



Nexview Consulting

Using Procurement Data to Add Value, Integration, and Influence

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March 23rd, 2015

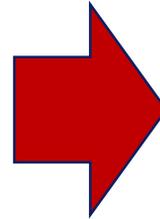


nexview 

Our discussion consists of two parts...



"Why Grandma, what big data you have!"



"This month's business meeting is the same as last month's business meeting but with many more problems."

Turning data into information

and

Using it to take action

Nexview Consulting helps clients achieve alignment within their organizations to improve performance and results



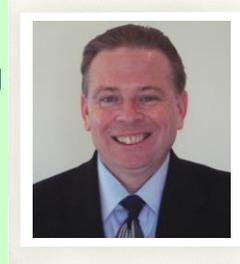
Services

- Sales & Operations Planning/Integrated Business Planning and Supply Chain consulting
 - Implement or revitalize existing processes
 - Information Systems evaluation, selection, and implementation
 - Organizational design & change
 - Customer & product profitability management
 - Change management
- Training & Coaching

Differentiators

- Boutique firm specializing in S&OP
- Recently expanded the S&OP process to upstream oil & gas
- Holistic approach – emphasize performance improvement, results management, behavior change, leadership development
- Low overhead model accommodates mid-market firms; Global network of highly-experienced consultants accommodates multi-geography projects

Eric J. Tinker – Mng Principal



- 20 years in management consulting leading complex change in the US and internationally
 - Projects have delivered over \$500MM in benefits
 - Client experience ranges from start-ups to leadership of large, complex, multi-geography business transformation for global corporations
- Prior leadership roles at Celerant Consulting, Deloitte Consulting, Plan4Demand, Hughes Aircraft
- Qualifications
 - MBA – University of Southern California - Finance & Entrepreneurship
 - MS – Mechanical Engineering, California State University - Northridge
 - BS – Aerospace Engineering, Syracuse University
 - Certified Public Accountant



Our objectives are to

- Discuss a few techniques to enable you to turn your procurement data into information
- Talk about the two primary levers of spend – PRICE and VOLUME (and really these are also fiduciary duties of the procurement function)
- Share some tips for using the information to improve your internal performance and integration with internal and external partners
- Give you a tidbit or two that you can walk out with and do something with
- Perhaps give you an idea or jog your memory of something you've been meaning to address and motivate you to do it

Who's here tonight?



As we know, procurement has several areas, we'll discuss only a few tonight

Strategic Sourcing

- Alignment with corporate strategy
- Commodity groupings
- Sourcing strategy by group
- **Spend & pricing analysis**
- **Right sizing supplier base**
- Alliance management

Processes & IT

- Transactional processes
- Contracting processes
- Negotiations
- Spending authorities & controls
- IT system use
- Data integrity

Supply Chain Integration

- **S&OP and supply chain process integration**
- **CPFR**
- Integration with operations and maintenance (MRO)
- **Inventory levels vs. quantity purchased**
- Consignment and VMI

Management System

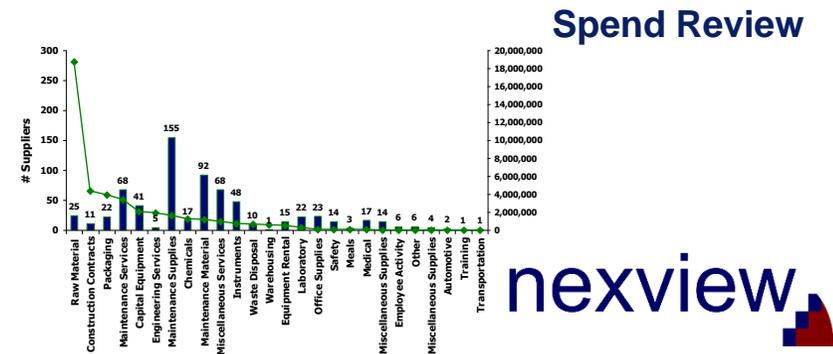
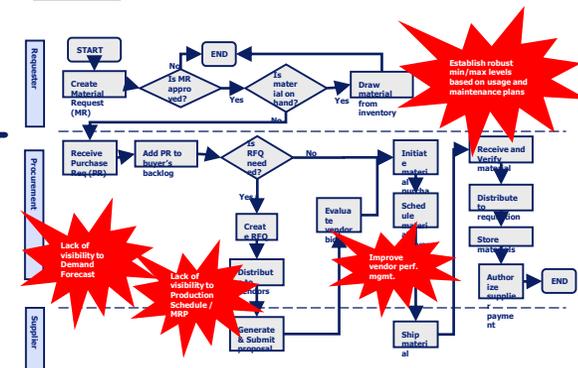
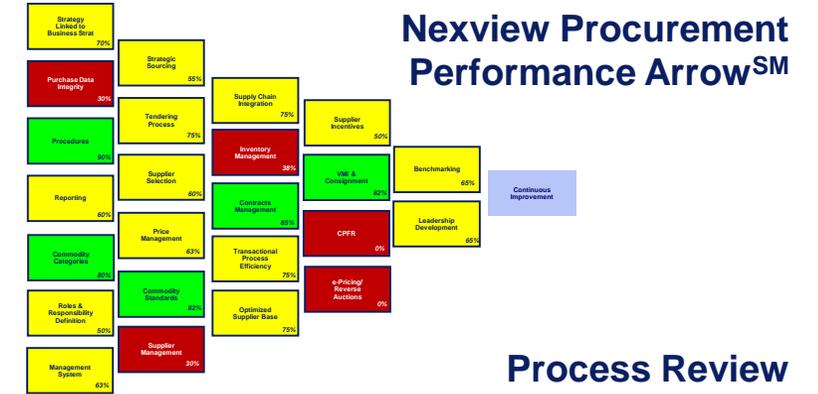
- Planning & review meetings
- Key Performance Indicators
- Supplier management

