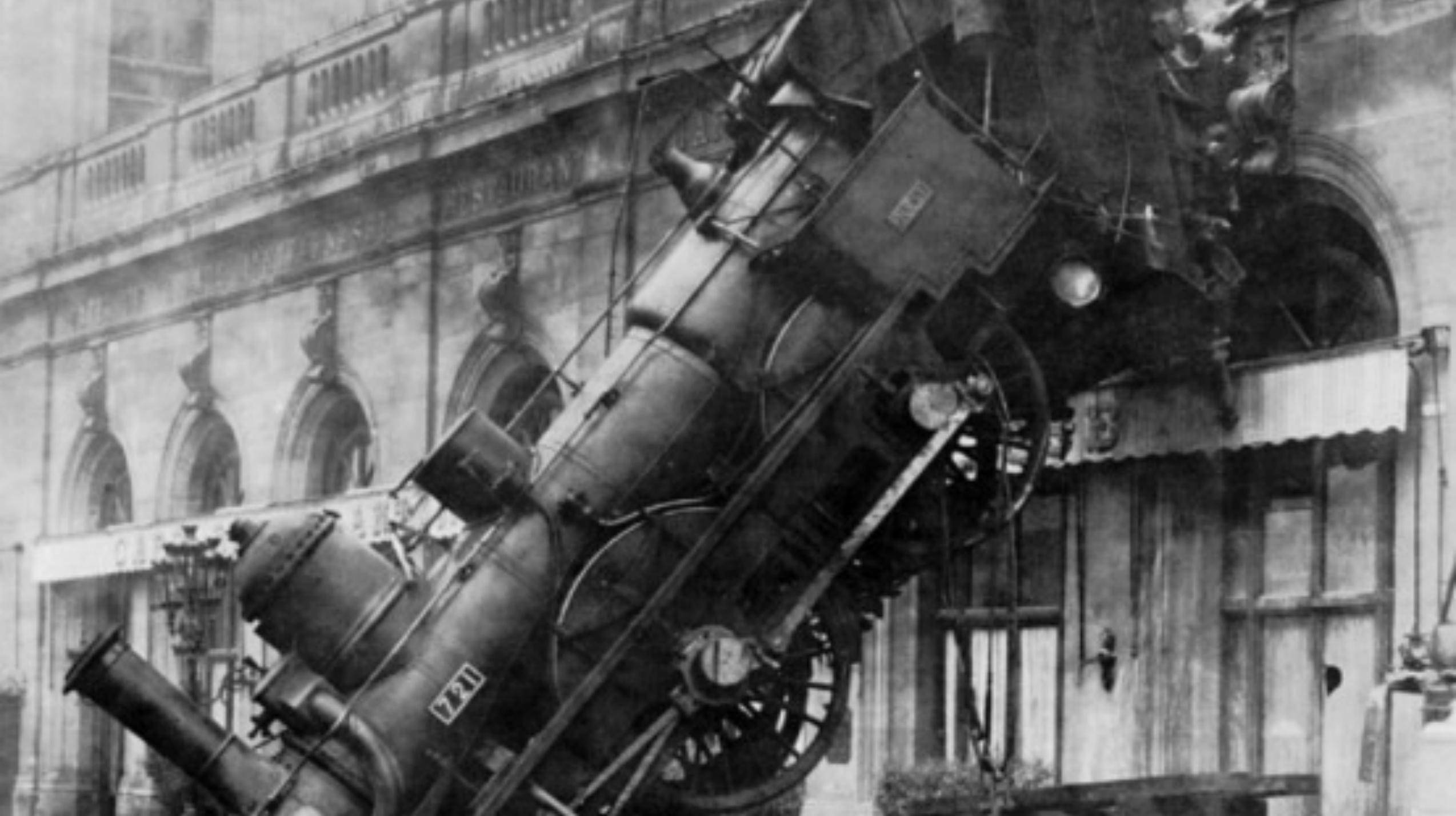


Supply Chain Strategies That Will Help Drive Better Outcomes

February 2022

...this is about **improving your supply chain management:**

1. Leading **supply chain triage**
2. Stabilizing / **upgrading your supply chain management**
3. Leveraging **strategic sourcing to crawl back margin** while building in **supply chain resiliency**



Wil G. Knibloe III | Principal, Crowe LLP



Wil is the Founder and Principal Executive of Crowe’s Strategic Sourcing | Logistics Optimization practice. He has over 19 years of operations and supply management experience, including 10 years in supply chain management positions with Ford Motor Company, Union Pacific, Pharmacia/Monsanto and DE-STA-CO (a Dover Company). Wil has served 50+ construction, manufacturing and distribution clients spanning many sub-industry segments, including non-residential & residential construction, industrial engineering services, infrastructure, automotive, chemicals, oil / gas, aerospace, pharmaceuticals, consumer goods, waste management and others.

Industry Thought Leadership:

- Construction Financial Management Association (CFMA) - National Conference Speaker – *“Leveraging Strategic Sourcing to Improve Profit and Alignment With Suppliers”*
- Construction Financial Management Association (CFMA) – Texas Chapter Conference Speaker – *“Toolbox for Driving Improved Margin and Cash Flow”*
- Construction Financial Management Association (CFMA) – Mid-Ohio Chapter Conference Speaker – *“Toolbox for Driving Improved Margin and Cash Flow”*
- White Paper – *“Using Strategic Sourcing to Improve Construction Company Performance”*
- White Paper – *“Boost EBITDA Through Procurement”*
- Article ‘Talking Heavy’ - Managing Your Supply Chain During Unprecedented Times

Education:

- B.A., Supply Chain Management, Michigan State University
- Certified Supply Chain Manager (CSCM)

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Strategic Sourcing & Logistics Optimization

We help companies do three things to boost margins...

1 2 3

Negotiate with suppliers Optimize freight cost Transform team performance

In our approach, we...

- ✔ Serve as a trusted supply chain advisor to top management
- ✔ Identify and qualify opportunities, then build plans to achieve results
- ✔ Execute the plan to deliver significant financial results while improving operations
- ✔ Are vendor agnostic and driven to provide and exceptional client ROI

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Procurement & Logistics Optimization Service Offerings

Procurement Spend Analytics

Spend Visibility | Opportunity Identification | Strategic Sourcing Plan Development

We leverage technology to identify and qualify third party spend savings opportunities; and to track and sustain results.

