



*Right Supplier. Right Price. Right Now.*

# Predictive Procurement: Transforming 'Dirty Data' Into Rapid Cost Savings

April 2024

[www.arkestro.com](http://www.arkestro.com)

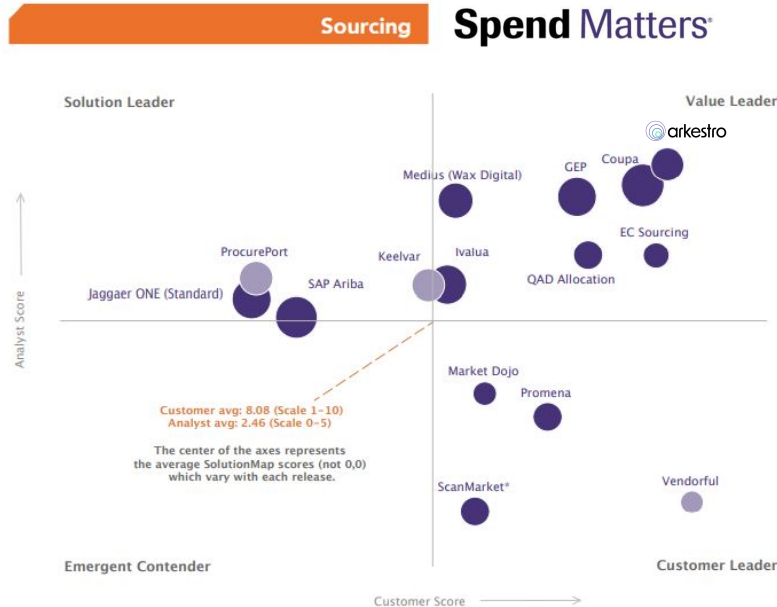




**Edmund Zagorin**  
Founder & CSO



# In 2021, our team at Arkestro won recognition for being the best AI-driven approach to run an RFQ or RFP



**Gartner**

**COOL**

**VENDOR**

# Arkestro brings game theory and machine learning to procurement with \$26M investment

Ron Miller @ron\_miller / 7:00 AM PDT • June 14, 2022

 Comment



**CONSTRUCT**

**KOCH**<sup>TM</sup>

DISRUPTIVE TECHNOLOGIES

FOUR MORE CAPITAL

# Our Mission: Amplify the Impact of Procurement's Influence

Backed by  
world class  
investors



**Jeff Immelt**  
Board Member



**Rob DeSantis**  
Co-Founder &  
Board Member



**Cindy Padnos**  
Board Member

Trusted by  
leading  
enterprises



**Neil Lustig**  
Chief Executive Officer



**Edmund Zagorin**  
Co-Founder & Board Member



# What is Predictive Procurement?

# Procurement Transformations Often Set Out With Bold Ambitions



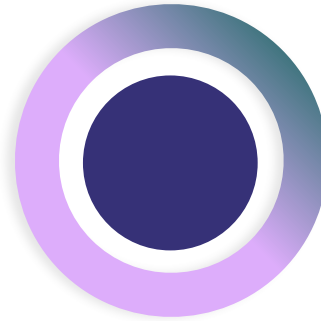
Build Great  
Stakeholder  
Relationships  
To Influence  
More Spend



Deliver  
Best-In-Class  
Annual  
Financial  
Outcomes



Manage and  
Mitigate  
Supply Risks to  
Business  
Continuity



Deliver A Great  
Customer  
Experience &  
Supplier  
Experience



Increase  
Savings Per  
Headcount  
and ROI of  
Procurement

## Problem

**‘Dirty data’ in procurement makes it hard to deliver better or faster procurement outcomes at scale across all spend**



**Item descriptions  
are wrong or  
incomplete**



**Purchase price variance  
can be driven by  
urgency & quantity**



**‘Spot buys’ + ad hoc  
non-catalog purchasing  
create a ‘noise ocean’**












# Is it possible to see 'dirty data' in procurement as an **OPPORTUNITY** for rapid cost savings rather than a **BLOCKER** for transformation?


REACTIVE PROCUREMENT	PREDICTIVE PROCUREMENT
Measure success vs backwards-looking baseline	Measure success vs forward-looking benchmark
Quoted offer is one-time, validated using static rules, often requires competitive offers to validate	Quoted offer is iterative, validated using dynamic rules, can be benchmarked without additional competitive offers
Quoted offer data is manually entered or copied into complex table, errors are found by analyst	Quoted offer data is generated or checked against a predictive model using AI to find errors without an analyst






Submit a quote for Zinc Oxide (ZnO).  