Organization

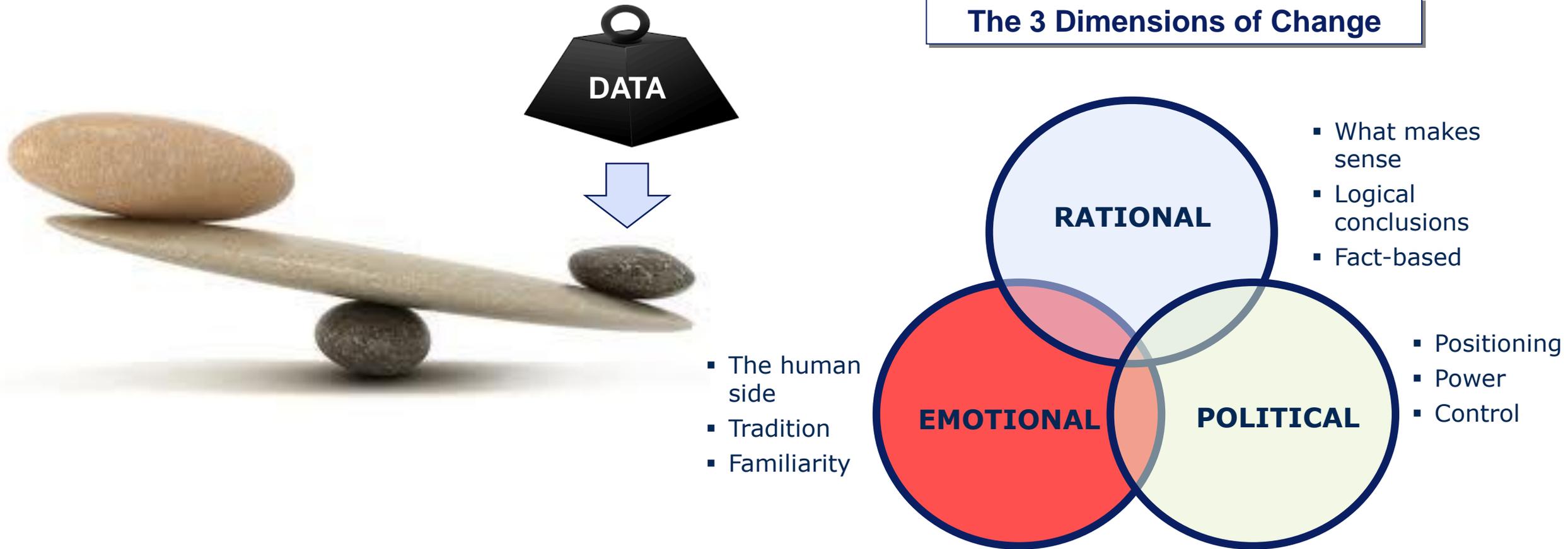
- Structure
- Roles & responsibilities
- Integration with other functions
- Sizing

Centralization vs. Decentralization

- Reporting relationships
- Common processes
- Leveraged spend
- Local needs and efficiency
- Alliances vs. local spend



It can often be tough to get buy-in from Procurement



“If the rate of change on the outside exceeds the rate of change on the inside, the end is near.” - Jack Welch

Let's start off with Procurement's first fiduciary duty → SPEND



"I'm your bud, this is a great deal."



"I can (and have to) do better."

ERP systems are adding more functionality, as are reporting tools, and specialized procurement systems

- Data Aggregation
 - Various systems or across multiple unintegrated sites
- Charting
 - Flexible/drag & drop
 - Real time
- Exception identification
 - Thresholds
 - Out of alliance spend
 - Spend without POs
 - Comparative pricing
- Ferrari's are nice but
 - They require a lot of maintenance (e.g. correct master data, source transactions entered completely, correctly)
 - They are expensive

Spend Analysis Dashboard



For most of us “commoners”, we live in the Excel world...



- Select data based on what will prove or disprove your hypotheses
 - “We have too many suppliers for A”
 - “We pay a wide range of prices for the same thing”
 - “We have a lot of out-of-alliance spend”
- Pick a valid baseline period for the data set
 - Representative of situation you’d like to improve
 - Improvements will be measured from this datum period
- The data download must be cleaned and validated
 - Line item detail
 - Tie the total to summaries and accounting totals
 - Clean records for missing data if possible (e.g. commodity category codes)

AP Voucher or PO Data Dump

Voucher Date	Voucher No.	Line Item	Item No	Item Desc	Acct Code	Commodity	Commodity	Com Cat	3SCommod	Acct Desc	Supplier	C Supplier	C Supplier	N Qty	UoM	Invoice Pri	Std Cost	Unit Price
20040325	98054	2	70002017	FILM: POI 12813	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	36794	LB	29803.14	0.81	0.81
20040520	98189	3	70002017	FILM: POI 12813	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	38279	LB	31005.99	0.81	0.81
20040824	98472	4	70002017	FILM: POI 12813	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20041027	98727	5	70002017	FILM: POI 12813	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20041221	98920	6	70002017	FILM: POI 12813	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040115	72811	1	05604024	LABEL: P/ 1771	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040127	73376	1	999999MII	MISCELL/ 8000	21	LAB SUPP	LAB SUPP	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040127	73376	2	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040212	73744	1	05604024	LABEL: P/ 1771	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040217	74025	1	06318520	RAC ACCI 12811	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040513	76512	1	05604024	LABEL: P/ 1771	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040513	76530	1	05604024	LABEL: P/ 1771	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040513	76530	2	05604024	LABEL: P/ 1771	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
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20041005	81468	1	05604024	LABEL: P/ 1771	32	PACKAGII	PACKAGII	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040113	72624	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040113	72625	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040121	73044	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040217	74044	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
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20040308	74700	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040310	74927	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040322	75184	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040322	75185	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040330	75490	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040330	75491	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
20040331	75551	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	12812800	010198	10198	ALL AMEF	37277	LB	32058.22	0.86	0.86
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20040415	75661	2	999999MII	MISCELL/ 8000	03	CAPITAL	CAPITAL	Packaging	Packaging	80000000	011447	11447	C&L REPA	30	EA	1675.5	5.5	5.5
20040419	75755	1	999999MII	MISCELL/ 8000	24	MAINTEN	JANITORI	Packaging	Packaging	80000000	011447	11447	C&L REPA	89	EA	2225	25	25



