

SEPTEMBER 2025

Speed Meets Strategy: Supplier Consolidation Powered by Digital Factories

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Insights **2025**

DETROIT / SEPTEMBER 23 - 24

Presenter



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Woodward Overview



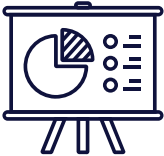
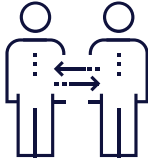
Powering a Clean Future

Company Presentation



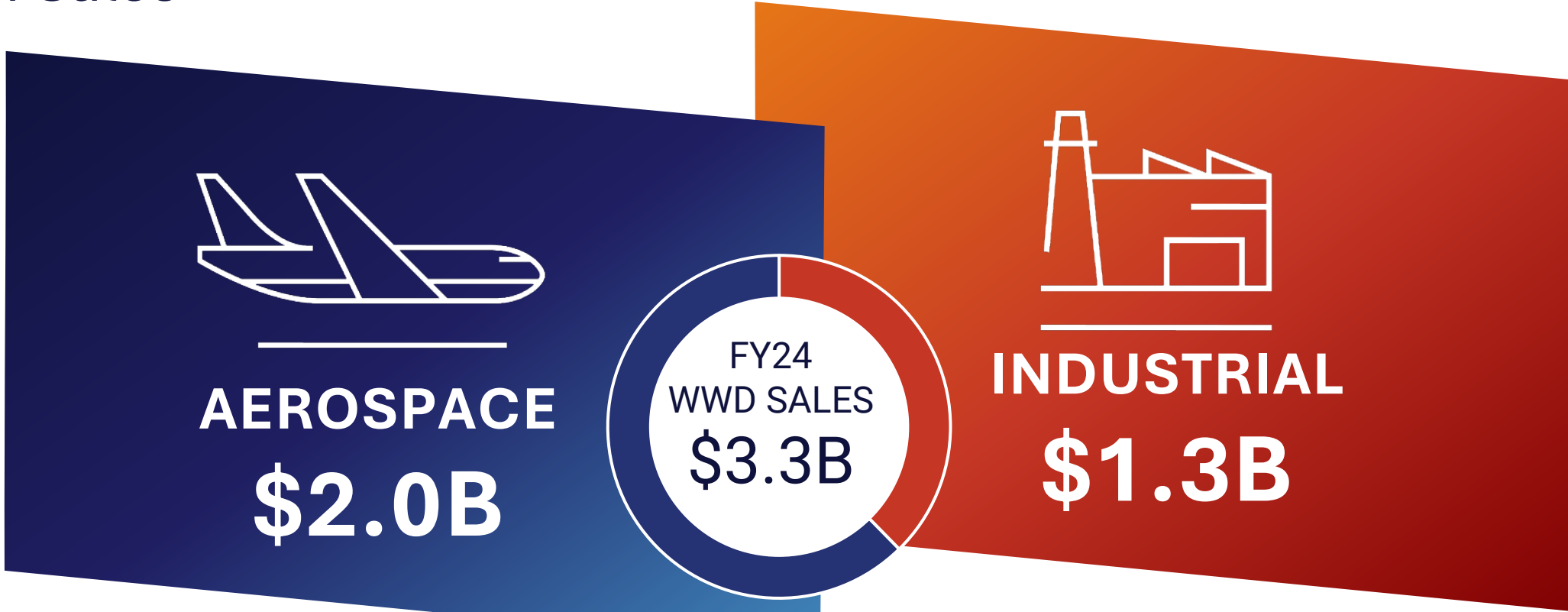
Woodward Overview

Woodward at a Glance

 ~9000 Employees Globally	 \$3.3 Billion FY24 Sales	 Market Segments Aerospace Sales \$2.0 Billion	Business Segments Aerospace   Commercial Defense  BGA	Partnering with Industry Leaders AIRBUS BOEING GE RAYTHEON SAFRAN CATERPILLAR CUMMINS GE MTU WÄRTSILÄ	We Design and Manufacture Control System Solutions and Components  for the Aerospace and Industrial Markets
 11 Years Average Employee Tenure	 Worldwide 38 Locations	Industrial Sales \$1.3 Billion	Business Segments Industrial   Power Transportation Generation  Oil & Gas	 Our Customers are Leading Original Equipment Manufacturers and End Users of Their Products	 Our Purpose: To Design and Deliver Energy Control Solutions Our Partners Count On to Power a Clean Future
 155 Years of Innovation (Founded 1870)	Worldwide 38 Locations 17 Countries	 Number of Patents 850 in Force 350 U.S. 500 Non-U.S.			