 North SD via Arkestro  
To: You      
Wed 2023-01-18 2:31 PM

 Zinc Oxide (ZnO) Quote Sheet  
54 KB

Powered by 

## NORTH SD

Submit a quote for  
**Zinc Oxide (ZnO)**

Greg Cruz from North SD is inviting you to submit a quote for Zinc Oxide (ZnO) based on 1 line items we think you have.

About the request:	
Total Price	Total Line Items
<b>\$199,050.00</b>	<b>1</b>

# How did we get here?

**The Digital Era:**  
Procurement on the Web



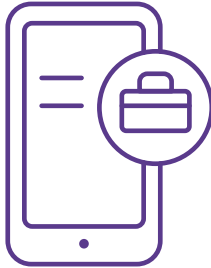
1996

**The Self-Service Era:**  
Procurement on the Cloud



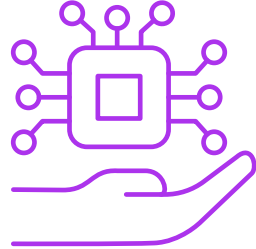
2010

**The “Best of Breed” Era:**  
Procurement in Apps



2015

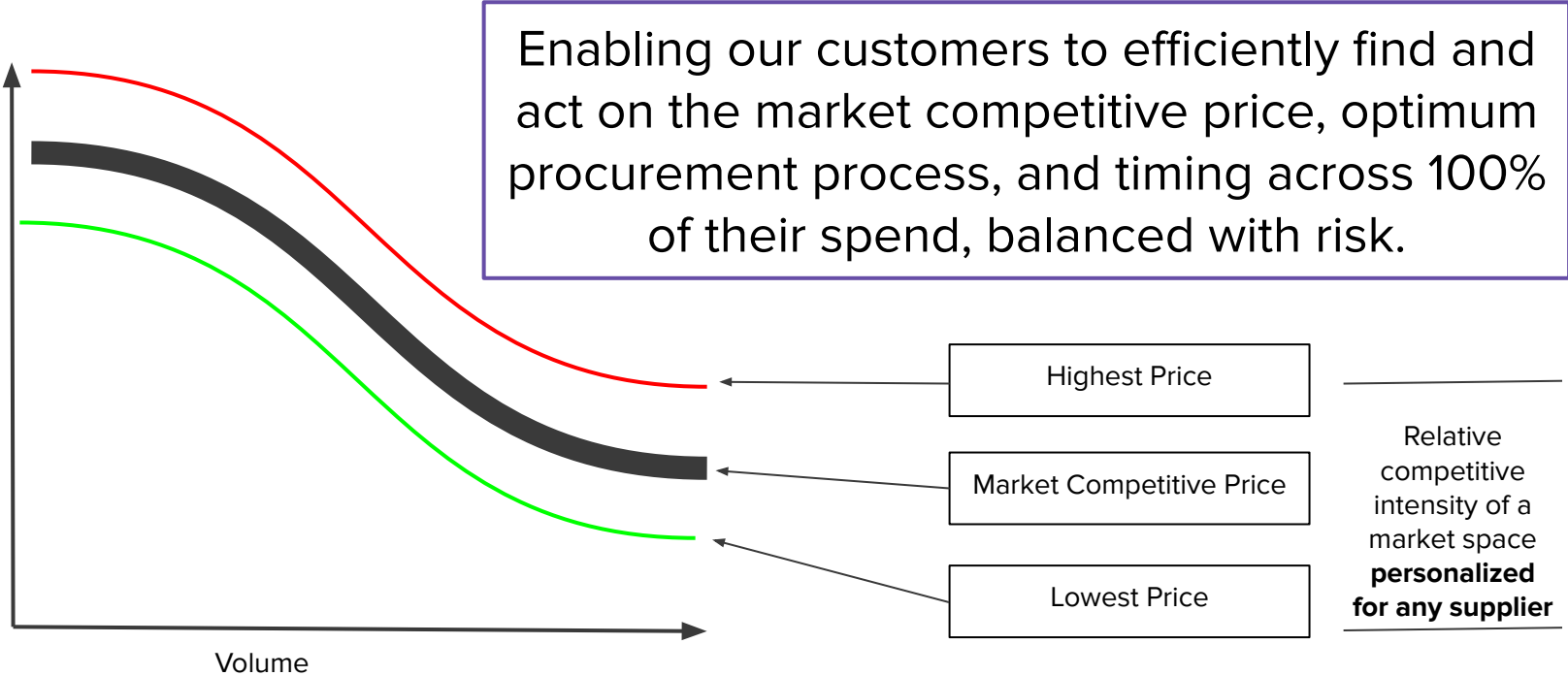
**The Predictive Era:**  
Predictive Procurement  
Orchestration



