

4 Challenges Facing Procurement Organizations

**Identifying and mitigating global
supply chain issues**

**Presenter: Mike Long, Purchasing Manager –
 Anvil Corporation**



About Anvil Procurement

15 staff, including Buyers, Expeditors, and Document Technicians

Annual Statistics

- Over 600 Purchase Orders
- Over 4,000 individual line items
- Over \$70MM purchase value
- 16 delivery locations
- Over 10,500 supplier documents processed

Capabilities

- Equipment and material procurement
- Shop expediting
- Logistics, including heavy haul and international
- SAP, Maximo, and other client procurement systems



“Supply Chain” in the news

“Maersk Q2 Results: Profit drops 45% to \$833 million over disruptions in global supply chains”

The Economic Times, August 7, 2024

“Auto companies 'in full panic' over rare-earths bottleneck”

Reuters, June 9, 2025

“Supply Chains Become New Battleground in the Global Trade War”

The Wall Street Journal, October 2023

“Small retailers brace for shortages amid supply chain issues: 'Worrying sign that things are getting worse'”

CBS News, October 2023

"Only 23% of Supply Chains Have a Real AI Strategy in Place"

Supply Chain 24/7, May 13, 2025

“Trade strains boost cargo rates at pace recalling Covid ‘chaos’”

The Economic Times, May 28, 2024

“Whole Foods tells customers of 'temporary supply challenges' after cyberattack leaves shelves bare”

New York Post, June 11, 2025

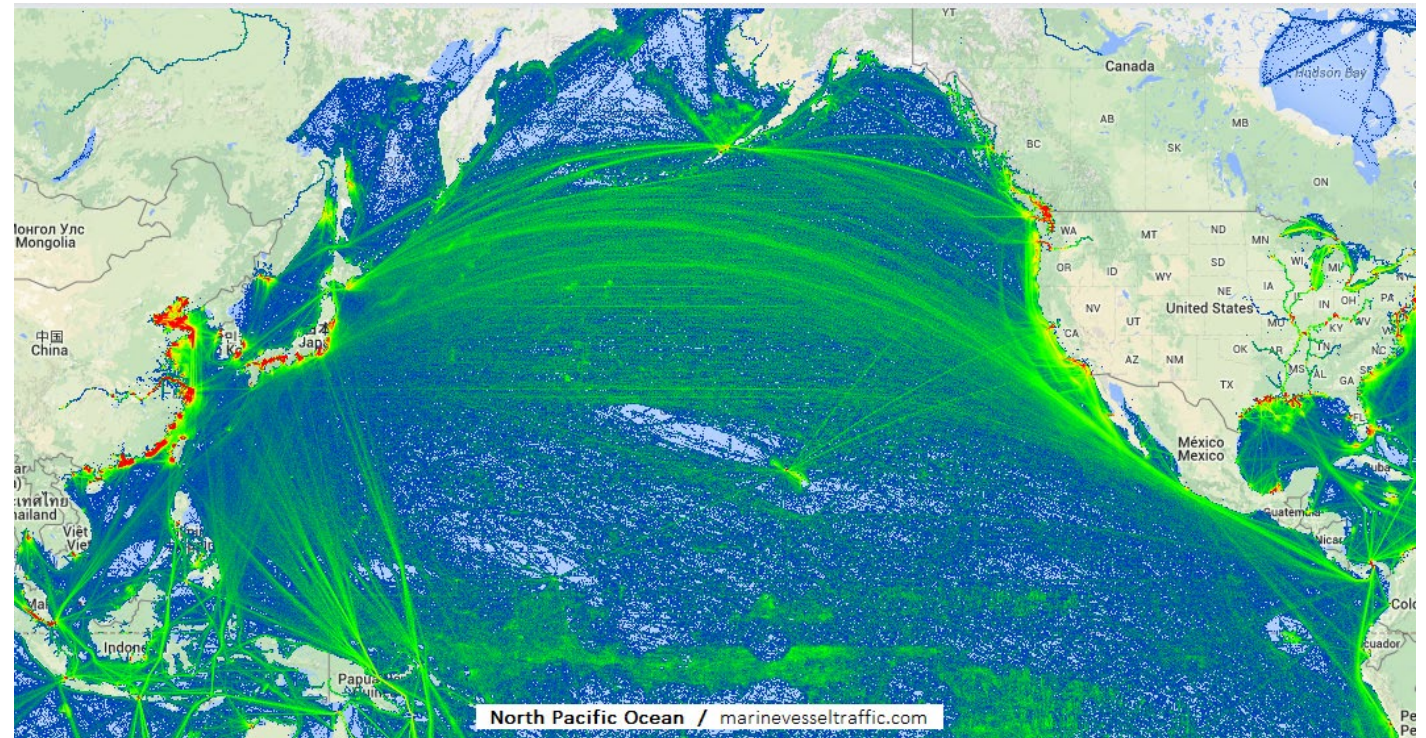
"More Bad News on US Cargo Theft – Up 26% in 2025, Expect about the Same in 2025"