Category Strategic Sourcing

Indirect | SG&A | Transportation - 10%+ saving | Direct Materials – 3%+ savings

We deliver savings while improving alignment with suppliers by leading an objective strategic sourcing process.

Logistics Optimization

Set Freight Cost Strategies | Carrier Selection | Mode & Route Optimization

We deliver bottom-line impact and operational improvement by optimizing across multiple logistics value levers.

Supplier Development

Supplier Site Evaluations | Integrated Supply Solution | Score-Carding & Governance

We help companies improve operational performance and increase capabilities that drive business competitiveness through the execution of supplier development strategies and by driving overall supplier performance accountability.

Procurement & Logistics Team Transformation

Organizational Assessment | Leverage Best Practice | Admin Process Optimization

We drive sustainable value from Procurement and Logistics beginning with a comprehensive gap analysis of operations to develop prioritized recommendations through implementation of best practices.

When companies experience...

- **EBITDA challenge**
- **Market growth**
- **Turnaround or Restructuring**
- **Growth by acquisition**
- **Working capital challenges**

In our approach, we...



Listen to your story

We understand the expectations of your operational performance and the impact that has on the Company's strategy..



Diagnose your problem

We discuss your story and break it down into categories, metrics, and priorities. This analysis arrives at a precise diagnosis of the problem.



Execute

We execute and implement the operational improvements to deliver a return.

We deliver...



Manufacturing and Supply Chain Operations

We improve labor productivity, throughput, forecasting, planning and scheduling optimization, overall equipment and facility effectiveness, cost of to serve, Lean and Six Sigma



SG&A Optimization

We assist in back office flow and optimization, gross margin and pricing, geographic and distribution footprint review, sales force effectiveness, and reporting and organizational accountability



Operational Turnaround & Restructuring

We help with cost structure optimization, capacity and footprint rationalization, procurement/low cost sourcing strategy and execution, customer and product rationalization, commercial optimization



Working Capital Optimization

We help optimize Inventory (raw material and finished goods), Accounts Payable, and Accounts Receivable optimization

Resulting in...

- **Identification of operational levers to financial results**
- **Quantified operational improvement opportunities**
- **Scorecard and accountability tools to sustain performance improvement**

- **Leading supply chain triage...**

Supply chain disruption is our new normal

... massive commodity inflation, uncertain material lead times, and trade labor and driver shortages – all of this made more painful by increased customer demand.

Worse than I can remember; however, **supply chain disruptions are now the expected norm...**

Begin by *'stabilizing the ship'...*

If your team is **still chasing issues and appears rudderless, and sales does not have uniform and transparent strategies for managing customers - your organization is behind.**

- Establish a **cross-organizational steering** committee **responsible for working issues** comprised of procurement, logistics, operations
- Maintain a **clear 'issues list'** (e.g., price increases, shortages, delayed trucks, etc.) and dedicate focused supply chain resources to de-bottleneck them which begins with clearly understanding root-cause

If you are not working the issues in an organized way – your teams are wasting a lot of energy to achieve diminished results.

Supply base assessment / risk rating approach

Having **a clear list** is foundational for driving a clear understanding of issues and corrective actions.

\$100M – Mid-West based construction products manufacturer

Foundational

- Establish a steering committee and governance (bottom up)
- Identify stakeholders and create the working lists (RACI model)
- Align on BOM / spec and demand
- Align on the list of items and related suppliers w/ contact info
- Dial in the playbook and assign SPA
- Establish KPIs: what we can build and when | when will we hit run rate
- Transparency: institutionalize visibility into plant schedules and materials plans (inventory / PO's)

Organize the mess / set priorities

- Engage internal stakeholders and suppliers to quickly understand where the issues are (and are not):
- Use a combination of strategies (e.g., surveys and calls) to understand suppliers ability to meet demand requirements and 'bucketize accordingly' and to document RAMP plans:
 - **Extremely Critical** – supplier does not have the faculties or capacities to ever meet supply requirements (i.e., a new source of supply is necessary)
 - **Critical** – supplier can meet supply targets, but not in the timeframes required (i.e., explore all options to improve timing, such as: overtime, adding shifts, expediting material, etc.)
 - **Not issue** – supplier can meet timing and supply qty targets
 - **TBD** – not clear what the supplier can or cannot do
 - Establish governance to pitch track defined supplier RAMP's
 - Escalate all 'Critical' and 'Extremely Critical'

Supply base assessment / risk rating approach (Cont.)

Corrective action begins with **clearly understanding root cause** (and options).

Define Root Cause

For 'Extremely Critical' and 'Critical' suppliers **ensure you define a clear root cause with the supplier**. Must leverage a 'man' | machine | materials method:

- **Labor** ('man') – is it a labor shortage (*Overtime?, running all shifts, 24/7?, specialized skill that can be cross trained?, hire more people?, add a line?, etc.*)
- **Machine** – no machine capacity or not enough machines (*Add a machine? More hours? Align part program for more velocity, schedule ours first?*)
- **Material** – no raw material (change spec?, alternate source?, expedite?, etc.)

... PVC electric box...

Effective root cause (... asking the right questions and engage at the right level within the supplier organization) is essential for effective corrective action.

Corrective Action

When issues can not be resolved with the incumbent suppliers alternate strategies must be explored to create supply. This means we must be willing to get creative, challenge institutional norms and ask what may feel like stupid questions.

'Supply shortage' issue resolution cycle

Ask better question and challenge status quo.

... one of the largest producers of ventilators in April 2020...

1. Root-cause: labor, machine, materials (*understand first then, get close to the problem – Tier 2, 3 if needed*)
2. Demand smoothing (order is for 4000, but I need 100 per week)
3. Escalate in the both organizations (what level are you working at)
4. 'Flex' Gov. mandate / priority
5. *Product distributor of primary? Or customers that my have over purchased the like item.*

1. Evaluation of critical and non-critical for temp spec deviation
2. Evaluation of alternate products or solutions (engage the customer if needed)
3. Evaluation of processes for CI based improved through put

... Multi colored ventilators...

... managed ramp plans...