2020



# Laying the Foundation for Market-Level Predictions

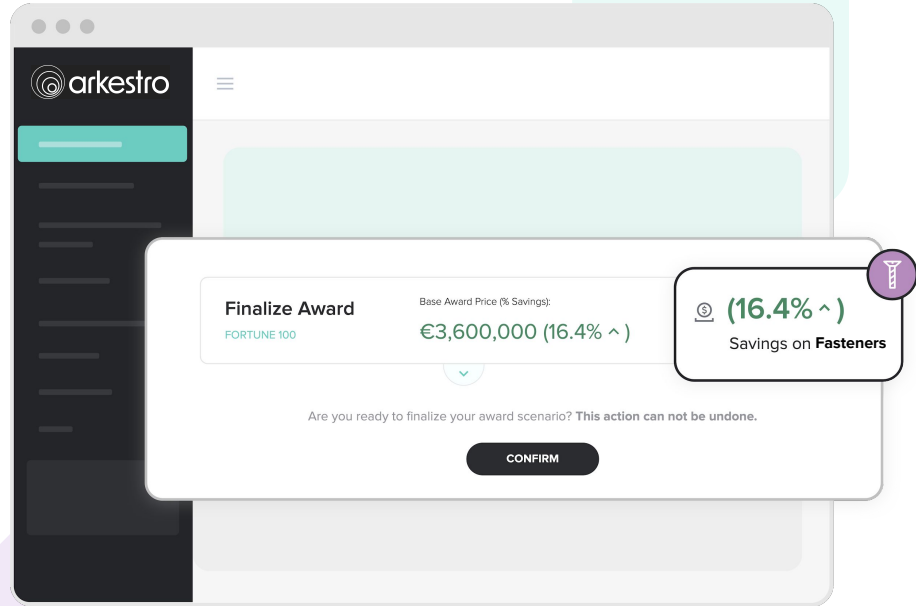






The Chemical Company

**€590K saved on €3.6M**  
**in spend for fasteners**



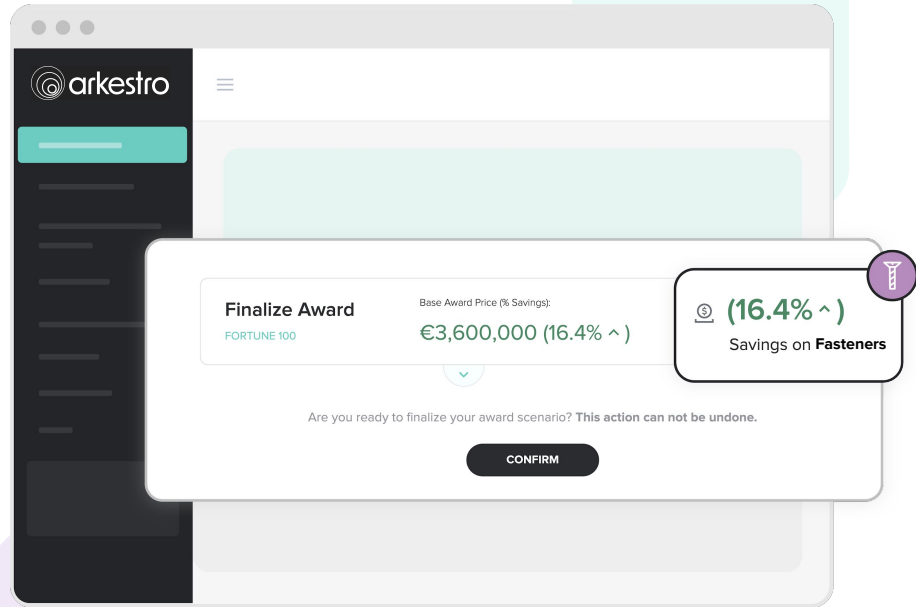




The Chemical Company

**€590K** saved on **€3.6M**  
in spend for fasteners

**5,000+** unique SKUs



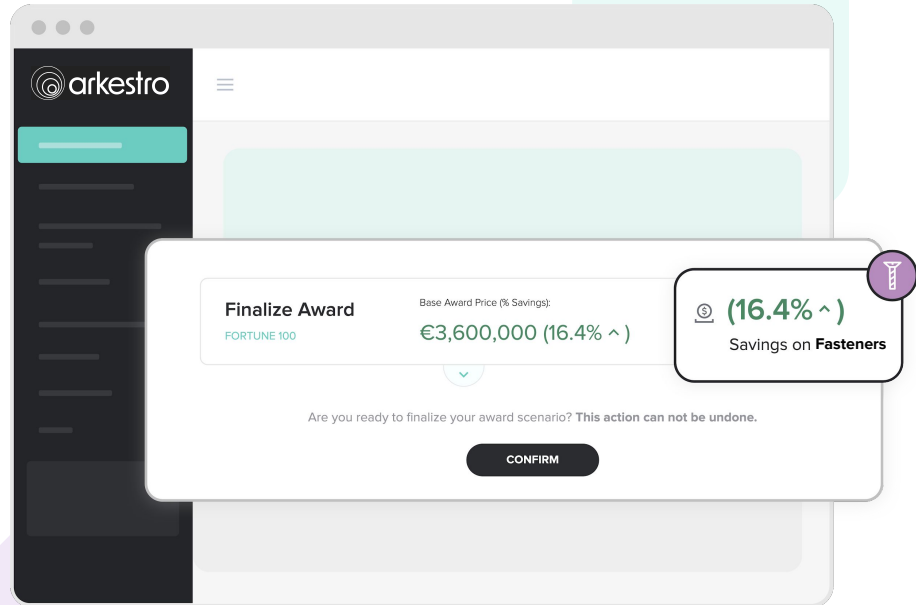


The Chemical Company

**€590K** saved on **€3.6M**  
in spend for fasteners