Woodward Overview

FY24 Sales



World Class Controls: Our Core



Integrated Propulsion Systems

- Fuel Systems
- Engine Actuation
- Thrust Reverser Actuation
- Fuel Injection & Ignition
- Oil & Air Management



Flight Deck Controls

- Side Sticks
- Throttles
- Pedals
- Flap Levers



Aircraft Actuation & Controls

- Electromechanical Actuation
- Hydraulic Actuation
- Precision Motors
- Servo Controls
- Sensors

Today's Sourcing Challenge

Sourcing Challenges



Supply Chain Disruptions
– Tariffs & Geopolitical



Component Obsolescence
& Long Lead Times
– Lead times exceeding a year!



Regulatory Compliance



Talent/Labor Shortages



Technological Demands



Cybersecurity Threats



Financial Constraints



.....and a Long Tail of Low
Spend Suppliers

The Long Tail

Challenges

Operational Complexity - Hundreds of low spend suppliers

- Administrative Burden
- Supplier Record Maintenance, audits, etc
- Contracts
- Risk Tracking
- Maverick Spend
- Strategic Dilution
- Limited Supplier Collaboration

Opportunity

- Supplier Rationalization/Consolidation

Strategic Supplier Alignment: The 4 “Cs”

The Four “Cs”

Category

- All part numbers are categorized (via AI OCR) based on key critical definition
 - Raw Material
 - Part size
 - Special Processes (Plating, etc)
 - Tolerances

Capability (Supplier)

- With each DF Supplier we know their manufacturing capabilities match our part requirements
- Machining Technology
- Raw Material Experience

Capacity

- More importantly “Open” capacity
 - Each DF Supplier provides a monthly update on open capacity plan for at least the next 6 months
 - New parts/programs with known ramp rates are overlayed against the DF Supplier’s estimates

Cost

- All parts are run through the Supplier’s DF in aPriori to provide a “self-quote” based on pre-negotiated Labor, OH, SG&A & Margins

*We get the Right Part, to the Right Supplier, at the Right Time and with a full Transparent understanding of Costs **Each** and **Every time**. No Exceptions. - Chris Platz*

Supplier Digital Factories and Self-Quoting



WOODWARD AND
KEY SUPPLIERS HAVE
EMBRACED A SUPPLIER
DIGITAL FACTORY AND
SELF-QUOTING INITIATIVE

DIGITAL FACTORY INPUTS

Supplier Equipment List

Types of equipment, quantities, machine models

Supplier Labor Rates per Operation
(2 axis, 5 axis, deburr, etc.)

Supplier Direct Overhead Rates
(This is usually a % of labor)

Supplier Indirect Overhead Rates
(This is usually a % of labor)

SGA & Margin %

The Four “Cs”

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Capacity

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Cost

- All parts are run through the Supplier’s DF in aPriori to provide a “self-quote” based on pre-negotiated Labor, OH, SG&A & Margins

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Why Categorize

- › Categorization allows us to put parts with similar attributes together to aggregate machine hours using similar materials, similar tool packages run on similar machines
- › Packages of similar parts allow suppliers to:



**Improved
Quality**



**Improved
yield**



**Reduced build
quantities/inventory**

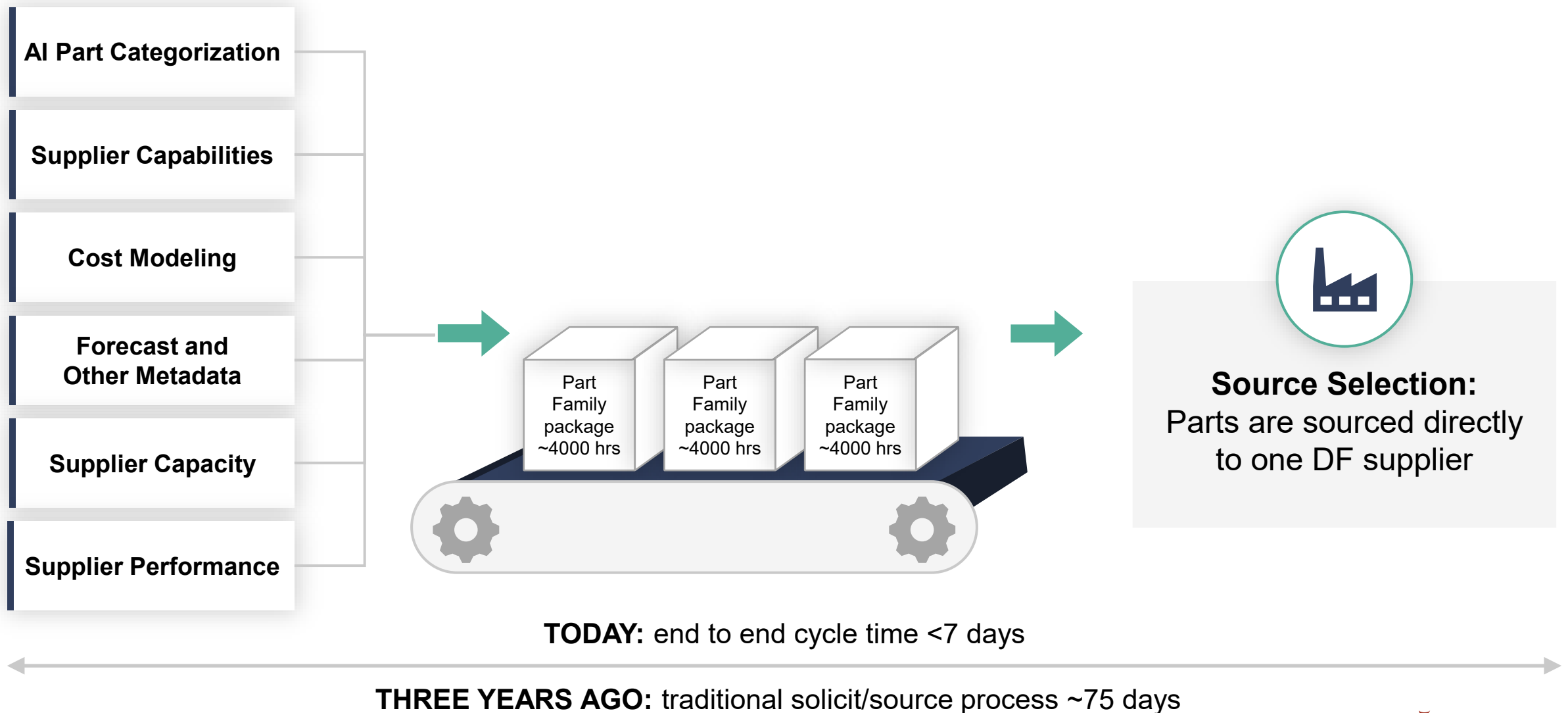


**Efficient Mixed
Model Schedules**



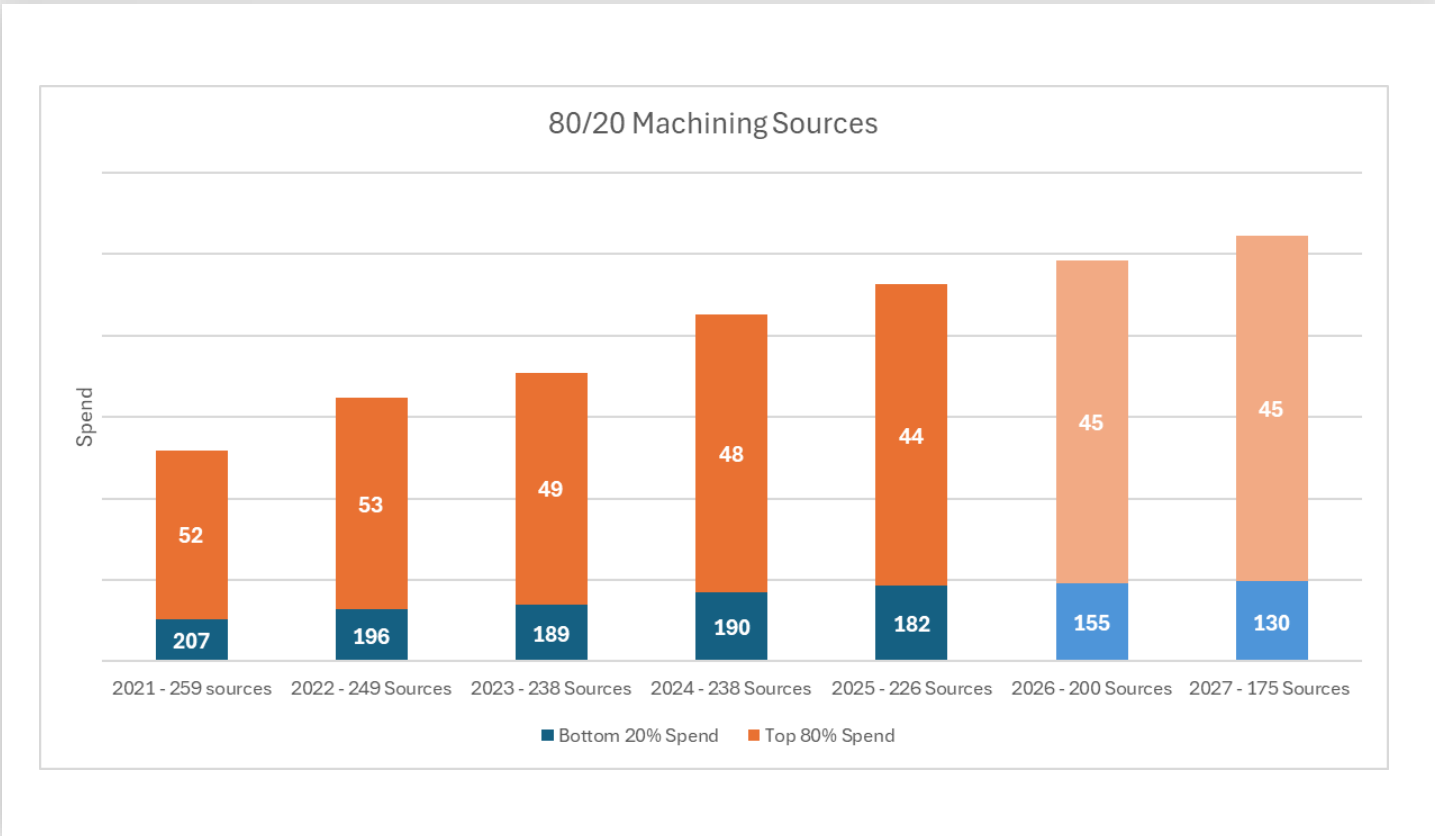
**Optimized
Changeover**

Woodward's Sourcing Process



Metrics

- Focused effort to consolidate the supply base over the past 5 years.
- Reduction of the bottom 20% of spend from 207 to 182 sources over the same period, with goals to continue & accelerate this trend.
- Key “Grow” Digital Factory suppliers are adding to their revenue at a 10x+ rate compared to non-DF suppliers.



