



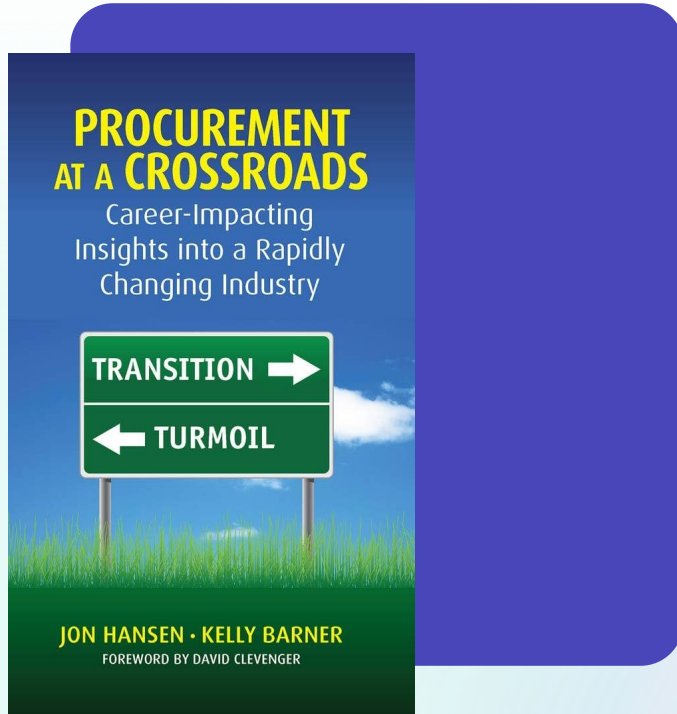
Supply Chain Agility in the Predictive Enterprise: How Superhuman Supply Chains Transform Global Business

Edmund Zagorin
Founder & CSO
Arkestro

www.arkestro.com



Supply chain agility can be controversial goal. You often discover you need it when its missing



List out the top 5 C-Suite strategic goals of a business:

- Revenue growth
- Customer focus
- Launching new products
- A+ employee culture
- M&A activities

What do you NOT see appear on this list?

Procurement is getting HARDER

McKinsey research shows procurement teams are being asked to manage 50% more spend but doesn't have 50% more headcount