**5,000+** unique SKUs

**Less than 2 weeks**





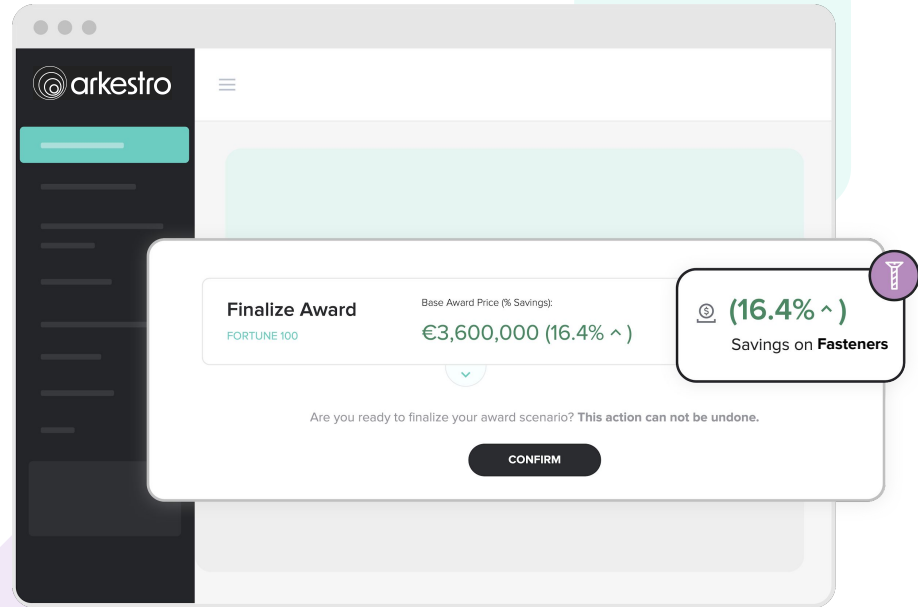
The Chemical Company

**€590K** saved on **€3.6M**  
in spend for fasteners

**5,000+** unique SKUs

**Less than 2 weeks**

**No supplier logged into app**



# BASF was excited by the results



Sven Theysohn  
Head of Procurement  
BASF Coatings Americas



The Chemical Company

“The financial results of  
Arkestro are quite impressive.”