Greater Control

Incumbent Supplier

Engineering Solution

Less Control

New Supply Sourcing (like for like capabilities)

New Supply Source (w/ like capabilities)

1. Former supplier that was approved
2. Supplier that we know that has been considered
3. Supplier identified with like-for-like capabilities and confirmed capacity

1. Primary research to identify suppliers with like capabilities that are adaptable to requirements with confirmed capacity

* *Parallel path where possible*

Begin by 'stabilizing the ship'... (Cont.)

- Organize and lead **two fundamental customer management strategies**:
 1. Ensure policies and process are in place for a **managed pass-through of cost increases** to minimize margin erosion
 2. Ensure **lead-time promises** to your customers stay aligned with **what the supply chain can support**

Don't let your margin get caught in the middle.

Margin Management

- What is your process for capturing material cost increases and vetting them before accepting them?
- Once approved, how do you manage pass through to customers?
- Do your agreements have cost escalators included?

Customer Date Commitment

- Have quoted lead times been adjusted for your *new normal*?
- How is supply chain / procurement consulted for new orders?
- What time period are quotes honored for?

... general residential contractors (floors, walls, paint, etc.) - \$2B company, \$85M of EBITDA capture in 3 months on **pricing**...

In summary...

Said simply...

1. You should have a clear list, team and process for working shortages; and,
2. And you should '*double down*' on margin and customer management.

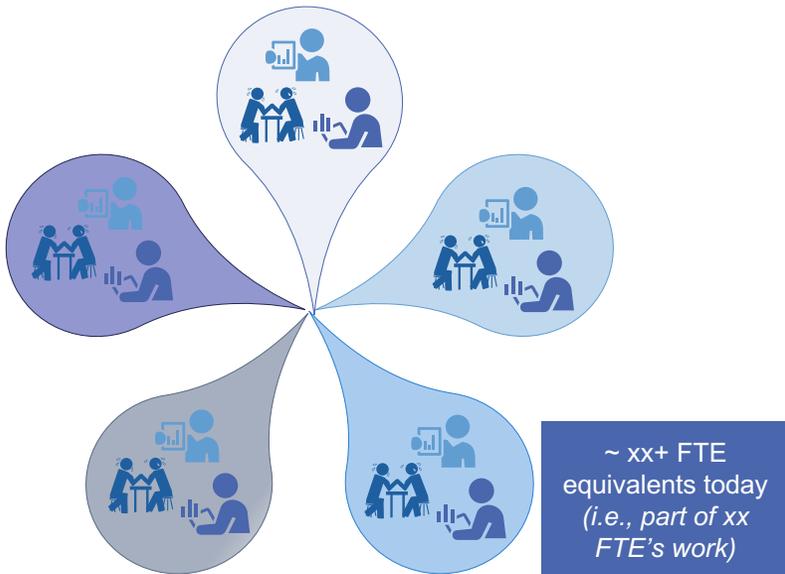
If you do not establish this foundation – you will chase issues and '*bleed*' margin.

- **Upgrading your supply chain management**

1. **Invest in supply chain / procurement professionals** and drive toward a **center-lead management** program.

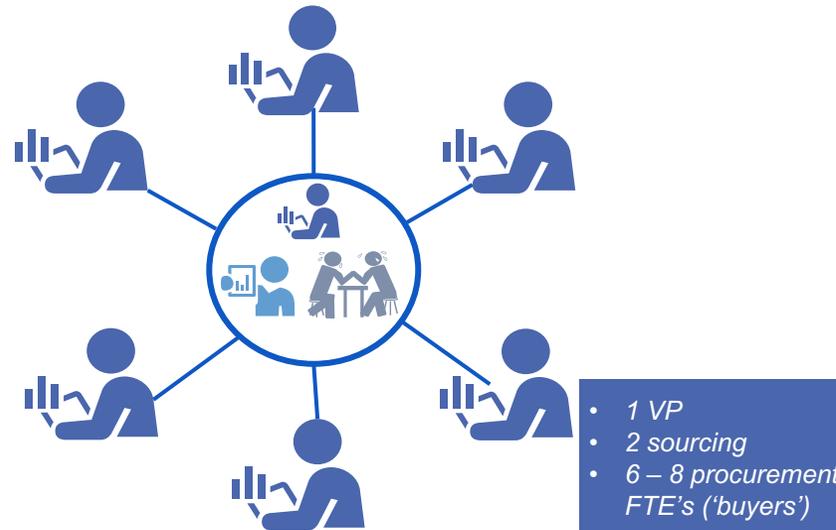
Potential platform structures

Critical to find the right balance of efficiencies without squandering stakeholder independence.



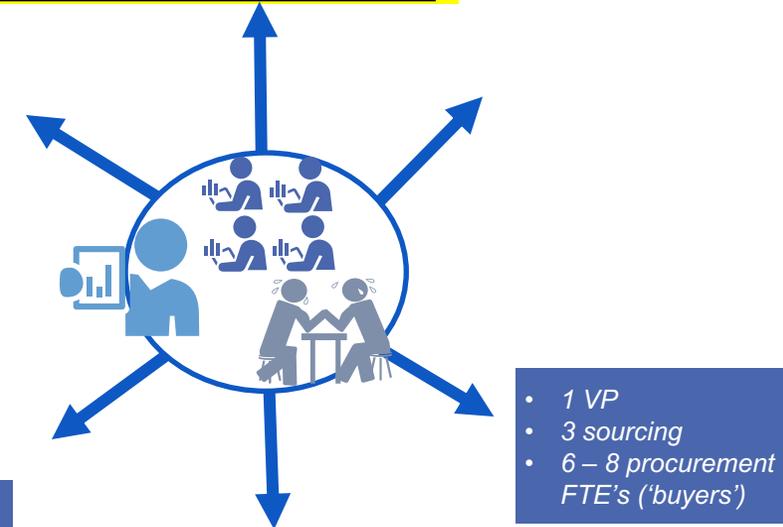
- Transactional procurement disparity managed across the business; and,
- No apparent strategic sourcing
- Presumably, good service level, customized and responsive; however, unscalable, poor structure for supplier / risk management and low levels of synergy capture

... likely Current State



- Centralized strategic sourcing and with a combination of centralized and center led transactional procurement personnel
- Policies, processes and governance are center-led and managed
- More scalable management structure with better controls and synergy capture balanced with fewer barriers and speed to day-to-day decisions / transactions (i.e., negotiate global – execute local)

Center Led



- A single centralized department for all strategic sourcing & procurement decisions and transactions
- Policies, processes and governance are center-led and managed
- Most scalable with highest levels of control and synergy capture; however, can become disconnected from the business and overly bureaucratic if not thoughtfully managed

Centralized

Critical for success

The difficulty of **overcoming organizational pride is underestimated** and can bring a program launch to a stop quickly. **If you do not have support of your Executive leadership team – don't bother.** Other implementation roadblocks include:

- Lack of organizational adoption;
- Fear over contract disruptions;
- Easier to not change and “we are different/special” complex;
- Discount the monetary impact sourcing can make;
- Have tried and failed in the past;
- Over or underestimate the time and resources needed.