Case Study 1

Supplier “XYZ” Goes out of Business



Aerospace Machining Supplier in Western Europe



In business **over 30 years**



Supplier to multiple top Aerospace Companies



~50 employees



~\$25M year revenue

Situation

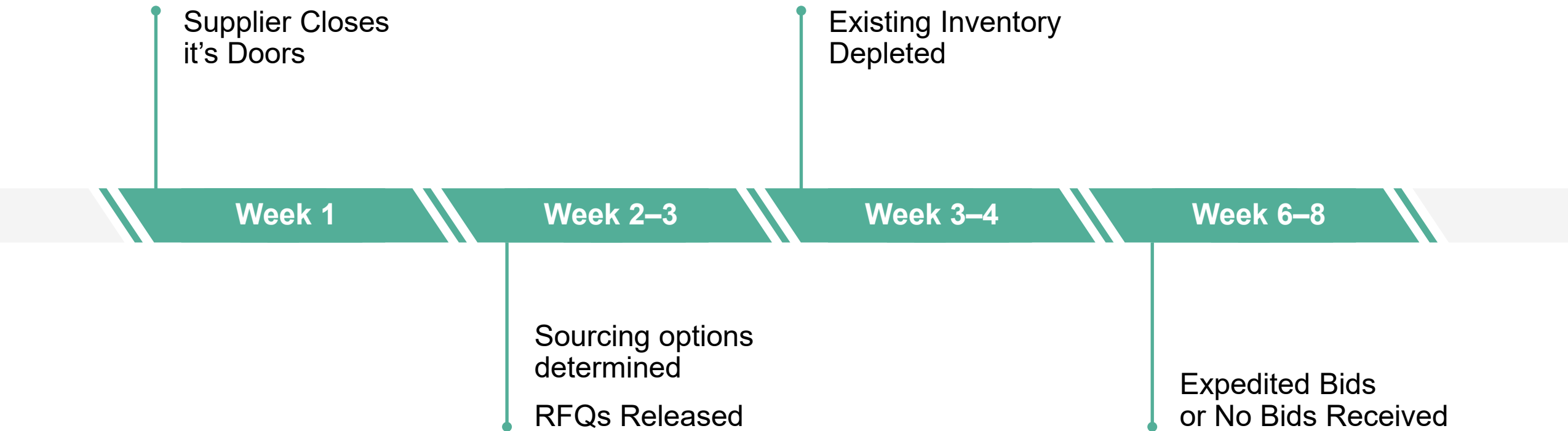


Private Company – Limited ability to track their risk profile

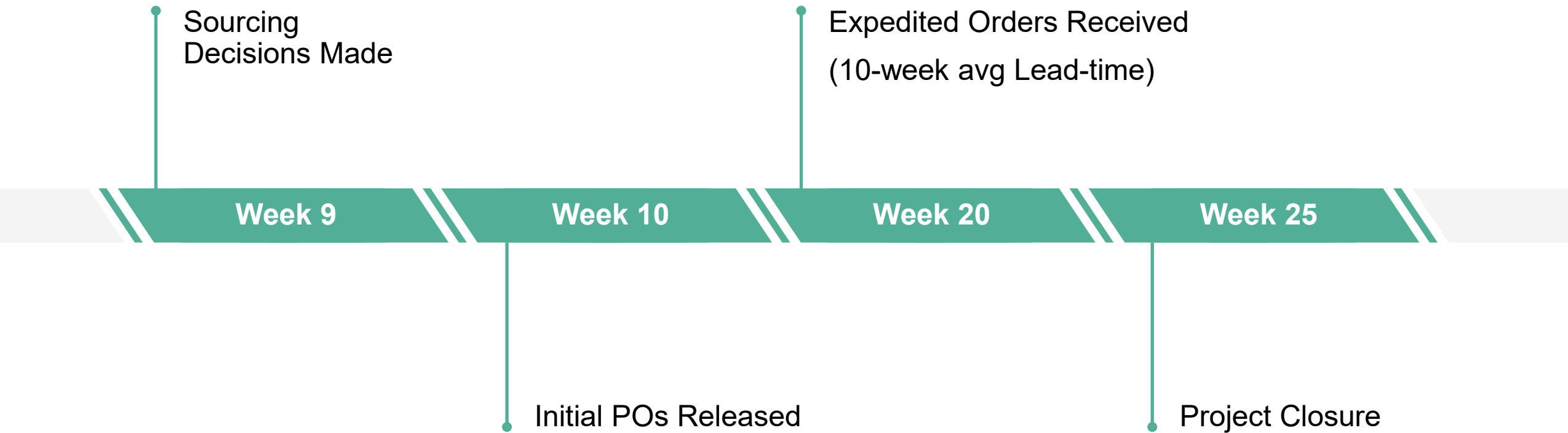
TIMELINE

WEDNESDAY	THURSDAY	FRIDAY
Morning phone call to our Buyer, they are shutting their doors on Friday PM. Ship EVERYTHING that you have! Internal “War Room” set up	On site representation	Last orders shipped & remaining POs cancelled