# How Arkestro differentiates to enable our customers to drive savings faster, at scale

Embedded data science, game theory, and machine learning



**Predict & Suggest  
Baseline**

**Predict & Suggest  
Suppliers**

**Predict & Suggest  
Quoted Offer**

**Automation  
In Email**

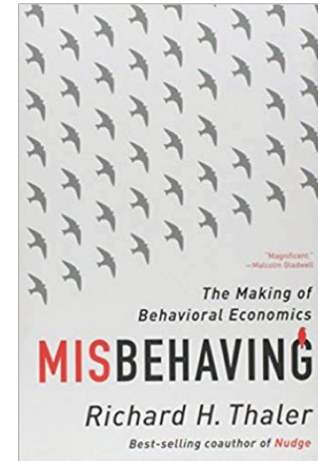
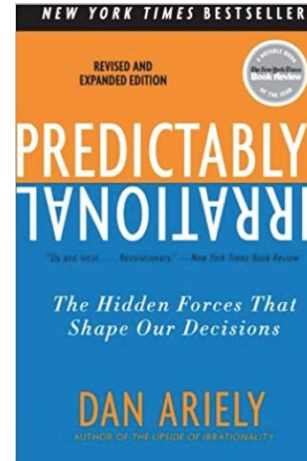
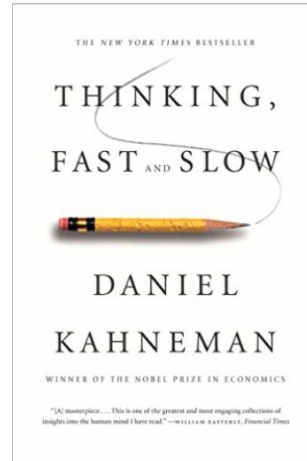
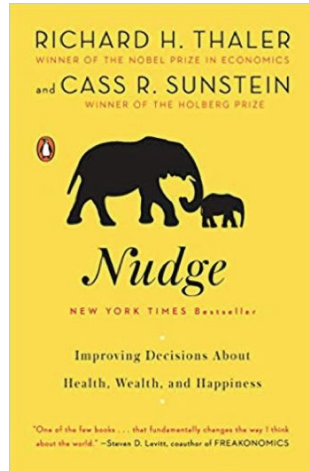
**Collaborative  
Feedback**

Category independent algorithms allow Arkestro to add value across all spend categories: Indirect, Direct, MRO, Logistics, Services and more, from spot buys to strategic negotiations.



# Suggested Offers & Instant Counter-Offers

# Autonomous systems predict human responses using models from behavioral science



# The Behavioral Science of Suggested Offers

People select the recommended option, especially if they don't have a pre-existing preference



Germany

**12%**

Donors



Austria

**99%**

Donors



# Studies show this is especially true in procurement negotiations

...in control conditions whoever, the buyer or seller, made the first offer in a single issue, distributive negotiation, determined the final selling price, with higher final prices when a seller made the first offer than when a buyer made the first offer. In these conditions,

**over half of the variance in outcomes of simulated price negotiations between experienced managers could be explained by first offers**

(Galinsky & Mussweiler, 2001; see also Kray et al., 2001 and Van Poucke & Buelens, 2002 for similar findings).

\_\_\_\_\_  
Lewicki, Roy J., Barry, Bruce, Saunders, David M.  
“Essentials of Negotiation”, McGraw-Hill, 2007

# Studies show this is especially true in procurement negotiations

...in control conditions whoever, the buyer or seller, made the first offer in a single issue, distributive negotiation, determined the final selling price, with higher final prices when a seller made the first offer than when a buyer made the first offer. In these conditions,

**over half of the variance in outcomes of simulated price negotiations** between experienced managers could be explained by first offers

(Galinsky & Mussweiler, 2001; see also Kray et al., 2001 and Van Poucke & Buelens, 2002 for similar findings).

\_\_\_\_\_  
Lewicki, Roy J., Barry, Bruce, Saunders, David M.  
“Essentials of Negotiation”, McGraw-Hill, 2007

**“The final price of an item is often higher when the seller makes the first offer than when the buyer takes the lead... Buyers should always aim to put the first offer on the table, and therefore set the anchor for negotiations.”**

*– Chartered Institute of Procurement and Supply*



# Collaborative Feedback & Faster 'Best and Final' Offers

# Autonomous Sourcing without 'Predictive Procurement Orchestration' is primarily for Indirect Spend associated with the Leverage Suppliers



# That's because traditional 'bidding processes' don't work with Strategic or Direct Spend... for Strategic, 'Autonomous' without 'Predictive' is risky



# Predictive Procurement Orchestration enables Autonomous Sourcing for Direct and Strategic Spend even when it's SOLE SOURCE by trading FASTER PROCUREMENT CYCLES for cost value through COLLABORATIVE FEEDBACK

**Challenge:** Sole source Suppliers hold pricing power due to high switching costs

**Capability:** Arkestro's **COLLABORATIVE FEEDBACK** helps this sole source supplier improve their offer and makes the process much FASTER

**Value:** Improved pricing from existing sole source suppliers, and faster sales for the supplier

Quantity	Unit Price	Discount per Unit	Line Item Price	Feedback	Rank	No Bid
77.23	\$	\$ 0	\$1,152.32	✓	Top 2	<input type="checkbox"/>
123.97	\$	\$ 0	\$2,727.34	✓	Top 2	<input type="checkbox"/>
126.74	\$	\$ 0	\$3,041.76	✓	Top 2	<input type="checkbox"/>
344.74	\$	\$ 0	\$2,068.44	✓	Top 2	<input type="checkbox"/>
74.41	\$	\$ 0	\$818.51	✓	Top 2	<input type="checkbox"/>
282.79	\$	\$ 0	\$2,262.32	✓	Top 2	<input type="checkbox"/>
79.45	\$	\$ 0	\$1,191.75	✓	Top 2	<input type="checkbox"/>
128.05	\$	\$ 0	\$1,408.55	✓	Top 2	<input type="checkbox"/>
234.72	\$	\$ 0	\$3,990.24	✓	Top 2	<input type="checkbox"/>