What matters most is that...

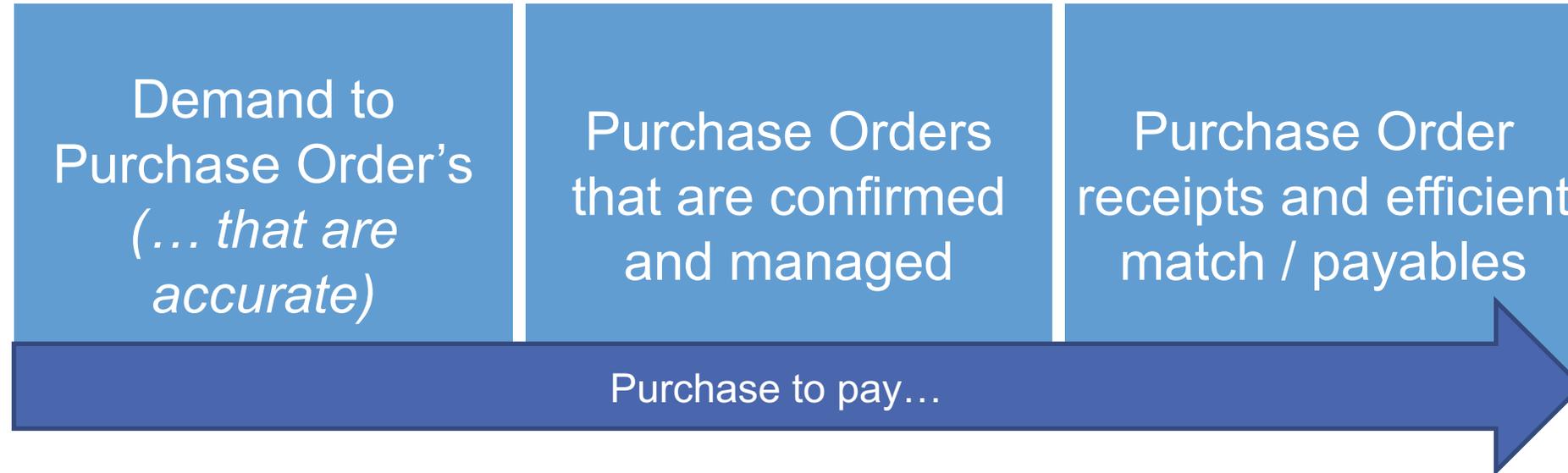
...what is created
**aligns with your
strategy**

...we make
**stakeholders lives
easier and add
tangible value**

...we achieve
**alignment across
your leadership
team**

... have a **clear
execution plan
and tech
strategy**

2. **Ensure the organization is well organized and resourced to execute the basics** daily (e.g., cutting orders, confirming dates, tracking vs. commitment, scheduling in/out, etc.)



3. Increase your **focus on supplier management and development strategies**, while **expanding the pool of prospective suppliers where possible**

Two examples:

1. Dock equipment; and
2. Restaurant supply chain.

The door opener to great deals / make early deposits to allow for future withdrawals...



- Pre-emptive work for future sourcing activities
- Market intelligence: gather insight from the supplier on potential disruptions (pricing, delays, impacts, and industry changes)
- Establish ongoing relationships with supplier for future program & supply chain initiatives
- Provide project-level support for issue resolution where appropriate
- Reduce disruptions, proactively gain insights into supply impacts
- Improve collective buying power and add value to projects
- Improves efficiency in logistics and warehousing
- Ensure material quality

4. **Extend your planning and scheduling horizon**, working closely with top customers

5. Consider building **strategic inventories** or **locking in capacity with suppliers** for longer lead time / lower risk raw materials and services

Two examples:

1. The not so *strategic* approach of spraying PO's to suppliers; and,
2. A warehouse build contractor that got ahead of supply of *standard* items.

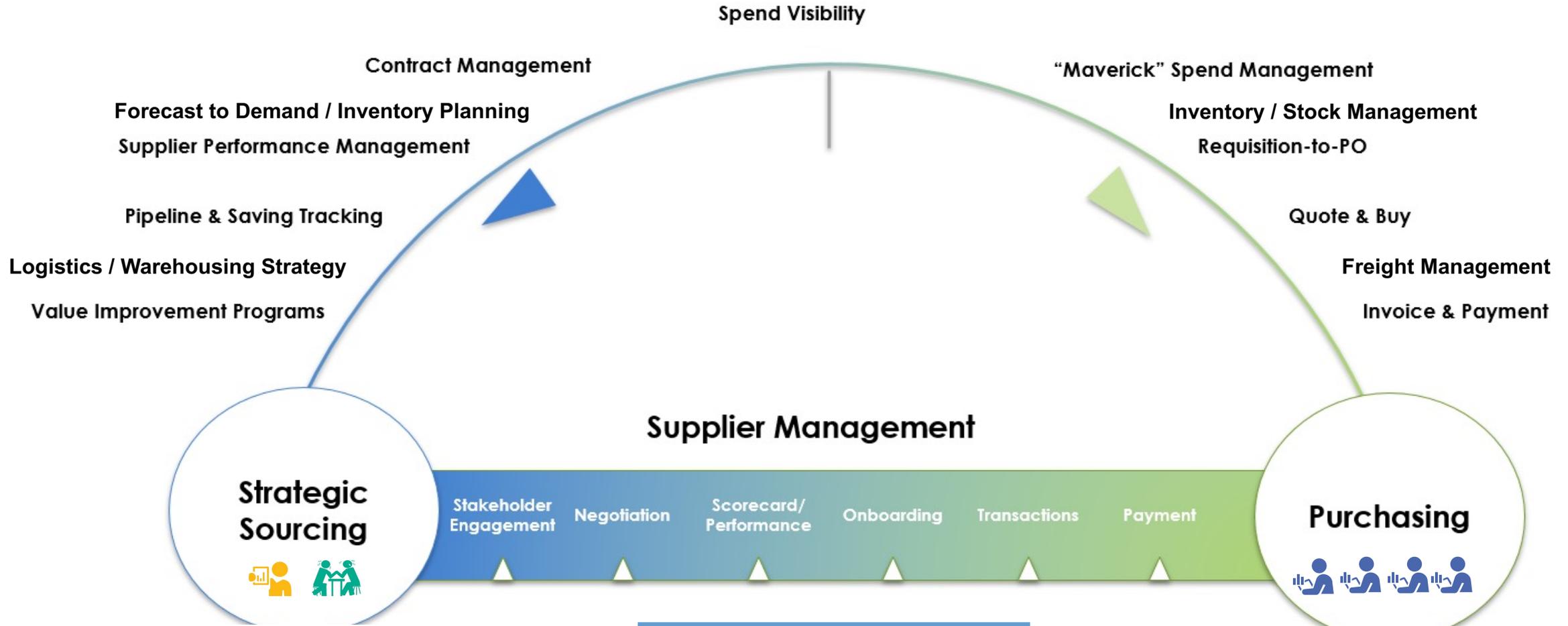
6. Implement processes to facilitate frequent **forward-looking supply chain risk evaluations**, working **closely with top suppliers and carriers**