Supply Chain Digest, May 13, 2025



What is “The Supply Chain”?

- Engineers and designers
- Buyers and other supply chain professionals
- Raw material providers
- Component suppliers / Subvendors
- Vendors
- Manufacturers
- Transportation / Logistics providers
- Customs brokers & agents
- Materials management specialists
- Fabricators
- Constructors
- Commissioning and start-up specialists
- End Users



“I don't want to sell anything, buy anything, or process anything as a career. I don't want to:

- *Sell anything bought or processed,*
- *or buy anything sold or processed,*
- *or process anything sold, bought, or processed,*
- *or repair anything sold, bought, or processed.*
- *or construct anything sold, bought, processed, or repaired **

You know, as a career, I don't want to do that.”

** (He didn't actually say this one)*





4 challenges facing procurement organizations:

- Challenge 1: Multiple Stakeholder Misalignment
- Challenge 2: Supplier Constraints on Capacity & Resources
- Challenge 3: Shortage of Technical Expertise
- Challenge 4: Unpredictable Macro Issues



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Challenge 1: Multiple Stakeholder Misalignment

Stakeholders enter into an agreement with different perspectives:

- Client/Owner/End User
 - Project Manager
 - Technical Staff
 - Supply Chain Staff
 - Cost / Schedule / Accounting Teams
 - Quality and Safety Representatives
- Engineering/Procurement Contractor
 - Project Manager
 - Technical Staff
 - Buyer/Expediter
 - Project Controls
- Supplier
 - Sales Manager/Engineer
 - Project Manager
 - Buyer/Expediter
 - Production / Fabrication Team
- Subsupplier(s)
- Construction and Fabrication Contractors



What does alignment look like?

- Everybody understands the mission:
 - Get the right equipment/materials to the right place at the right time
 - Get the right information to the right people at the right time
- Everybody understands their role and obligations in achieving the mission
- Everybody is fully committed to achieving the mission:
 - Time commitment
 - Attention commitment
 - “Team First” commitment
 - Accountability commitment



Achieving and Maintaining Alignment

- Clear expectations laid out in purchase requirements and expectations at time of RFQ
- Robust bid clarification and evaluation process
- Initial PO Kickoff meeting held within 2 weeks of award
- Identification of key stakeholders and responsibilities
- Identification of risks and mitigations
- Regular status check-ins
- Ongoing clarification log
- Ongoing action item list



#1 Key to Success:

Hold a PO Kickoff Meeting within 2 weeks of award

- Attendees include supplier, engineering, procurement, and client stakeholders
- Align on key milestone dates
 - Documentation submittals
 - Purchase and receipt of critical components
 - Prefabrication / Pre-inspection meeting
 - Key fabrication milestones
 - Shipment
 - Delivery
- Review key technical requirements
- Review key commercial terms and progress payments
- Align on communication plan
 - Recurring meetings
 - Regular status reports with photos and updated schedules

