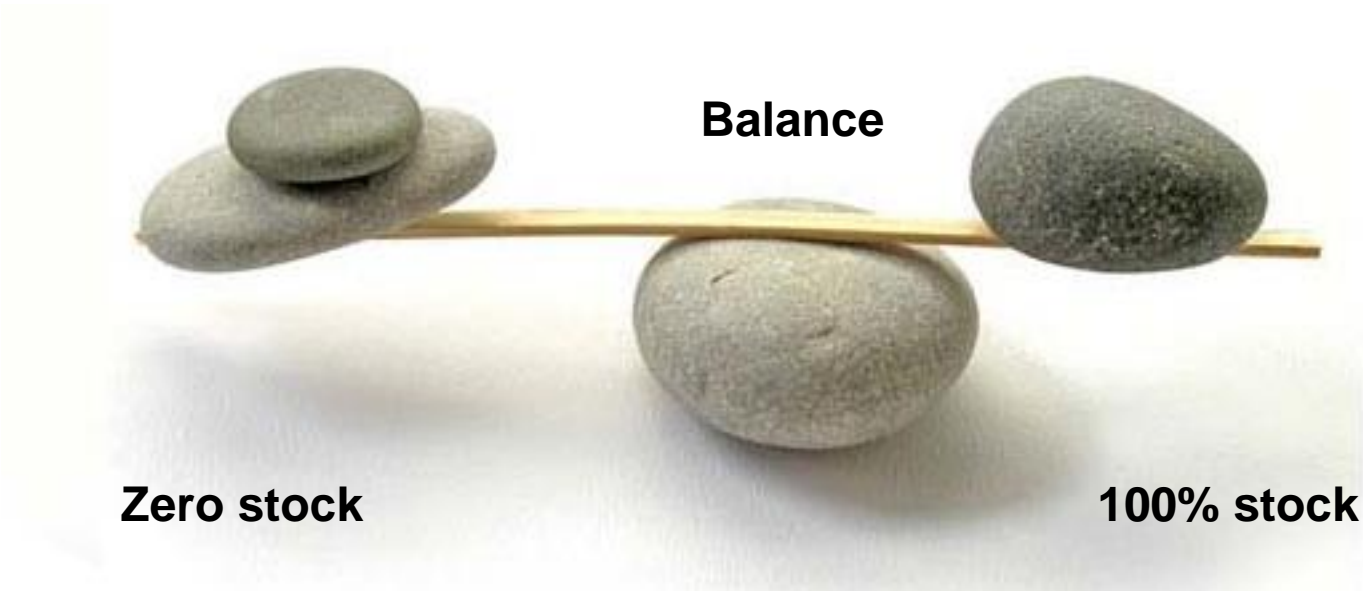
Process Alignment

- Implementing S&OP cadence
- Linking to key execution processes
- KPIs to drive accountability

Tools Integration

- Forecasting
- MRP
- RCCP

Strategic Balance of Inventory



Inventory control is a balancing act!



Three Levels of Inventory Decisions

Strategic

Supply Chain Decisions

- What are potential alternatives to Inventory
- How should the product be designed?

Tactical

Deployment Decisions

- What parts/items should be carried as inventory?
- In what form should it be maintained?
- How much of each should be held and where?

Operational

Replenishment Decisions

- How often should the inventory status be determined?
- When should a replenishment decision be made?
- How large should the replenishment be?

Steps to establishing an inventory strategy

Understand part behavior

- ▶ All parts are not created equally
- ▶ Parts that have predictable demand patterns versus those with low level of forecastability require different methods of planning.

Understand types of Inventory

- ▶ Understand by part and location what form of inventory is required at each node.
- ▶ Understanding the relative importance of the parts.