Stress Reduction Kit



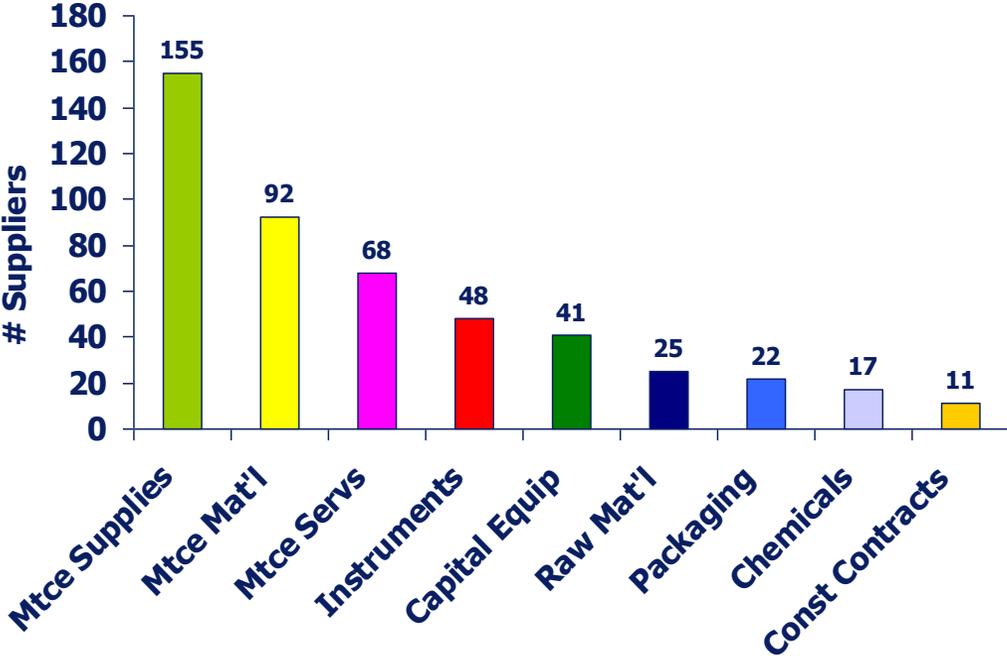
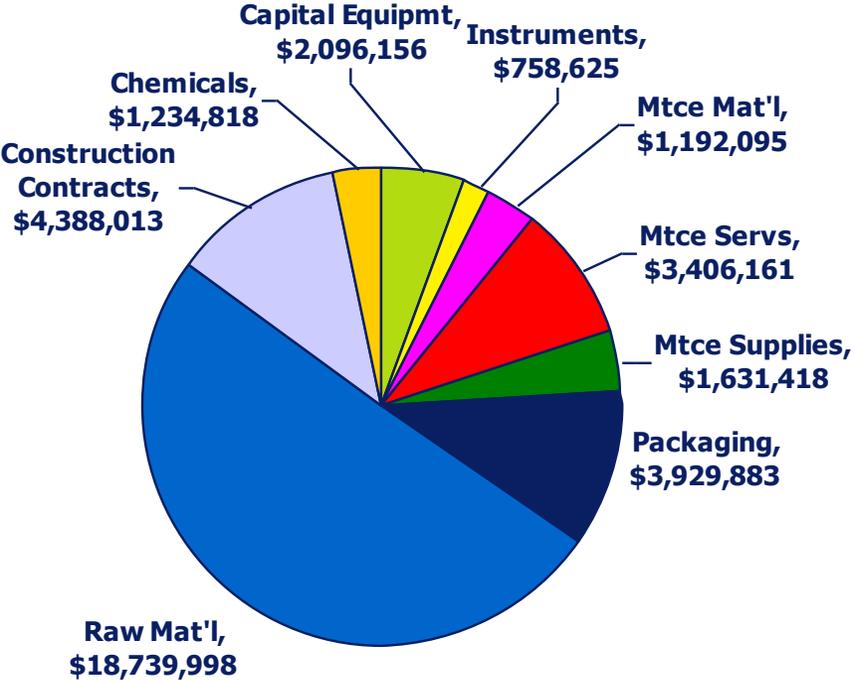
- Directions:
1. Place kit on FIRM surface.
 2. Follow directions in circle of kit.
 3. Repeat step 2 as necessary, or until unconscious.
 4. If unconscious, cease stress reduction activity.