In summary...

If you **want better outcomes** you have to **invest in your supply chain teams and processes.**

1. Leveraging strategic sourcing to crawl back margin while building in supply chain resiliency

Strategic Sourcing vs. 'Procurement'



A structured and objective process for supplier selection, negotiations and management. The goal is to achieve optimal alignment between organization needs and wants and the most capable supplier in the market.

Goal – maximize organization value

- Not the same thing; and,
- Disappointing result when mixed.

Tactical day-to-day transaction level management of requirements, new purchase orders, open order management, receipt... to payment.

Goal – responsive, accurate and efficient transactions

Supply chain management value levers

Procurement synergies are well understood, yet few organizations are positioned to capture value. Companies that do enjoy the benefits of a critical and **differentiating competitive advantage**...



Reduced supply chain management **risk** and **disruption**

*Once the exception – now the norm; companies experience **2 – 3 supply chain disrupting events annually***



Streamlined and more **scalable** procurement **administration**

***Poorly designed processes and lacking automation** are the greatest barriers to scalability*



Improves supply partner **relationship management**

*~80% of companies with **high-performing supply chains** achieve **revenue growth greater** than the average within their **industries****



More **competitive cost**

2% - 5% lift in net income

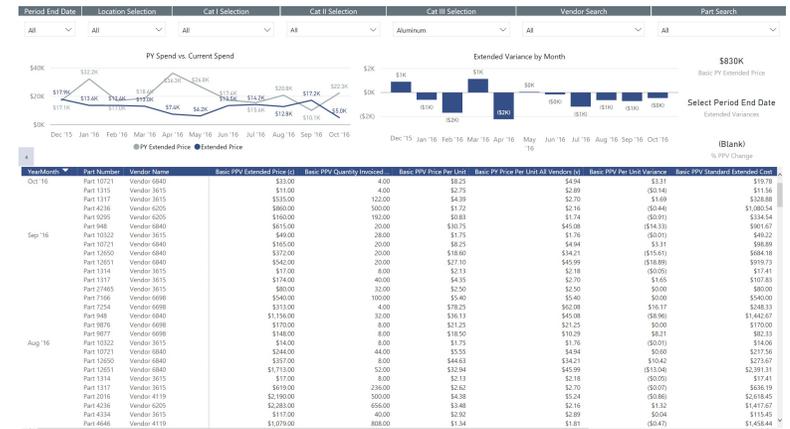
The power and value of spend visibility

An analysis platform is used by sourcing teams to monitor spend and identify opportunities. Some tools can compare vendor purchases against a dynamically calculated internal index and a relevant external index.

3rd Party Spend Analysis: 20k ft. view to 5k ft.



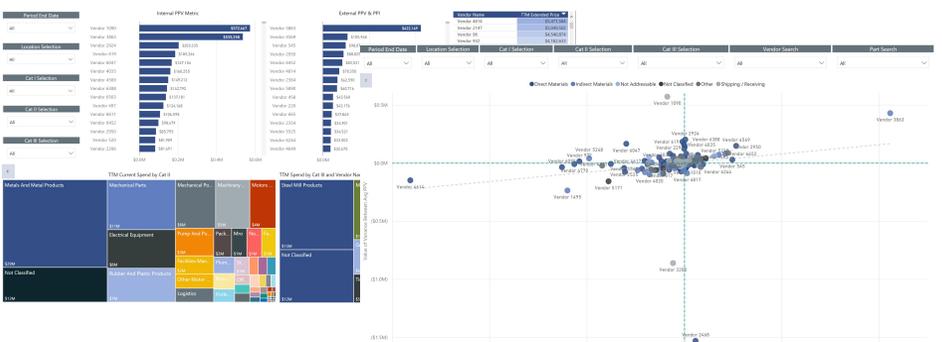
Direct Material Price Trends: historic vs. current actuals