SKU count increased by

66%
IN JUST 3
YEARS



SKU complexity costs US manufacturers

\$50
BILLION 
IN GROSS PROFITS ANNUALLY



**OPERATIONAL
INEFFICIENCY**



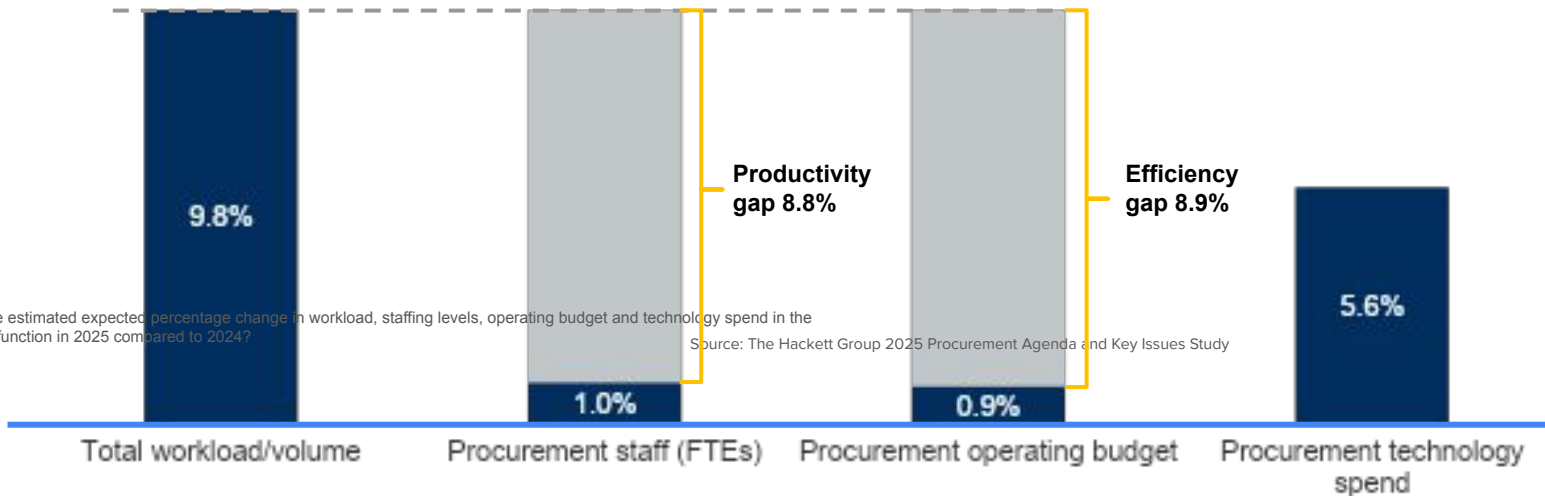
**INTERNAL
COMPETITION**

McKinsey
& Company

Procurement bandwidth was already stretched thin

Prior to the tariffs, Hackett indicates Procurement teams were under-resourced and under-invested for the requirements put forth by the business

PROJECTED PERCENT CHANGE FROM 2024 TO 2025
FOR PROCUREMENT, STAFFING, BUDGET AND TECHNOLOGY SPEND



Q. What is the estimated expected percentage change in workload, staffing levels, operating budget and technology spend in the procurement function in 2025 compared to 2024?

Source: The Hackett Group 2025 Procurement Agenda and Key Issues Study

**Let's imagine Procurement is tennis.
The tennis ball is a quote from a supplier.**



Returning one ball with feedback to a supplier and a next step is no problem. But three at once?



And what about multiple quotes for each item across thousands of items whose price change every month for every volume & geography?