# Actual Production Field Trial Results achieved within 60 days - Presented at Steering Committee Meetings...

## Arkestro PPO Event Results for [REDACTED] Savings Identified: \$1.3M

Event Name	Event Close Date	Supplier Participation (Supplier Count)	Quotes Received (Round 1 + 2)	Coverage (Lines Covered Count)	Baseline \$'s (CAD)	Savings Amount (CAD)	Awarded Savings Percentage
<b>RFQ's</b>							
Inj. Moulded Parts (change supplier)	10/24 (Closed)	3 / 12 (25%)	6	8 / 8 (100%)	\$6,612,461	\$13,589	<1%
Inbound / Outbound Freight RFQ	10/26 (Closed)	13 / 16 (81%)	20	47 / 47 (100%)	\$4,894,799	\$806,439	16%
Chemical Supply Package	10/27 (Closed)	3 / 16 (19%)	5	4 / 4 (100%)	\$1,037,248	\$137,049	13%
Vendor Managed MRO	10/31 (Closed)	6 / 11 (55%)	9	111 / 111 (100%)	\$2,658,553	\$346,040	13%
Landscaping Renewal	10/27 (Closed)	2 / 4 (50%)	4	15 / 15 (100%)	\$171,068	\$1,998	1%
<b>Discrete Purchases (Spot Buy)</b>							
Absorber Industry Extractor Soldering	10/27 (Closed)	3 / 6 (50%)	5	1 / 1 (100%)	\$2,865	\$2,525	88%



# Actual Production Field Trial Results achieved within 60 days - Presented at Steering Committee Meetings...

**Arkestro PPO Event Results: Production Field Trial for [REDACTED]**

Confirmed Savings through 10/31 - \$8,587,048.28      Minimum Expected Savings through 11/3 - \$11,620,958.28

Event Name	Event Close Date	Supplier Participation (supplier count)	Quotes Received	Coverage (lines covered count)	Quoted Baseline Spend (Original Baseline Spend, if different)	Savings Amount	Savings Percentage
Tapes RFQ	10/27	50% (4 out of 8)	7	100% (15 out of 15)	\$4,160,607	\$2,518,041.71	60.52%
Fasteners RFQ	10/13	22.22% (2 of 9)	2	65% (30 out of 46)	\$3,296,571.31 (\$4,272,602.00)	\$1,141,117.57	35.22%
Inductors RFQ	10/24	42.8% (3 out of 7)	4	100% (10 out of 10)	\$14,083,123	\$4,919,478	34.93%
PCBs	11/3	86% (6 out of 7)	6	100% (11 out of 11)	\$8,832,846	\$3,033,910	35%
Pallets (spot buy)	10/30	20% (1 out of 5)	2	100% (2 out of 2)	\$181,871	\$8,141	4%

# Actual Production Field Trial Results achieved within 60 days - Presented at Steering Committee Meetings...

## Arkestro Field Trial PPO Events 3 Results for [REDACTED]

Event Name	Event Close Date	Supplier Participation (Supplier Count)	Quotes Received	Coverage (Lines Covered Count)	Round 1 Quoted \$'s	Round 2 Quoted \$'s	Savings Amount*	Savings Percentage
Area 600 Piping RFP	9/26	4 / 4 (100%)	7	54 / 54 (100%)	\$1,953,302	\$1,656,160	\$297,152	15.2%
Medium Voltage Cable Connectors	10/4	6 / 6 (100%)	11	13 / 13 (100%)	\$59,765	\$58,644	\$1,121	1.9%
Valves RFQ	10/18	2 / 6 (33%)	4	83 / 83 (100%)	\$654,887	\$589,342	\$65,545	10.0%

\*Savings Amount assumes OEM is moving forward with the lowest priced Supplier from each event. Actual savings will be based on award scenarios