Trending view of category spend vs. index data

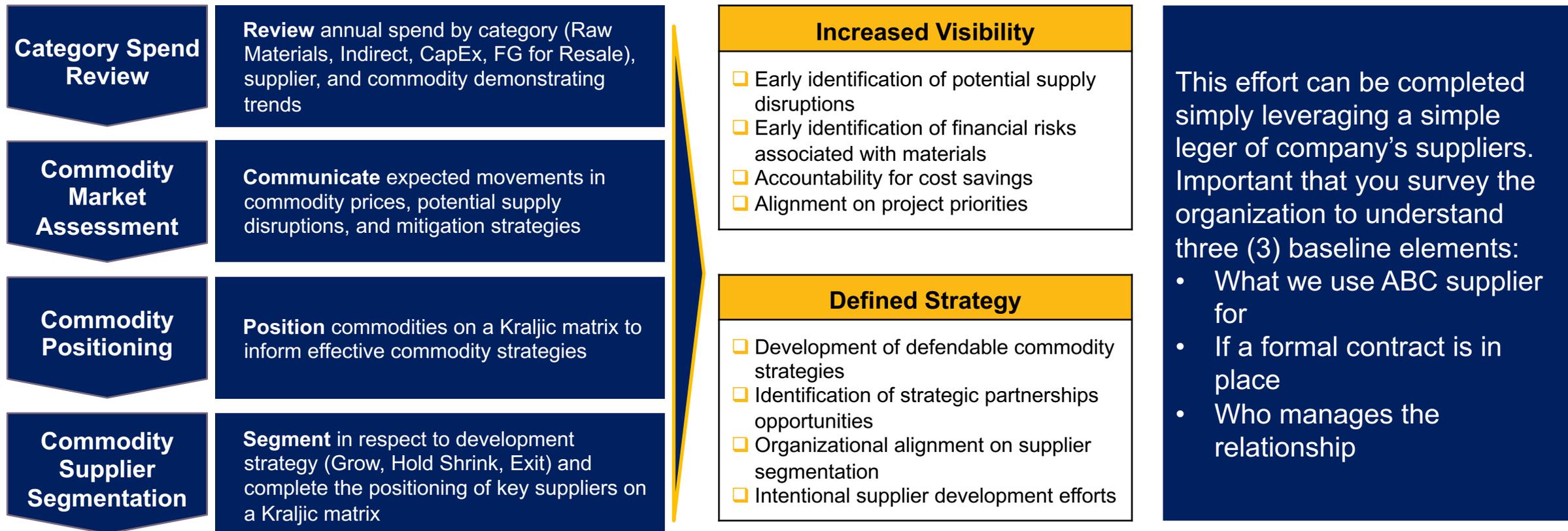


Opportunity score per custom index matching



You need to build a plan

Leveraging a **strategic sourcing planning framework** will help ensure you are working on the right things and align the organization.



... strategies are build on an **understanding of the spend category, supplier markets, understanding leverage and how you view suppliers.**

Three basic strategies

Once teams are dialed in on ‘addressable spend’ **three (3) areas of opportunity take shape...**

Spend category initiatives

- Phase 1: Specific targets that appear to represent quick, meaningful wins (e.g., general supply categories and telecom)
- Phase 2: More strategic categories (e.g., direct items)

Vendor direct initiatives

- Phase 1: Stabilizing and looking for quick wins in existing relationships
- Phase 2: More aggressively growing and eliminating existing relationships
- Phase 3: Supplier development / management

Demand management and process improvement initiatives

- Focused on areas that can be improved in internal processes (e.g., “maverick” spend and “leakage”)

A sourcing gemstone approach - Niul Burton, '98

Sourcing approaches considering both **‘exploiting buying power’** and **‘creating advantage strategies’** levers should be analyzed.

Strategies to Exploit Buying Power

Volume Concentration

- Reduce/consolidate number of suppliers
- Pool volume across business units
- Redistribute volume among suppliers
- Combine volume from different sourcing groups
- Develop alliances among purchasers
- Rationalize/standardize parts

Best Price Evaluation

- Benchmark internal prices
- Renegotiate/rollback prices
- Un-bundle prices and model should-costs
- Threaten-back leverage
- Use competitive bidding
- Use commodity hedging/trading
- Index/cap prices
- Compare TCO among potential suppliers
- Base pricing on profitability
- Develop long-term contracts

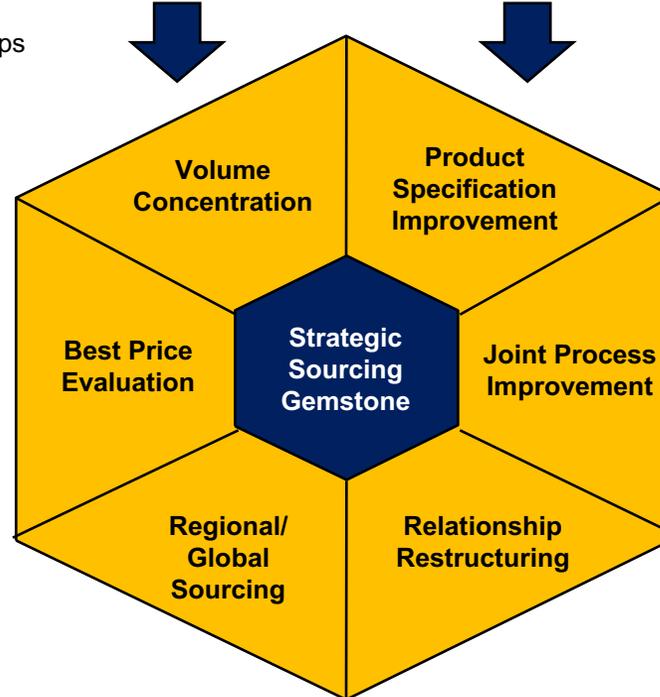
Regional/Global Sourcing

- Expand geographic supply base
- Examine new suppliers
- Capitalize on currency fluctuations
- Take advantage of trade incentives
- Optimize counter trade
- Leverage second-tier suppliers

Sourcing Approaches

Exploit Buying Power

Create An Advantage



Strategies to Create an Advantage

Product Specification Improvement

- Rationalize/standardize parts
 - Substitute materials/parts
- Apply product value analysis
- Apply product value engineering
- Use functional/black-box buying
 - Examine life cycle costs
- Develop long-term contracts