This is likely some huge file with 1000's of records

Categorize the spend to see what matters and where some opportunities may be

Spend Breakdown and No. of Suppliers for High Impact Categories

Total Spend = \$42.7M

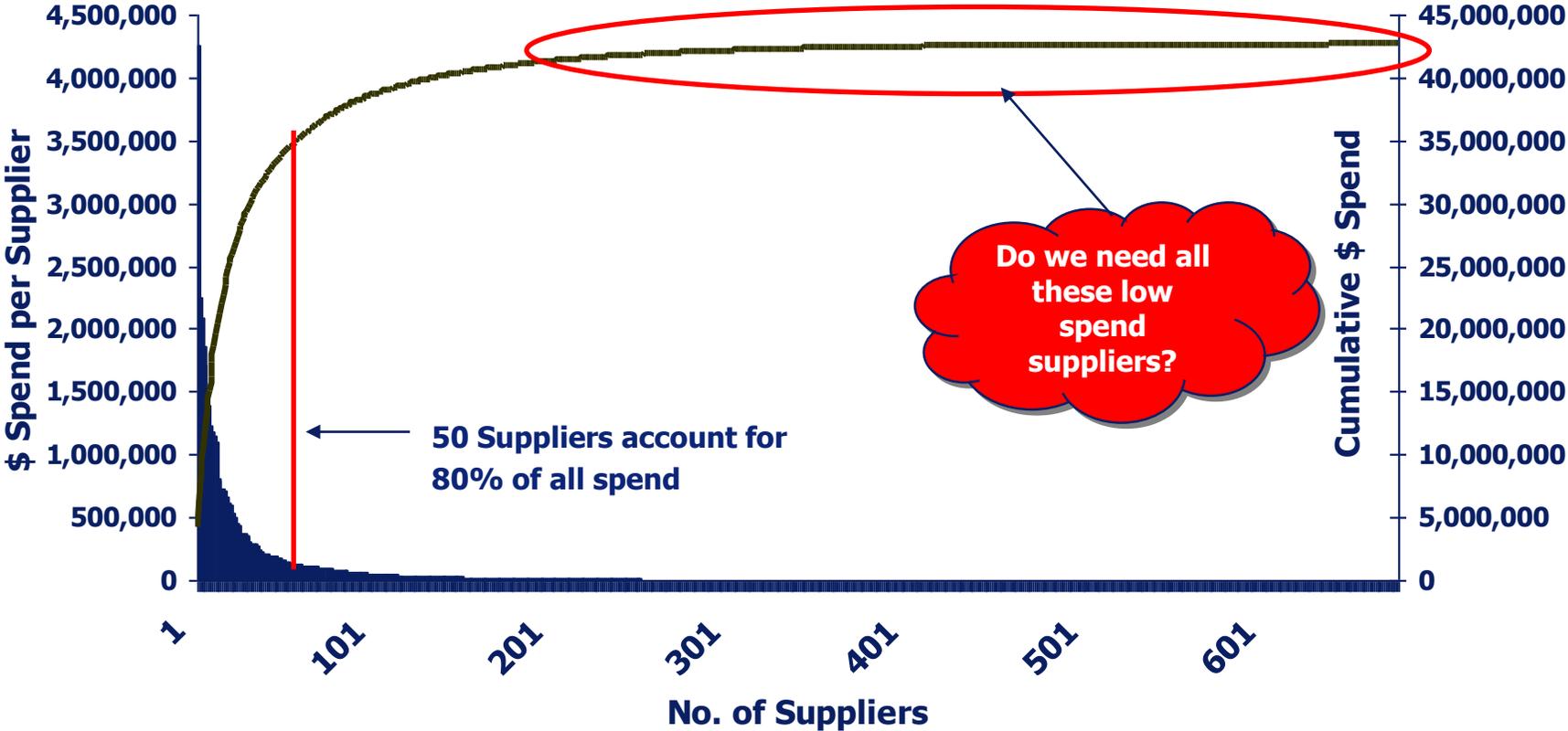


Maintenance areas look like opportunities and we should closely examine our raw material spend as well.



We have many suppliers with low spend, how much time are we spending managing those relationships?

Total Spend = \$42.7M



50 of 726 suppliers account for 80% of our spend.

The next step is to determine what is impactable

- Aren't under contract, or have flexible terms
- Have sourcing flexibility in terms of alliance agreements
- Does the spend relate to a single source or are suppliers limited?
- Are less specialized in terms of being able to change (less technical, not regulated)
- Haven't been sourced in a while
- What can be impacted now and in the near future



Challenge yourselves here, there will be all kinds of reasons not to.

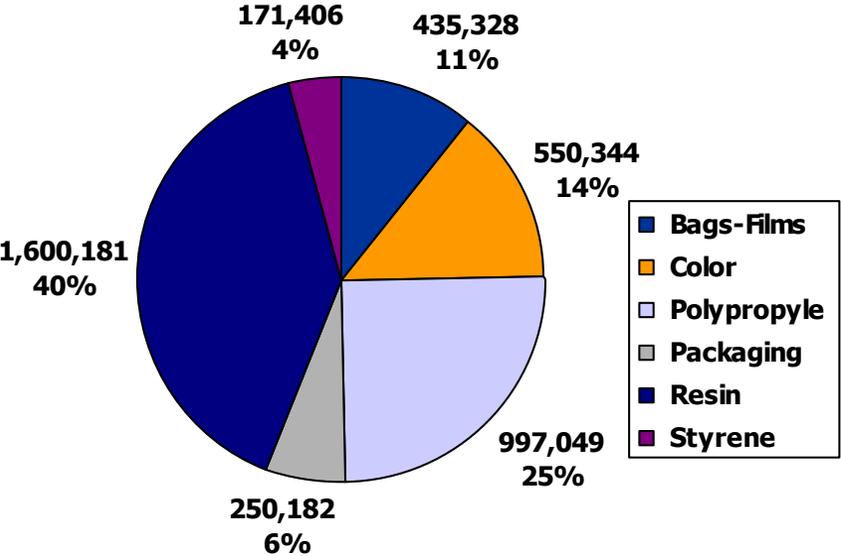
Back-pocket list of procurement savings areas

- Packaging
- Don't forget "C" items
- Indirect spend
 - Pallets
 - Office supplies
 - Services (uniforms, security, other outsourced)
 - Insurance
 - Professional services (Legal, Consulting?)
- Other potential benefit areas
 - Reducing out-of-alliance spend (Leakage)
 - Price comparisons based on a representative basket
 - Joint cost reduction programs