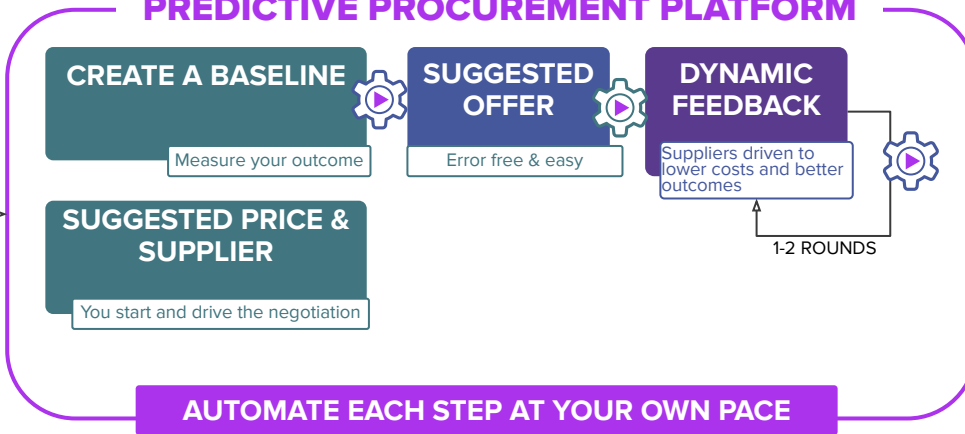
# Arkestro Predictive Procurement Orchestration

## QUOTING PLATFORM PROCESS



PRIMARYLY MANUALLY DRIVEN

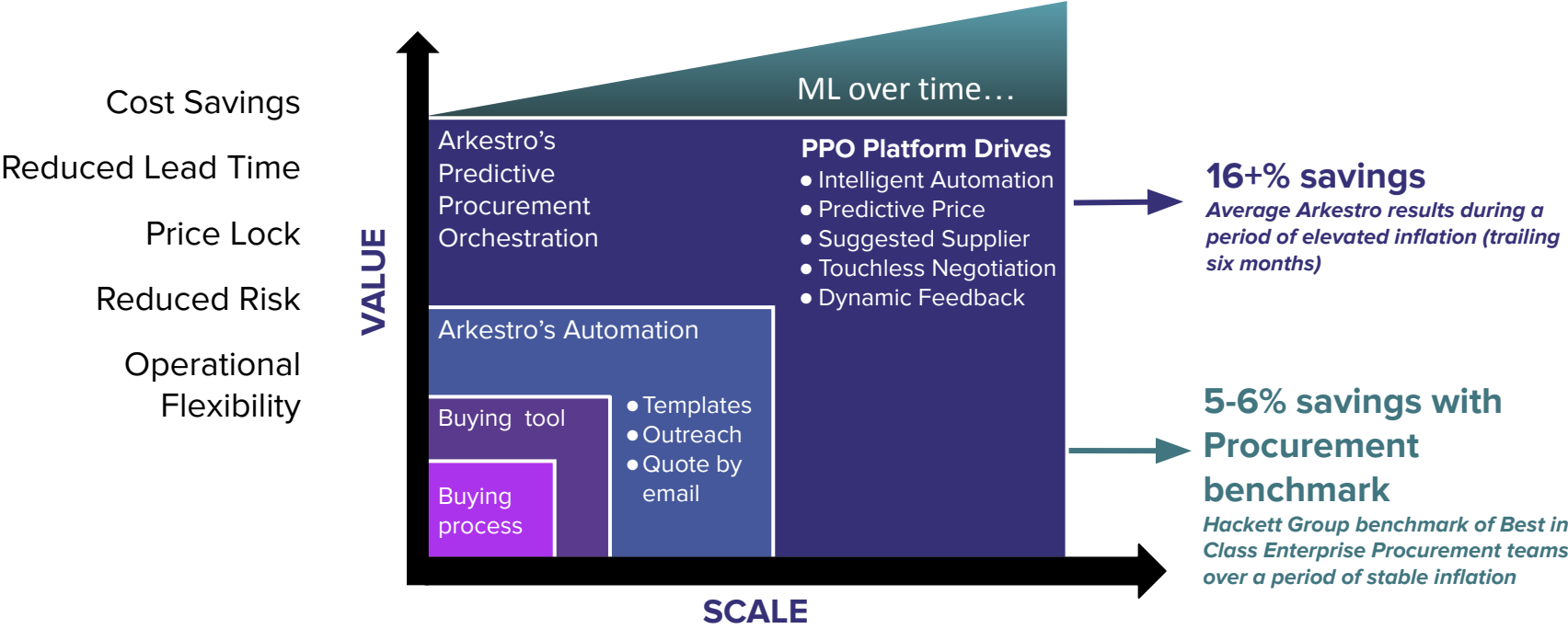
## PREDICTIVE PROCUREMENT PLATFORM



### Our customers achieve:

- ✓ Cost savings of **16%** within the first **60 days**
- ✓ Run **3X** as many events using the PPO platform
- ✓ **Reach more addressable spend** with the same resources