Joint Process Improvement

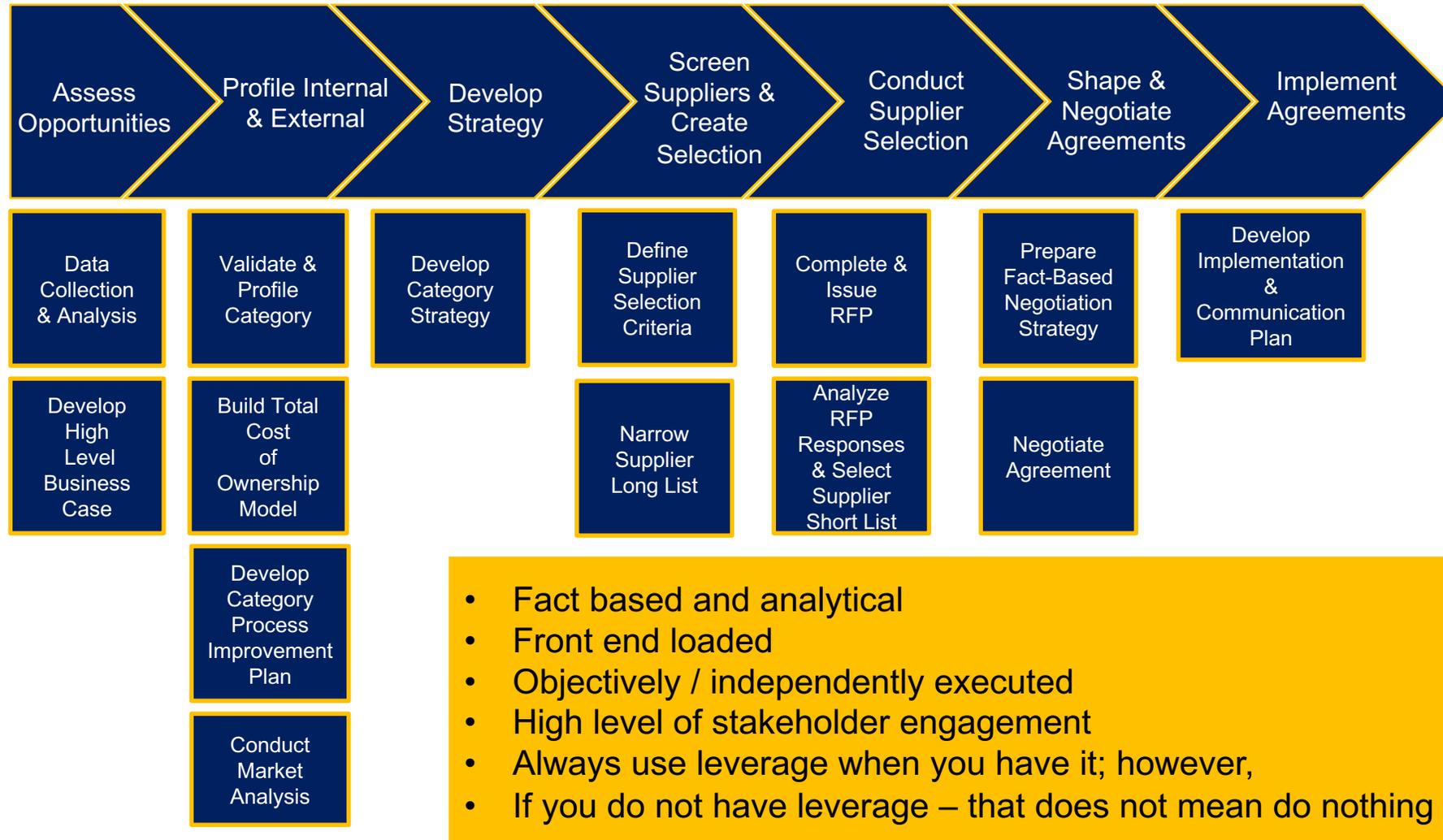
- Reengineer joint processes
 - Optimize physical material flow
 - Integrate logistics
- Support supplier operations improvement
- Use simultaneous engineering/joint R&D
 - Develop long-term contracts
 - Share productivity gains

Relationship Restructuring

- Analyze core competencies
- Examine strategic make vs. buy decisions
 - Adjust degree of vertical integration
 - Create market entry alliances
 - Establish joint ventures
 - Employ strategic alliances/partnering
 - Establish/develop key suppliers