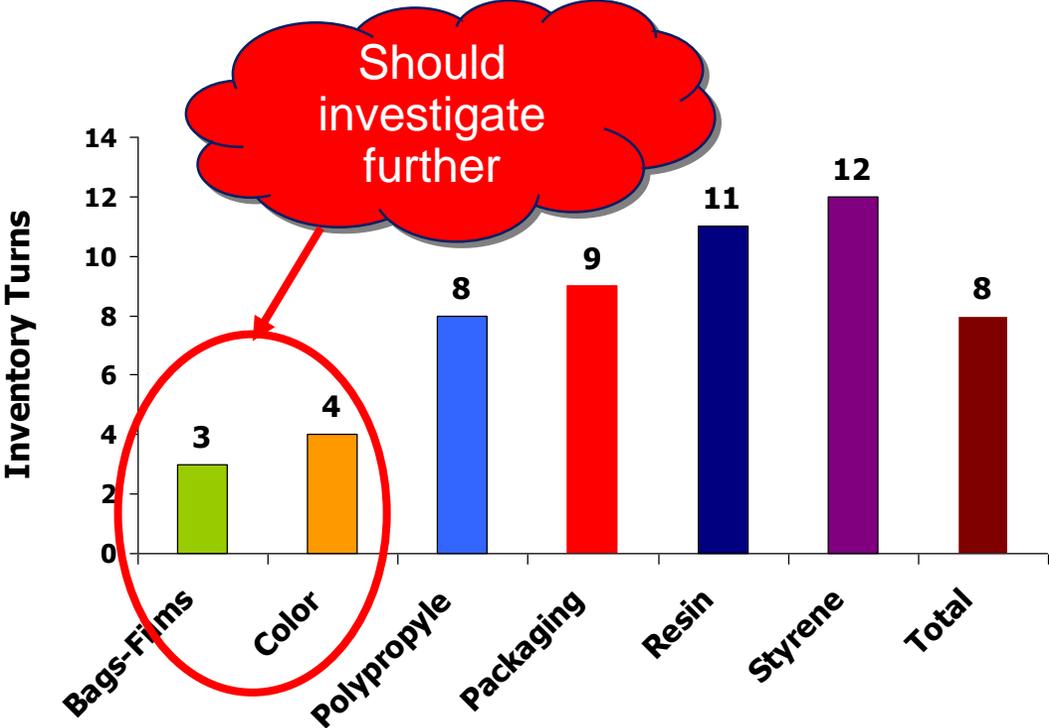


Raw material/component inventory management is sometimes linked with the procurement function as well