# Execution: Arkestro drives better outcomes, faster, at scale

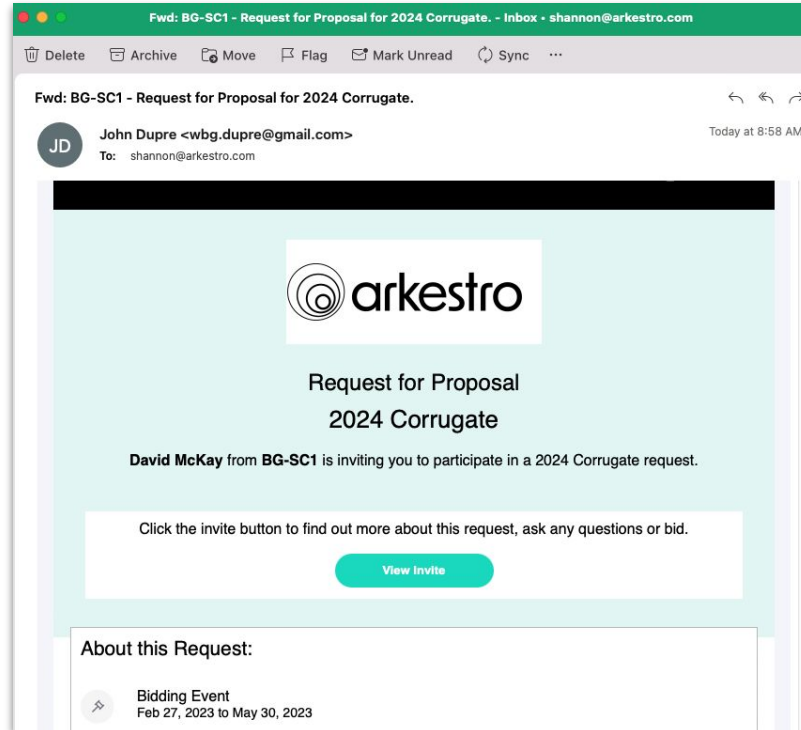


Move Faster | Expand Focus | Get More Done



# Meeting Your Supply Chain In Its Inbox With Timely Data

# Arkestro's Key To High User Adoption? A Supplier Workflow As Simple As DocuSign



# Arkestro Predictive Procurement Orchestration *Vision*

## How It Works

Predictive Outcomes

Supplier Engagement

Competitive Context

Process Automation

Embedded KPIs

LLM

## Predictive Procurement Orchestration Platform

Arkestro Predictive Models

Data Transformation & Cleansing

Value Based Modeling

Behavioral Science & Game Theory

Pricing Theory

Data Science

AI / ML

Natural Language Processing

## Inputs

Enterprise Integration Connectors & Public API Platform

External Data

ERP/P2P

MRP/MRO

CRM/PLM

Other

### DATA TYPES

Risk, Commodity, ESG, Historical Procurement Transactions (POs, Quotes), Invoices, and more

### SOURCES

SAP, Oracle, Workday, Infor, Maximo, JDE, Ariba, Coupa, Microsoft, Excel

# Analyst validated



19 © 2022 Gartner, Inc. and/or its affiliates. All rights reserved.


This represents a sample list of vendors and is not inclusive of all vendors in each of these market segments. Vendors may also support additional capabilities beyond the segments above.



Top Technology Trends in Procurement  
Gartner, Feb 2023



# Analysts believe in PPO




“ ———

Predictive Procurement Orchestration is an embedded platform that enables Finance and Operations to come together...by leveraging their most precious resource: their best people's best decisions.

**Spend Matters**

[Learn More](#)



The 2023 Gartner® Hype Cycle™ for Procurement and Sourcing Solutions lists Arkestro as one of the Sample Vendors for:

- ✓ Autonomous Sourcing
- ✓ Autonomous Procurement
- ✓ Supplier Discovery

[Learn More](#)

**Gartner.**

“ ”

We are delighted to be named on the Spend Matters list for the fourth year in a row, as Arkestro continues to demonstrate the importance of implementing predictive procurement to increase cost savings and amplify efficiencies.

-Neil Lustig, Chief Executive Officer at Arkestro

[Learn More](#)



## Autonomous Sourcing

How does it work?

Arkestro's Predictive Insights utilize analytics to break down your spend and PO volume over time, while our built in recommendations based on your category, organization, and location data get you ahead of the game.

[Read the Gartner® Report>](#)



**Gartner.**



**Thank You**