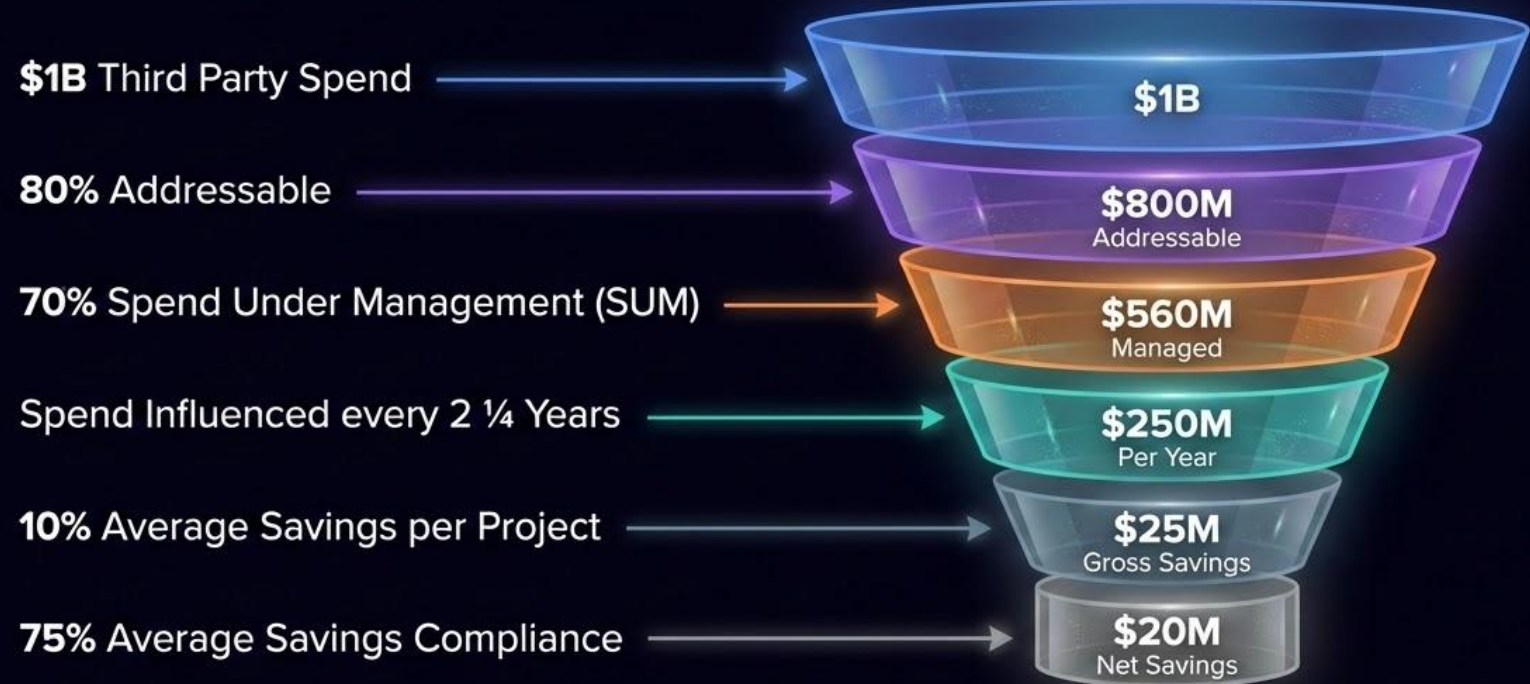


A single quote could contain pricing for hundreds of uniquely identified items.

No buyer can be an expert on the market price for every item at every volume for every supplier in every geography

1045927	ACTUATOR,SAFETY SWITCH,40MMX40MM
1045932	LATCH,ACTUATOR,SAFETY SWITCH
1045933	CABLE,M12 PLUG,5 PIN FOR CES SWITCH
1045934	CABLE,CONN,M12 PLUG,8 PIN FOR CES SWITCH
1045935	SWITCH,SAFETY,LEVER ARM,SHORT HOUSING
1045938	REGULATOR,PRESSURE,G1/2,0.5 TO 25 BAR
1045939	BEARING,DOUBLE ROW,80MMIDX140MMOD
1045940	KEY,FEATHER,28X16X180
1045941	RING,RETAINING,FRM215/14
1045943	BEARING,PILLOW BLOCK,110MM
1045944	FUSE,CLASS J,TIME DELAY,250A
1045945	LUBRICANT,OIL,COMPRESSOR 1 LITER

Becoming a strategic partner and trusted advisor to the business means making value delivery into a predictable, repeatable conversion machine



Source: Art of Procurement

Unfortunately, procurement is not becoming more predictable, or more repeatable. It's becoming more volatile and complex