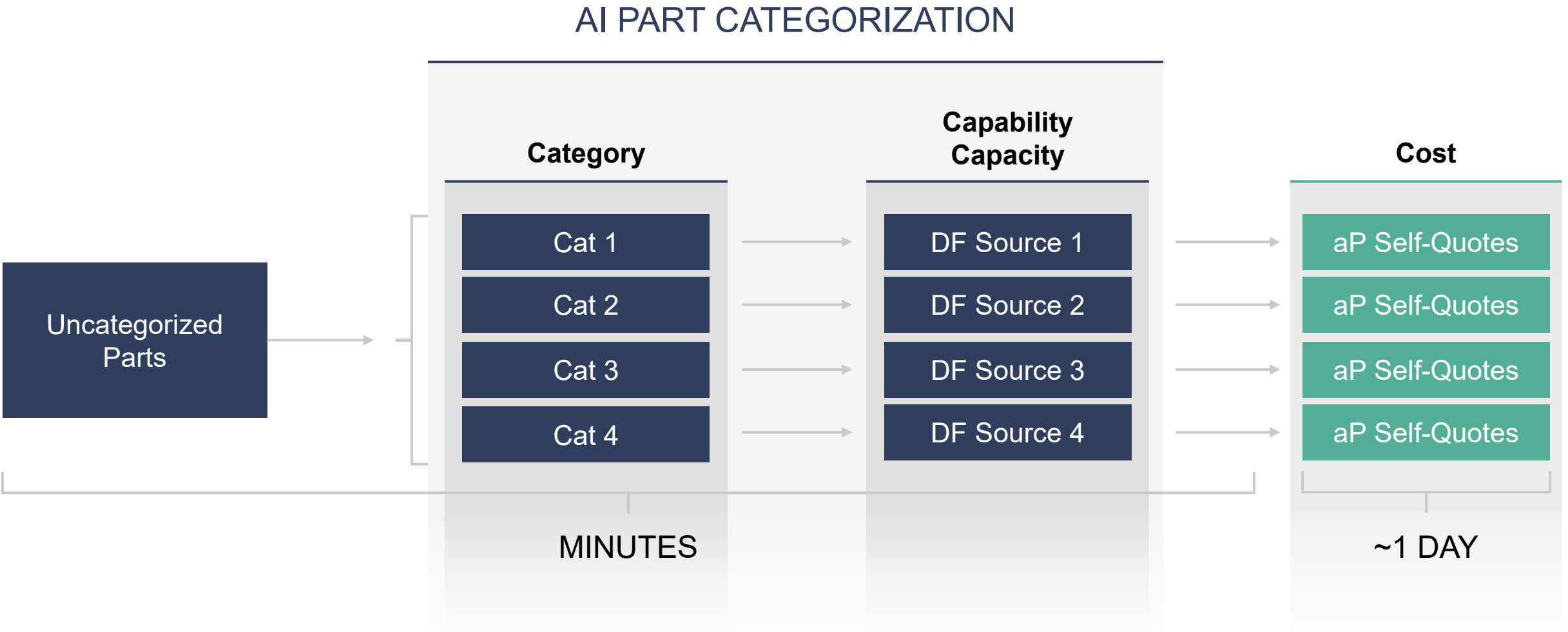
“Normal Expedited” Timeline



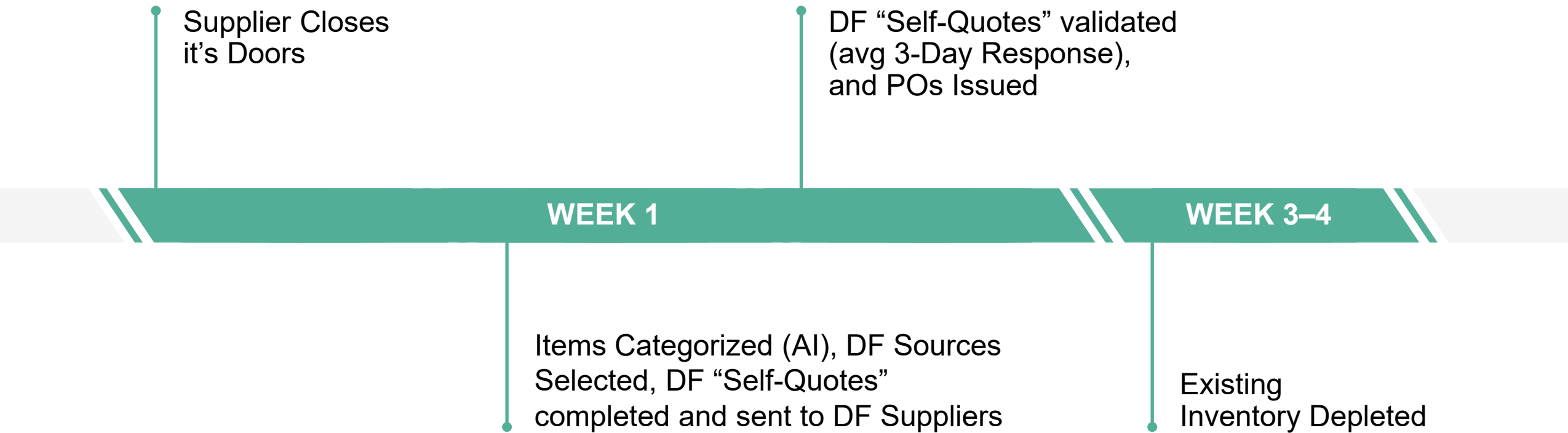
“Normal Expedited” Timeline



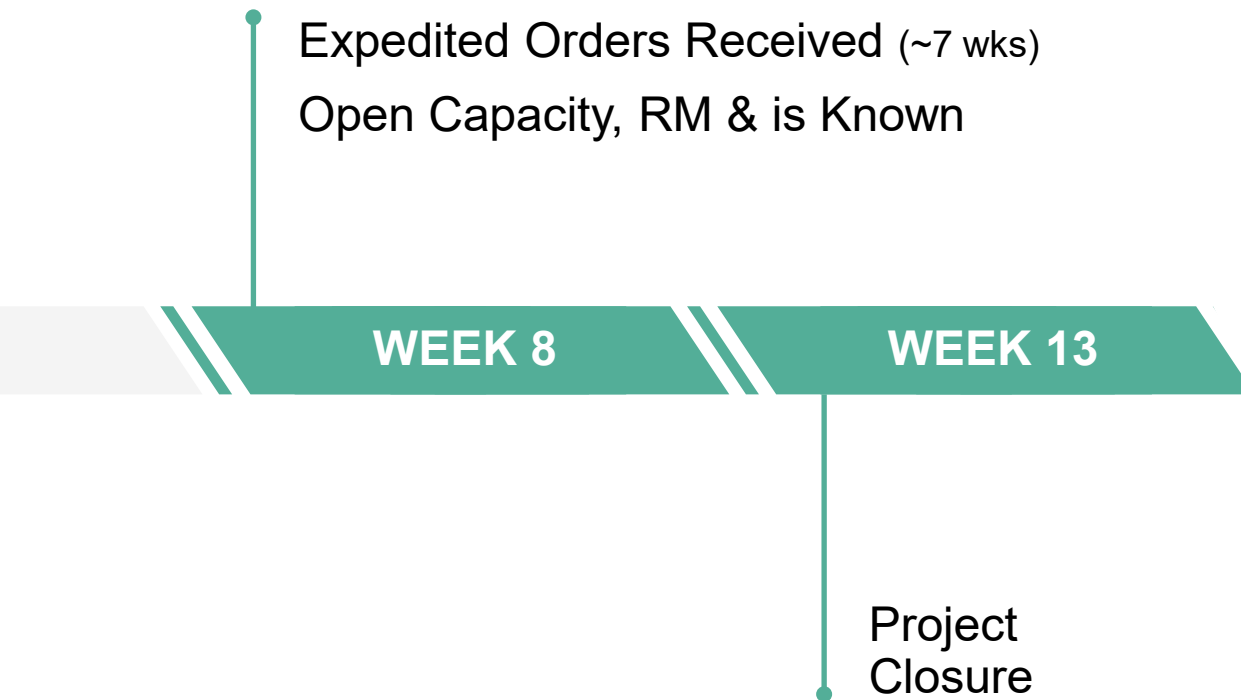
“New Expedited” Process



“New Expedited” Timeline



“New Expedited” Timeline



RESULT:

8 week turn with AI and aPriori / DF Suppliers vs. **~20 weeks** with the “traditional” expedited efforts



Overall, 60%-time reduction



100% first past award rate



Close connection with key Grow Digital Factory Suppliers



Shared alignment to supporting Woodward’s sourcing needs



Reduction of possible stock outs by 12 weeks

Digital Factory Stats