Avg inventory \$ by category

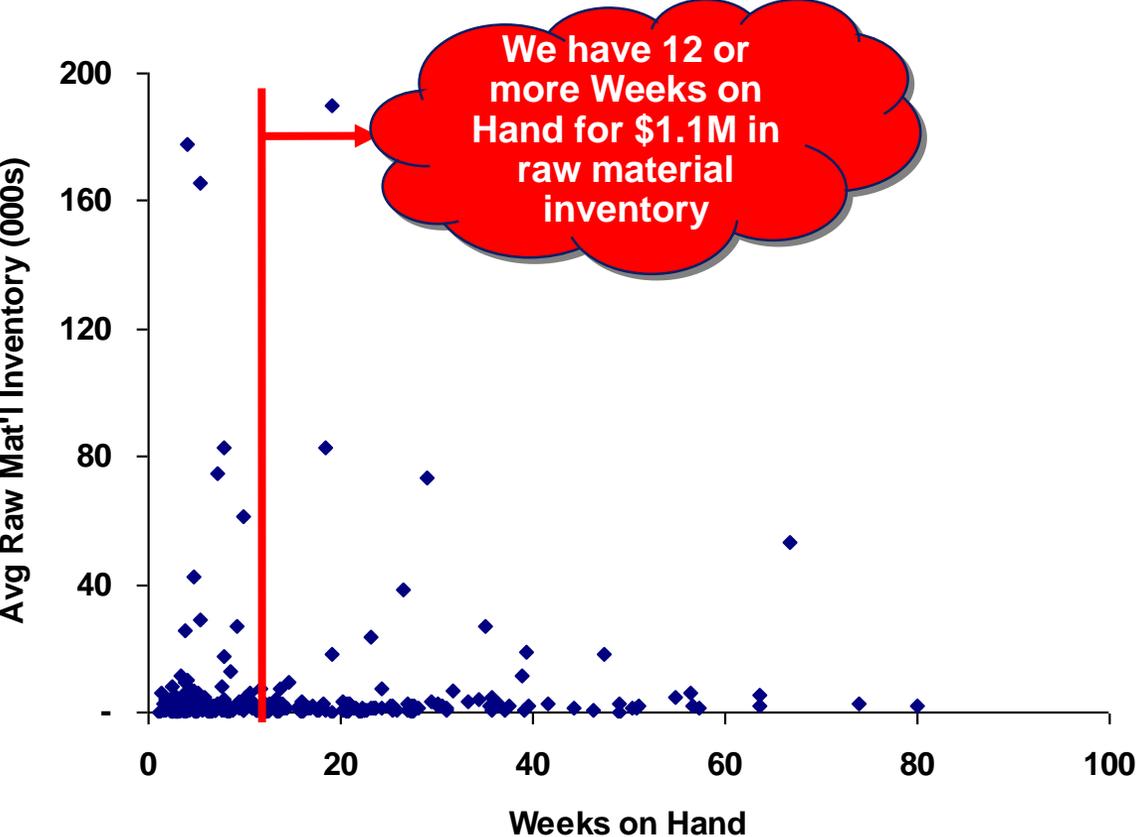


Turns by category

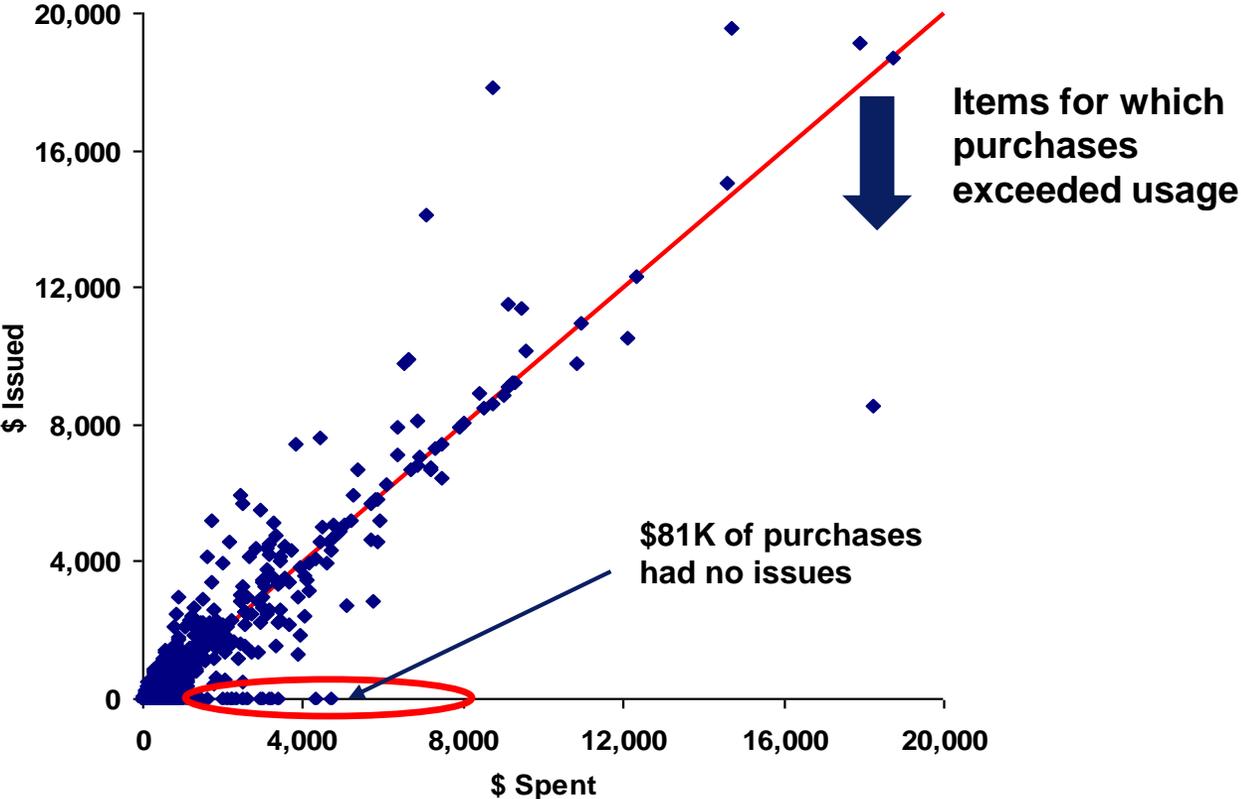


These charts show excess material on-hand and purchases that exceeded demand

Average Weeks On Hand vs. Monthly Avg Inventory \$ by SKU

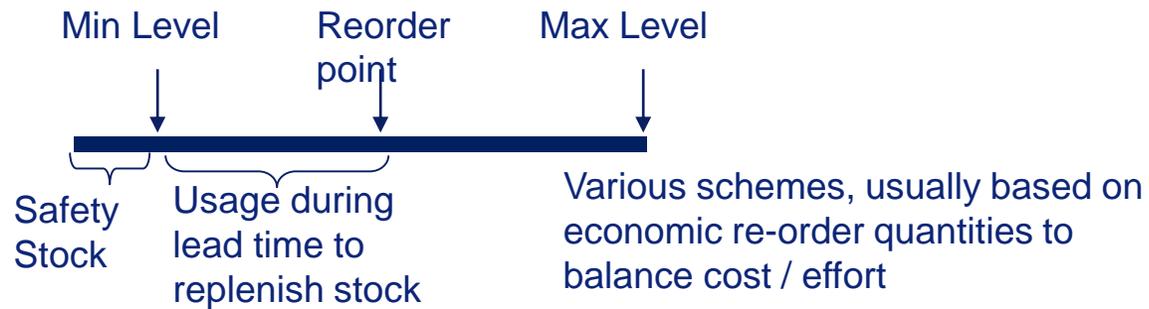


Comparison of 20XX MRO Stockroom Spend with Usage



Reminders for managing raw material/component inventory

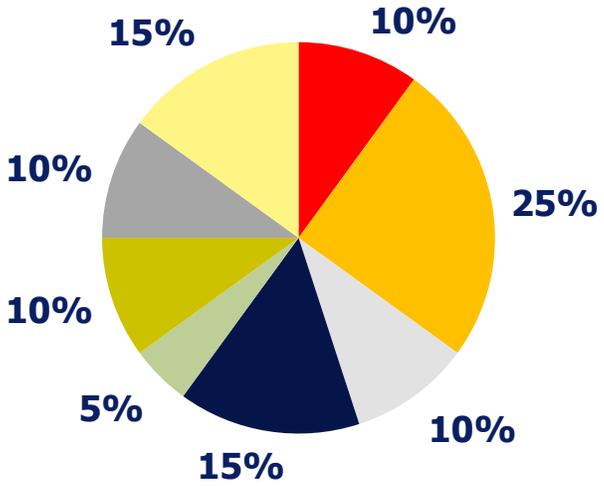
- Inventory sizing theory should be used (e.g. demand/usage and variability, lead time, and desired service levels)
- Targets set and managed to
- Min/Max settings



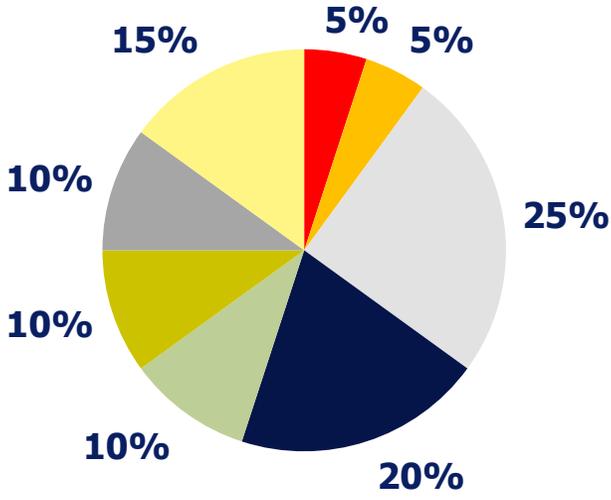
- Policies for slow moving items (and what is impactable for improvement target setting)
- Vendor managed inventory and consignment