DISCUSSION TOPIC:	BY:
d. Delivery xx wks after receipt of raw mat'l (FOB on ocean vessel, Port of Mumbai) – Onsite date x/x/xx 3. Terms & Conditions 4. Progress Payments & Invoicing 5. Change Order Process	
<u>Project Schedule</u> 1. Progress Reporting 2. Drawing & Documentation Schedules a. Discuss anticipated submittal date for Supplier's document index/schedule, engineering schedule, and detailed fabrication schedule 3. Milestone/Critical Meeting Dates a. Discuss necessary release for ordering of material b. Discuss desired timing for welder TOFD qualification at fab shop 4. Detailed Fabrication Schedule – Discuss estimated start of fabrication so we can start thinking about when to have TPI lined up 5. Supplier Work Schedules 6. Meetings/Schedule Frequency 7. Holidays/Company Closures/Business Hours	Long / Mettler
<u>Sub-Suppliers & Subcontractors</u> – Discuss if any sub-supplier involvement prior to in-person KO meeting 1. Names 2. Locations 3. Service provided	Mettler



4 challenges facing procurement organizations:

- Objective 1: All stakeholders are committed to the mission
- **Challenge 2: Supplier Constraints on Capacity & Resources**
- Challenge 3: Shortage of Technical Expertise
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Challenge 2: Supplier Constraints on Capacity & Resources

- Project manager – A qualified PM with adequate time to support your project
- Procurement – Ensure that procurement resources are aware of schedule requirements and convey the proper urgency to their suppliers
- Shop capacity and personnel
- Subvendors – Make sure you know what operations are being handled by third parties

Mitigate risk with:

- Production schedule – With regular updates
- Regular check-in meetings to confirm progress, identify upcoming milestones, and catch potential delays early

Typical PO wording to set expectations:

“The goods furnished will be subject to expediting by Buyer. Supplier agrees to request a similar right to Buyer for expediting purposes with respect to any sub-contractors and sub-suppliers.”





4 challenges facing procurement organizations:

- Objective 1: All stakeholders are committed to the mission
- Objective 2: Understand constraints & manage to the schedule
- **Challenge 3: Shortage of Technical Expertise**
- Challenge 4: Unpredictable Macro Issues

Challenge 3: Shortage of Technical Expertise

- In 2021 and 2022, over 98 million American workers quit their jobs, and quit rates in construction, manufacturing and other industries were much higher than historical averages during this time.
- Positions vacated by experienced employees were often backfilled with inexperienced, younger staff.
- Mitigation strategies:
 - Shop visits and quality audits
 - Third party inspections
 - Collaborative design reviews
 - Include supplier engineering and design staff in early status meetings



Shortage of Technical Expertise: Mitigation

Third Party Inspection / Shop Expediting

- Third Party Inspection:
 - Confirm fabrication status
 - Witness testing / hold points
 - Quality checks to confirm compliance
 - Final check / shipping release
- Shop Expediting:
 - Check detailed status of milestones and activities against fabrication schedule
 - Confirm purchased materials have been received and allocated to the purchase order
 - Identify and mitigate production bottlenecks
 - Escalate as needed to project management, production management, or senior management
 - Report status to project stakeholders



GENERAL SHOP EXPEDITING REPORT

SUMMARY OF ACTIVITIES	
1. INTRODUCTION:	
1.1.	
2. AREAS OF CONCERN:	
2.1.	
3. ENGINEERING:STATUS AS FOLLOWS - _% COMPLETE	
3.1.	
4. MATERIALS: STATUS AS FOLLOWS - _% COMPLETE	
4.1	
5. FABRICATION: STATUS AS FOLLOWS - _% COMPLETE	
5.1.	
6. COMPLETION:	
6.1.	
END OF REPORT	



4 challenges facing industrial procurement organizations:

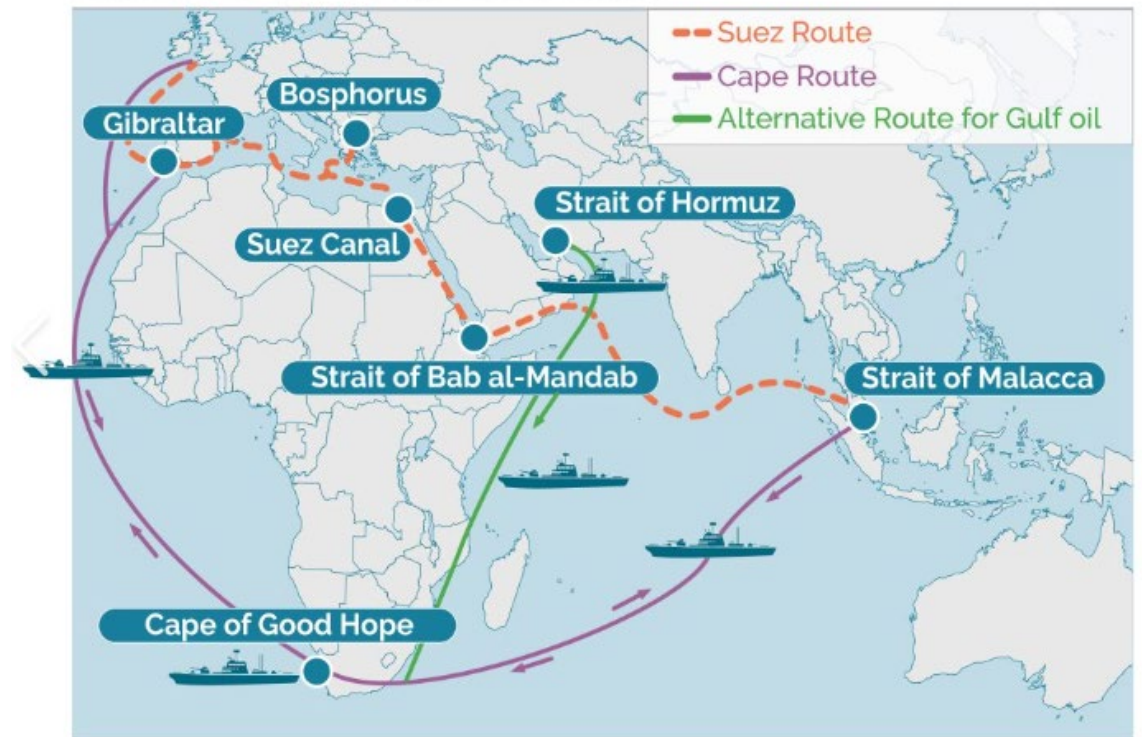
- Objective 1: All stakeholders are committed to the mission
- Objective 2: Understand constraints & manage to the schedule
- Objective 3: Shop visits, inspections, collaborative reviews
- **Challenge 4: Unpredictable Macro Issues**

Challenge 4: Unpredictable Macro Issues

- Conflict and piracy have disrupted shipping through the Red Sea and Suez Canal since late 2023. Detours add 4000 miles to each journey, increasing transit times by about 10 days and raising operational costs by up to \$1 million per ship.
- Severe drought reduced access to fresh water in Panama in 2023-24, resulting in restrictions on use of the Panama Canal with significant reductions in vessel counts and cargo volumes, longer wait times, and re-routing of larger vessels (8,000 additional miles and 2-3 additional weeks).
- Shifting trade policy and tariff rates have added uncertainty to the supply chain, impacting both cost and availability.
- The COVID pandemic impacted costs, schedules, logistics, and human resources – ultimately changing perceptions of how work gets done (Work from Home, Hybrid work, etc.).
- A shift to a globalized workforce is impacting work processes and institutional knowledge across industries.
- Incorporation of AI is proceeding at a rapid rate.

Averting strikes in the Red Sea

Alternative Asia-Europe trade routes



Source:
The Washington Institute for Near East Policy

ISPI

Unpredictable Macro Issues: Mitigation Strategies

- Understand your supply chain
- Build solid working relationships with key suppliers
 - Shop visits whenever possible
 - Don't "waste" your suppliers' goodwill
- Stay on top of trends in your industry
 - Global engineering services
 - Global sourcing and fabrication
 - AI developments
- Build a robust risk management plan to anticipate and mitigate disruptions
- Understand current tariff policy, trends, and forecasts
 - Ensure known tariffs are included in supplier costs
 - Structure agreements to minimize unknown tariff risk
 - Try to quantify impact of potential tariff changes
 - Identify alternate sources where feasible





4 objectives for successful procurement:

- Objective 1: All stakeholders are committed to the mission
- Objective 2: Understand constraints & manage to the schedule
- Objective 3: Shop visits, inspections, collaborative reviews
- Objective 4: Monitor trends, build relationships and develop mitigation strategies