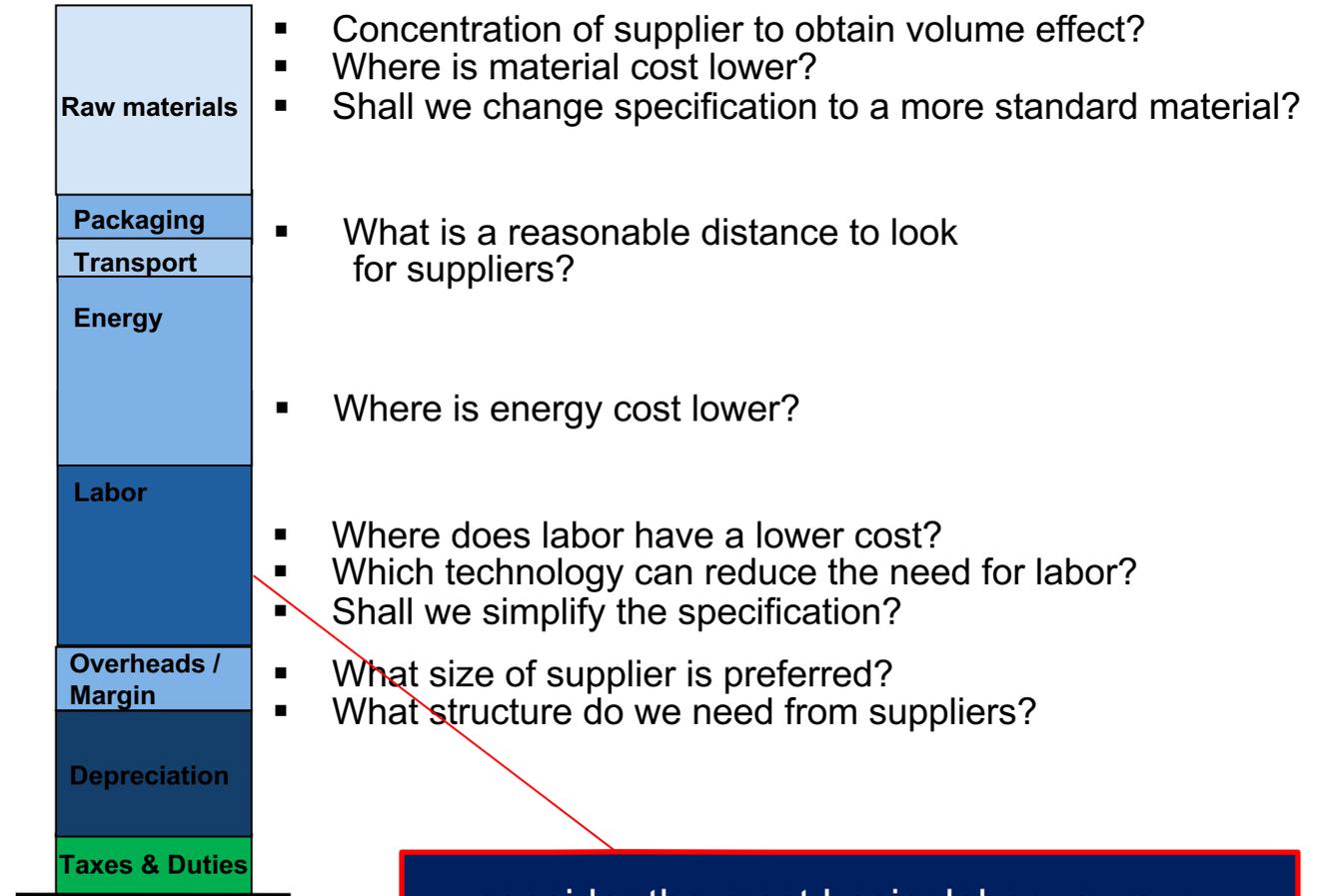
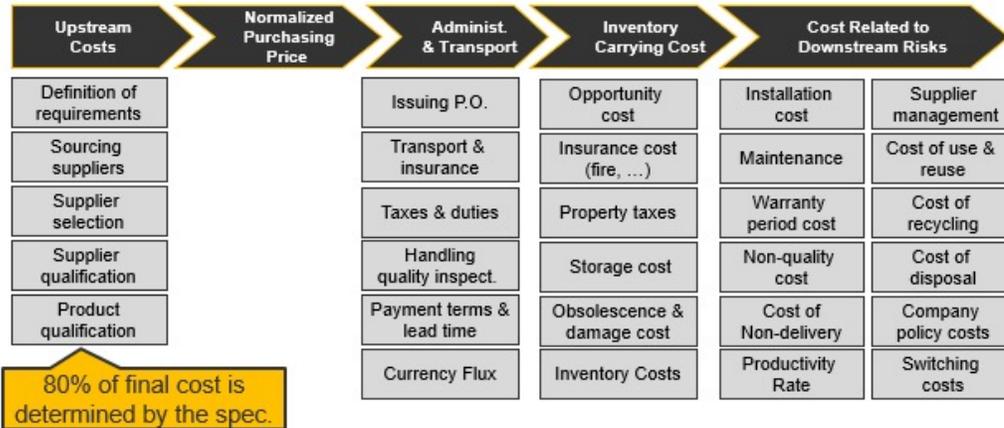
Basic seven (7) step sourcing process

No process = no impact + frustrated stakeholders.



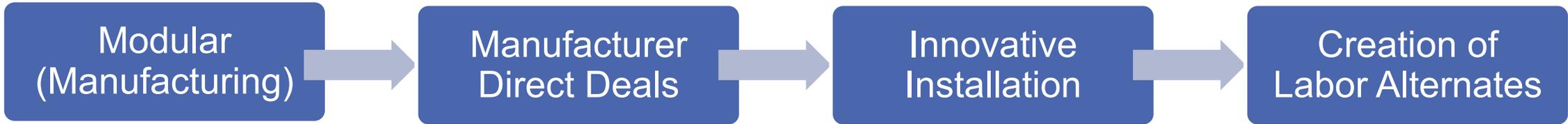
Understanding lifecycle cost and major drivers matters. **Total Cost of Ownership considers all the cost associated to a product during its life cycle:**

1. Concept
2. Acquisition
3. Use
4. Disposal

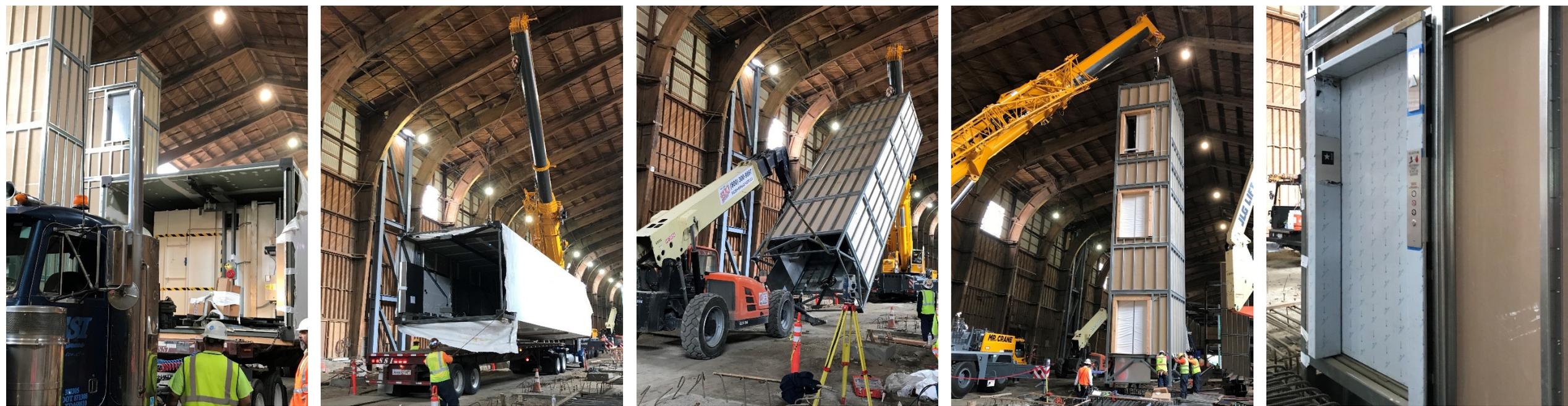


... consider the most basic; labor vs. raw material cost...

Total cost of ownership (cont.) - *more on labor - components*



6 weeks versus 46-52, 2-1/2 hour installation



Negotiating improved commercial terms (e.g., better pricing) in many cases is easier than keeping the benefits created:

- 'cost-plus' contracts with customers
- poor standard costs systems
- lacking sales governance processes and hurdle margins frameworks
- poor quoting and estimating processes with lacking accountabilities

... results in negotiated benefits passing through a companies P&L to the client.

Thank you

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