Occasionally, it's good to take a check of how people are spending their time – We call this a Day-in-the-life-of (DILO) study

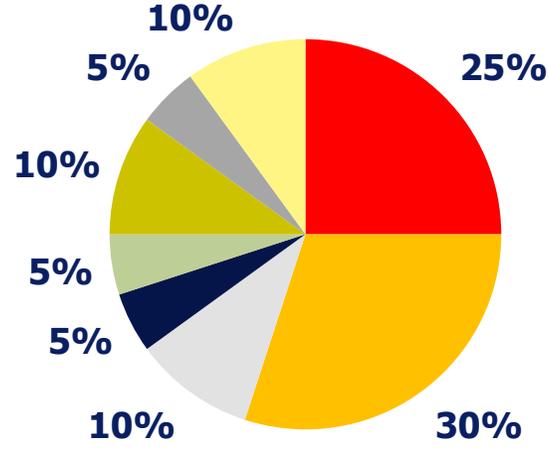
Perceived Time Allocation



Ideal Time Allocation



Observed Time Allocation



- Admin
- Transactional
- Suppliers
- Internal Customers
- Supervising/Training
- Analysis

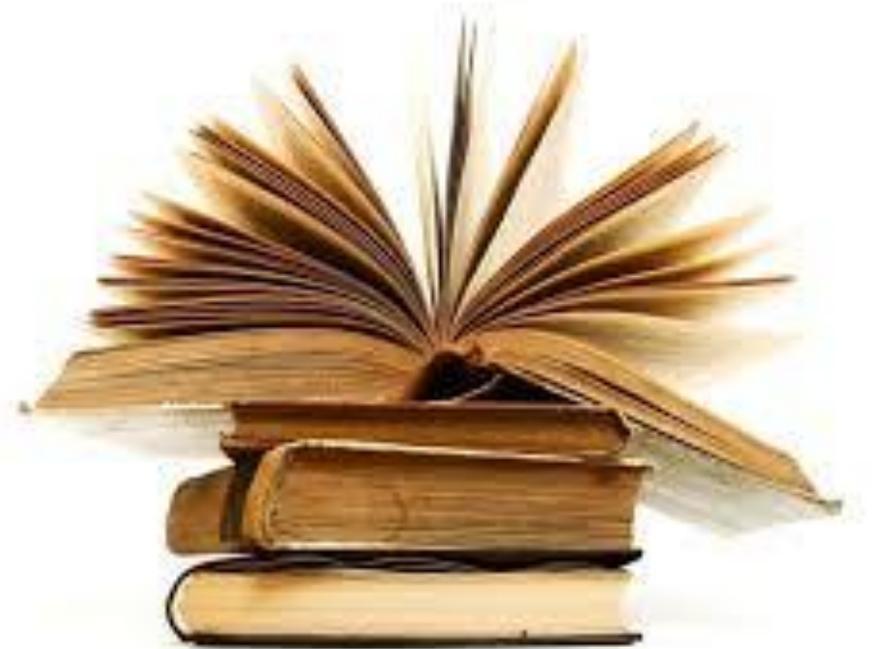
On this day, Administrative and Transactional account for more than half the day.

Estimate a range of benefits for impactable items

Benefit Area	Baseline	Impactable	Operational Levers	% Savings	P&L	One Time Cash Flow
Packaging	15,704	15,704	<ul style="list-style-type: none"> ■ Investigate alliances ■ RFPs ■ Consolidate spend across sites 	2 – 3%	320 - 470	
MRO (Supplies, Services, Material)	24,916	24,916	<ul style="list-style-type: none"> ■ Investigate alliances ■ RFPs ■ Consolidate suppliers and spend across sites 	3 – 6%	750 - 1500	
Construction	17,552	17,552	<ul style="list-style-type: none"> ■ Leveraged spend across sites ■ RFQs/RFPs 	2 – 4%	350 - 700	
Stores Inventory	6,800	1,600	<ul style="list-style-type: none"> ■ Min/Max settings driven by inventory theory ■ Increase consignment, reduce lead times ■ Coordinated maintenance planning 	10 – 15%	16- 24	160 - 240
Total P&L Impact	58,172	58,172		2 – 5%	1,436 – 2,694	
One Time Cash Flow	6,800	1,600		10-15%		160 - 240

Shifting gears to planning and integrating with others → The other Fiduciary Duty, VOLUME

Which is correct?



“The past is no indication of the future”

“History repeats itself”

Supply chain leaders require knowledge of the past to plan for the successful execution of the future (forecast)

- Procurement's second fiduciary duty – manage quantity (helping to)
 - Plan buy quantities
 - Manage inventories
 - Coordinate internally and with suppliers
 - Identify/confirm/coordinate cash needs



But don't our business systems allow us to do that?



Yes – but are they accurate, up to date, and optimized?

- Master data? (e.g. BoMs, lead times, inventory parameters)
- EoQs?
- Should we go for quantity discounts?
- Changing conditions? (e.g. Price trends?)
- Supplier performance?

Your knowledge of your history can make this better

Let's discuss a couple formal influence channels for procurement...

Sales & Operations Planning

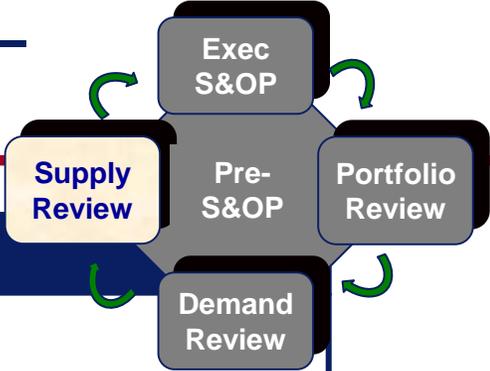
By S&OP, we are referring to the management-level cross-functional planning and decision making process.