**GEOPOLITICAL
CONFLICT & DISRUPTION**



**STRAIT OF HORMUZ
& TRADE ROUTES**

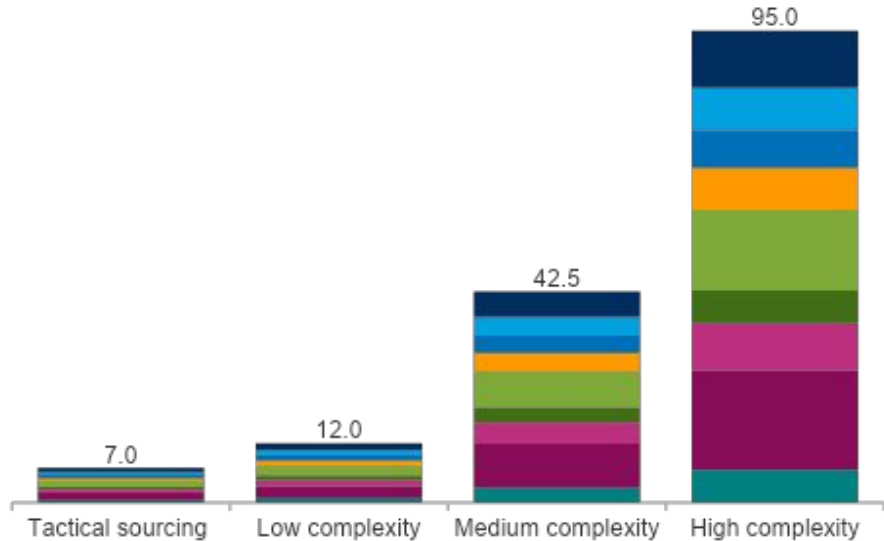


**REGULATORY &
ECONOMIC BARRIERS**



Evaluating and Negotiating Complex Offers Is the Bottleneck To Supply Chain Agility

Hackett shows that Comparison, Evaluation, Selection are the steps that consume the most clocktime and the most calendar days



High-complexity event	% of time	Cycle time (business days)
Requirements definition	12%	11.4
Development of sourcing strategy/documents	9%	8.6
Supplier identification/discovery	8%	7.6
Supplier qualification	9%	8.6
Supplier evaluation and selection	17%	16.2
Supplier regulatory/risk assessment	7%	6.7
Contract creation	10%	9.5
Contract negotiation	21%	20.0
Contract approval and signature	7%	6.7

Q. On average, how many business days do you estimate it takes to source for each level of complexity?
 Q. What percentage of the overall sourcing time is spent on each of the individual sourcing subprocesses?

That's why we introduced Predictive Procurement

Traditional Procurement



SUPPLIERS GIVE OFFERS TO BUSINESS



Offer then puts ball in procurement's court



Suppliers don't receive feedback



Competition adds cycle time



Predictive Procurement



PROCUREMENT GIVES OFFERS TO SUPPLIERS



Offer then puts ball in supplier's court



Suppliers receive contextual FOMO feedback



Competitive offers are **FASTER** than single quotes

Predictive Procurement Delivers the Strategic Unlock

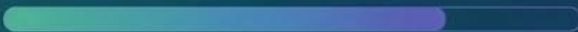
Across industries, customers see:



Procurement cycle times reduced from 3-4 months to **6 weeks**



5x projects, buys & negotiations per procurement professional



Manual effort reduced from 55 hours per event to **10 hours**



The impact:



Stakeholders delighted by how fast and easy procurement now feels



P&L owners want to leverage procurement across more spend



Frees up domain experts' time for strategic high-impact initiatives

Hackett Group found that going from base case to world class in procurement can **2x** activities with **4x** impact



Procurement: RFX Supported per FTE



Procurement: Spend Savings per FTE (in Thousands)



AUTONOMOUS-ONLY (“AGENTIC”)

Same Process,
No Humans



AUTONOMOUS PREDICTIVE

Better-Than-Human Process,
Amplifies Existing Human Value



The Predictive Enterprise

Automation Enterprise	Predictive Enterprise
<p>Automates Repetitive Task Completion</p> <p>Automation is focused on completing repetitive tasks that occur within a predictable sequence and observable flow.</p>	<p>Faster-Than-Human Decisions</p> <p>Predictive is focused on prompting faster-than-human decisions before a person would normally be aware of the need to act.</p>
<p>Human Must Configure & Initiate Automation</p> <p>Automation typically requires human to configure and initiate, then supervise until completion has been achieved.</p>	<p>Humanless Loops</p> <p>Predictive enables continuous monitoring of systems in motion to enable humanless loops focused on visibility and analysis.</p>
<p>Process Efficiency via Work Replacement</p> <p>Value is measured in units of human work replaced with machine work without making meaningful changes to the underlying process.</p>	<p>Outcome-Based Process Re-Engineering</p> <p>Value is measured by amplifying and accelerating human impact by allowing the steps in the process to dynamically change based on a predicted outcome.</p>

Using the Predictive Enterprise approach, procurement leaders become strategic enablers and trusted advisors





At BMI, we view market shifts as opportunities to differentiate ourselves. Simply, we're evolving our business model to win. We've seen this through our approach to system selling, for example. While others sell standalone products, we try to leverage our full portfolio, from components to complete roofing solutions. By providing a single, high-quality system, we simplify the process for our customers and offer a level of reliability that a fragmented market cannot provide.