Ensure execution

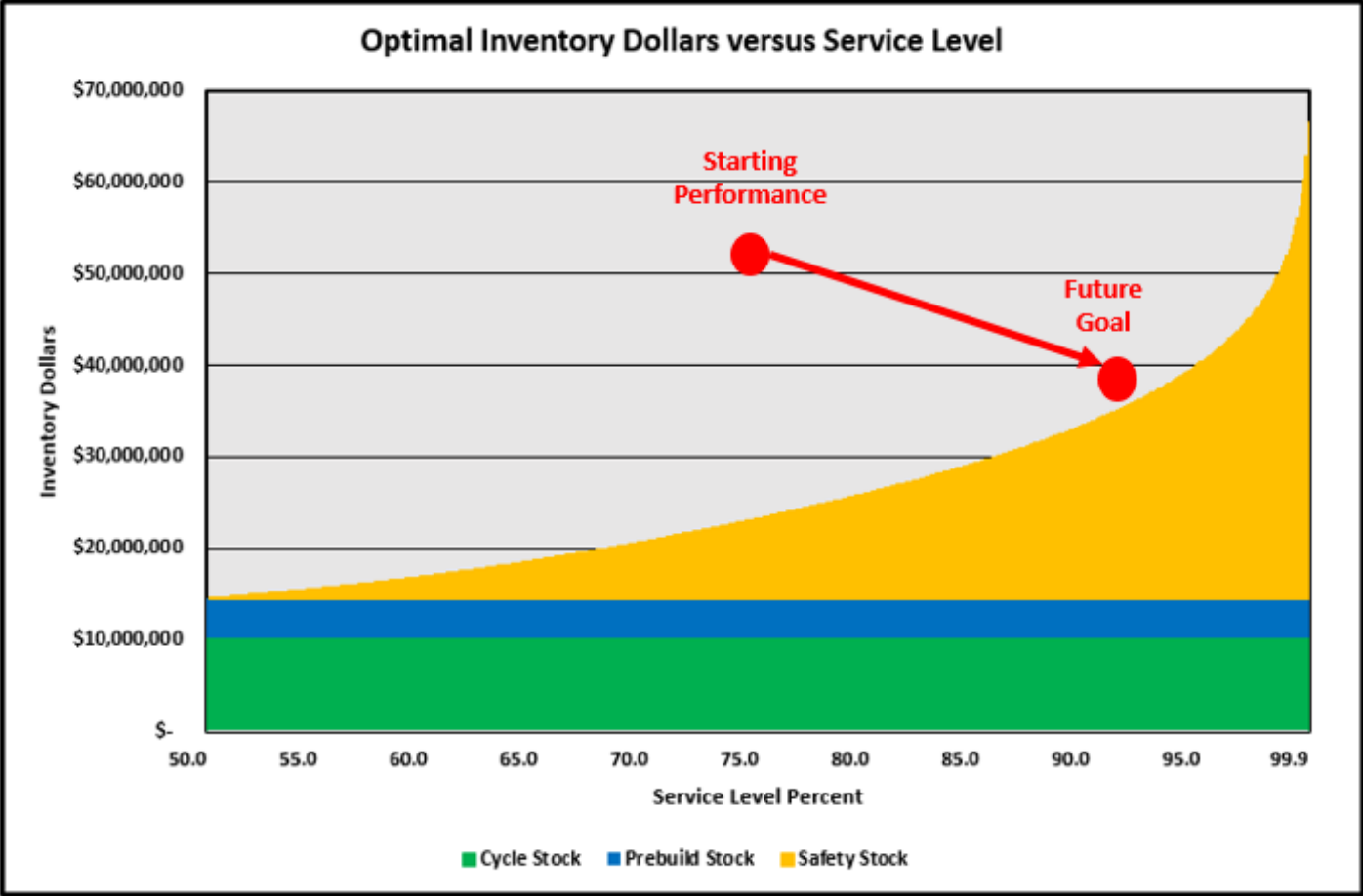
- ▶ Develop a link between the inventory plan and execution.
- ▶ Balance customer service level with inventory carrying costs.
- ▶ Ensure the systems, process and culture support execution and accountability.