S&OP is the vehicle for communication, performance management, and decision making related to integrating financial, demand, and supply planning to meet company objectives.



- Key characteristics include:
- Cross-functional alignment of planning and decisions
 - One set of consistent plans
 - 3-24 month horizon
 - Sr. Management led
 - Exception-based, product family level discussions
 - Management of financial gaps, while there's still time for action
 - Leadership development and improved teamwork
 - Business performance management across the enterprise
 - Platform for continuous improvement in the company

Procurement's largest role is typically in Supply Review – Here's what typically happens there



Meeting: **Supply Review Meeting Charter**

OBJECTIVES:

- Communicate any supply constraints and note them for later discussion in Pre-S&OP
- Manage to desired inventory levels
- Discuss any items potentially impacting supply (e.g. labor or raw material issues) or sourcing decisions
- Review KPI performance and performance to budget

TYPICAL ATTENDEES:

VP Operations (Sponsor), Director/Manager Supply Planning (Chairperson), Inventory Manager, Plant Manager(s), Finance, Procurement, S&OP Lead, NPD Representative (As Required)

FREQUENCY AND TIMING: Monthly, by end of 2nd week

INPUTS:

Unconstrained Demand Plan, Supply Plan, RCCP Analysis, Inventory levels and targets, Summary Procurement Plans, KPI Scorecard, Action Log

OUTPUTS:

Confirmed Supply Plan, Procurement Plan, Actions to drive KPI results, Items for Pre-S&OP (e.g. constraints)

POSSIBLE KPIS:

Production Plan Adherence, Capacity Utilization, Inventory Turns/DOH, Supplier OTIF

OTHER COMMENTS:

Needs to be integrated with the more tactical and operational meetings at the plant(s), Design team will determine if separate meetings are held by facility, business unit, or geography

How should procurement prepare for Supply Review?

- Before each S&OP component meeting, the supporting planning processes occur (e.g. forecasting for Demand Review, RCCP, MRP runs for Supply Review)
- For procurement (can vary some depending upon your processes)
 - Review the unconstrained forecast over the S&OP horizon
 - Compare that with your history → identify any major changes
 - Scale historical component purchases / review MRP results as required
 - Identify any procurement related constraints or obligations
 - Give the Supply Review meeting facilitator a heads-up and ensure your exception is on the agenda
 - Start framing up options – or solution if a decision is needed right away



Other potential touch points in the S&OP process

- Portfolio Review
 - Not typical – new products entering the supply chain can be an agenda item as required in supply review
- Demand Review
 - Not typical – but you should discuss any questions with the Demand Manager
- Pre-S&OP
 - Absolutely – discussions/issues could impact your area and involvement is key for management of the overall business
- Executive S&OP
 - Possibly - if your Senior Leader is a member of the leadership team
 - By invitation if you need to support an executive decision



A second influence channel is through linking planning & execution processes between trading partners - CPFR

- Several studies have shown that supply chains work better when information is shared across trading partners (see link to a good paper/case study below)*

Benefit	Range of Improvement
Increased Forecast Accuracy	20–30%
Increased Sales Revenue	10–30%
Increased Margin	2-6%
Improved On-Time Delivery	5-10%
Decreased stock-outs	2-7%
Decreased inventory	30-45%
Decreased Operating & Logistics Costs	10-28%

Source: Voluntary Interindustry Commerce Association (VICS) CPFR Case Studies and Collaborative Commerce Award Winners, 2010

*http://www.gs1us.org/gs1-us-library?Command=Core_Download&EntryId=1375



CPFR involves sharing information and potentially joint cost reduction goals

- Sharing your forecast data with your suppliers
 - Reduced lead times
 - Improved supply reliability
 - Reduced expedite costs
- Vendor Managed Inventory
 - Reduced inventory
 - Consignment inventory
- Linked/accessible information systems
 - Forecast visibility
 - Inventory levels
 - Integrated transactions (e.g. invoicing, PO's)



The major steps to implement CPFR

Framework steps from: Voluntary Interindustry Commerce Association (VICS)

Strategy & Planning



- Partner selection
- Benefits case
- Scope definition (Products/Areas of the business)
- Level of integration
- Ground rules for relationship

Demand & Supply Management



- Forecasts
- Inventory levels
- Order quantities
- Shipping schedules
- Frequency of updates

Process Definition & Execution



- Transactional process definition (triggers and ordering, inventory replenishment, purchase and pay)
- Information system integration/access

Analysis



- KPI's
- Continuous improvement
- Unforeseen disruption/contingency

Why wouldn't you implement CPFR with key partners?

➤ Perceived or real risks

- Could providing a forecast lead to buying commitments and lock you in?
- Could sharing inventory information could also compromise pricing discussions?
- Do trading partners have different short-term goals?
- Perhaps a larger partner may not want to invest in a relationship with a smaller one?
- Maybe customers do not have a good handle on their own forecast?
- Maybe the status quo is good enough?



CPFR works best between partners when the balance of power is about equal and both are under pressure to improve service and reduce cost.

Key takeaways

- Identifying opportunities with your data and building a story around it doesn't have to be difficult
- Sourcing opportunities are often available for some items within a broad portfolio
- Change management is easier when backed up by data
- Understanding and use of the data will help you progress to the higher value jobs within procurement and the rest of supply chain
- Knowledge of the past can help you plan for the future
- Procurement has important roles in S&OP and supply chain planning
- Look for ways to improve connectivity throughout the overall supply chain (e.g. lending your knowledge of procurement history, opportunities, constraints, CPFR, VMI, and consignment opportunities)



“The way to begin is to stop talking and begin doing.” - Walt Disney

Concluding exercise

- Go to <http://nexviewconsulting.com/ism>
 - One quick question to answer
 - I'll show the results in a few minutes

You can get a download of the presentation here too!



Thank you!

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Our values are:

Optimism

Collaboration

Confidence

Resourcefulness

Candor

Results

Please visit nexviewconsulting.com for more information including best practices, articles, blog postings, videos, research, and more.