Mechanical sourced parts (spend) that are run through the DF Selection/ Self-Quote process (Commercial items)



First pass award rate (we are getting the right parts to the right supplier at the right time)



DF "Self-Quote" supplier satisfaction

Case Study 2

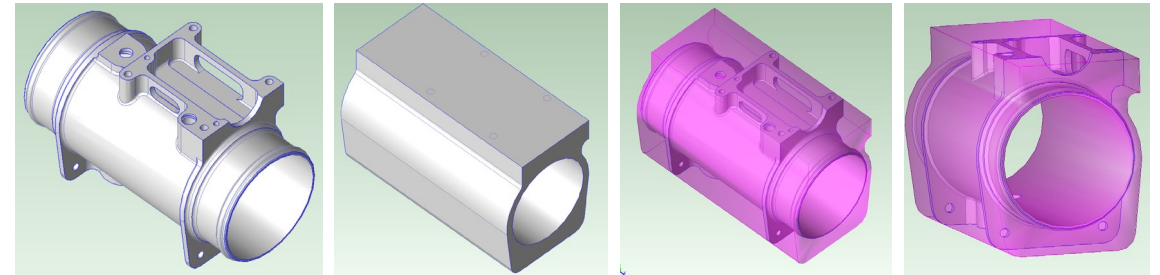
Value Engineering & “What If” Reviews

With our cost modeling software, we can quickly review and make decisions on improvement opportunities

Aerospace Air Valve

- AMS6061-T6
- Cost model virtual simulation review indicates
 - **65% reduction** in starting RM weight (w/extrusion)
 - **75% reduction** in machining time

Drawing updates are approved, the project has been awarded (DF) and production starts in 2026



AMS6061-T6	BAR STOCK	EXTRUSION
Starting LBS	26.7	9.5
Finished LBS	2.47	2.47
Material Utilization	9%	26%
LB savings Per Part	–	16.2
Cycle Time Reduction	–	75%

Summary

Summary

- Sourcing Challenges and the Long Tail of Low Spend Suppliers
- Getting the **Right Parts**, to the **Right Supplier**, at the **Right Time** via **aPriori Digital Factories** and **AI**
- Part Categories, Supplier Capability, Open Capacity, and Cost
 - Part Packages of 4-5k hours
- Improving the Customer / Supplier relationship
 - Eliminating Waste in the Process

Thank You!

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