Best in Class Profile

Best in class organizations maintain an efficient, effective, and accurate inventory

- 95%** Accuracy on inbound and outbound orders while reducing total landed cost
- 83%** Segment the demand forecast based on key product-customer characteristics
- 67%** Provide accurate views of inventory and ensure that “availability to promise” is extended across multi-echelon inventory whether at stores, DCs, suppliers or partners

Cycle stock & safety stock versus service level



Example – Analytics driven optimization

- **View planned cycle stock, safety stock, average inventory, turns/year and service level by part class**

Part Class	Cycle Stock \$/Month	Safety Stock \$/Month	Average Inventory \$/Month	Turns/Year	Number of Parts	Inventory Strategy	Target Service Level
A1 Parts	\$3,456,669	\$8,366,244	\$11,822,912	7.0	384	MTS	98.0%
A2 Parts	\$2,870,835	\$10,784,592	\$13,655,428	5.0	150	MTS	95.0%
A3 Parts	\$368,129	\$1,579,688	\$1,947,817	4.5	23	MTS	90.0%
A4 Parts	\$0	\$0	\$0	0.0	9	MTO	50.0%
B1 Parts	\$870,041	\$1,647,190	\$2,517,231	8.3	539	MTS	95.0%
B2 Parts	\$564,173	\$1,512,997	\$2,077,170	6.5	273	MTS	90.0%
B3 Parts	\$66,811	\$232,431	\$299,242	5.4	41	MTS	85.0%
B4 parts	\$0	\$0	\$0	0.0	59	MTO	50.0%
C1 Parts	\$456,167	\$727,141	\$1,183,308	9.3	624	MTS	90.0%
C2 Parts	\$874,808	\$1,862,139	\$2,736,948	7.7	693	MTS	85.0%
C3 Parts	\$280,747	\$874,347	\$1,155,094	5.8	244	MTS	85.0%
C4 Parts	\$0	\$0	\$0	0.0	598	MTO	50.0%
Total	\$9,808,380	\$27,586,769	\$37,395,149	6.5	3,637		94.1%

Example..

- Compare “what-if” simulations to determine your desired inventory investment and service levels
- Change “A2” and “A3” service levels to 98%

Part Class	Average Inventory \$/Month	Target Service Level
A1 Parts	\$11,822,912	98.0%
A2 Parts	\$13,655,428	95.0%
A3 Parts	\$1,947,817	90.0%
A4 Parts	\$0	50.0%
B1 Parts	\$2,517,231	95.0%
B2 Parts	\$2,077,170	90.0%
B3 Parts	\$299,242	85.0%
B4 parts	\$0	50.0%
C1 Parts	\$1,183,308	90.0%
C2 Parts	\$2,736,948	85.0%
C3 Parts	\$1,155,094	85.0%
C4 Parts	\$0	50.0%
Total	\$37,395,149	94.1%

Part Class	Average Inventory \$/Month	Target Service Level
A1 Parts	\$11,822,912	98.0%
A2 Parts	\$16,336,377	98.0%
A3 Parts	\$2,899,655	98.0%
A4 Parts	\$0	50.0%
B1 Parts	\$2,517,231	95.0%
B2 Parts	\$2,077,170	90.0%
B3 Parts	\$299,242	85.0%
B4 parts	\$0	50.0%
C1 Parts	\$1,183,308	90.0%
C2 Parts	\$2,736,948	85.0%
C3 Parts	\$1,155,094	85.0%
C4 Parts	\$0	50.0%
Total	\$41,027,937	95.3%

- Notice change in average inventory required

Inventory metrics

- High performing companies measure Inventory at business and functional levels
- FGI benchmarks indicate 67% or more of companies measure the following as it relates to finished goods:
 - Inventory Balance
 - *Inventory as measured in dollars, units or lbs.*
 - Inventory Turns
 - *The comparison of dollars of inventory to the cost of goods sold for a specific period (cost of goods sold / average inventory). It measures how many times a company sold its average inventory amount during the time period.*
 - Days of Supply
 - *The number of days it will take a company to sell all of its inventory ($365 \times (\text{Average Inventory} / \text{Cost of Goods Sold})$).*
 - On-Time Shipments
 - *Percentage of shipments delivered on time to customer order due date.*
 - Inventory Accuracy
 - *A percentage showing the variance between inventory records and actual count.*
 - Order Fill Rates
 - *Percentage of customer orders satisfied from stock at hand*
- *(Benchmark data and categories from Tompkins Finished Goods Supply Chain Benchmarking, 2013)*

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