From a supply chain perspective, we acknowledge that global disruptions and cost pressures are a reality for everyone. We've responded by deepening our supplier partnerships and improving our agility, ensuring that BMI remains a reliable partner for our customers even when the market is unpredictable.



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To stay ahead in a changing market, BMI has embarked on a strategic journey to modernise every part of our business. As you say, this means a journey that aligns technology, people, tools and culture to deliver the best possible value.

Examples that immediately come to mind across that entire matrix include simplifying how we work and make data-driven decisions by implementing integrated enterprise platforms that allow us to move away from fragmented legacy tools to unified solutions. This shift increases our agility, allows us to plan better and ultimately serve customers more effectively.

This effort runs adjacent to evolving our organisational design to better serve our system selling approach. We have aligned roles and geographies to ensure the right expertise is in the right place to drive growth.



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The Predictive Enterprise: Enabling The 5 Most Effective Supply Chain Agility Strategies

Strategy	Approach
Identifying Incumbent Alternative Suppliers	Using AI to identify suppliers you are already doing business with but for different items to create Plan B and C
Pivoting Demand via Re-Sourcing Events	Using AI to generate Suggested Offer an Instant Counter Offer Events to Multi Source or Pivot Demand
Pivoting Spot Demand via Spot Buying Events	Using AI to generate Suggested Offer an Instant Counter Offer Events to Multi Source or Pivot Demand
Rightsizing Incoterms using Targeted Events	Re-negotiating INCOTerms for Delivered Costs at the Item Level for complex Bill of Materials
Re-Thinking Rate Management For Inbound Freight & Logistics using Events	Moving to faster agile rate management cycles to decrease reliance on volatile spot market



Supply Chain Management

How Global Companies Use AI to Prevent Supply Chain Disruptions

by Remko Van Hoek and Mary Lacity

November 21, 2023





“Subsidiaries of Koch Industries, one of America’s largest privately-held conglomerates **are leveraging an AI tool designed by Arkestro** to optimize its supplier base. Unlike traditional procurement methods that rely on managing suppliers based on high-level purchasing categories and aggregate spend, **this AI tool delves into granular data, right down to the stock-keeping unit (SKU). It generates supply options, often among existing suppliers, thereby reducing the need for drawn-out requests for quotes. ... This mutually beneficial approach saves suppliers between 60% and 90% of the time typically spent on completing an RFQ.”**



Shorten Sourcing Cycle Times

Recommends key components: items, suppliers, best practices, etc

Demand Sensing

Predicts future purchase probabilities using demand plans and historical purchase patterns

Unblock Requisitions

Identifies the items to be sourced ahead of predicted requisitions

Achieve Cost Savings

Integrates the upcoming purchase with cost-savings opportunities

Manage Commodity Price Volatility

Correlate changes in SKU level prices across suppliers with substitutable items

Arkestro Opportunity Intelligence results from a multi-factor discovery process that goes beyond cost reduction, needed for effective strategic sourcing for direct and indirect spend

Item Recommendation Deep Dive

S/W- V70Q38AA WB INT SPRAY-COT02306Z



Other Actions 

Total Spend

\$10M (USD)

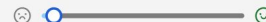
Item Potential Savings

\$472K (USD)

Confidence Score

99.5 / 100

Rate this Recommendation



What Happened?

Summary: The item S/W- V70Q38AA WB INT SPRAY-COT02306Z belongs to the COATING, D&I, B&B, DRD FOOD category. The total spend in the last 12 months is **\$10M USD**. And the total identified savings opportunity is **\$472K USD**.

Scores: This segment has a net score of 99.5 with the following top 3 reason codes: Highest Item Level Savings Opportunity (\$ 471,961), Highest Item Spend (\$ 10,080,082) and High Items in the same Pool (29).

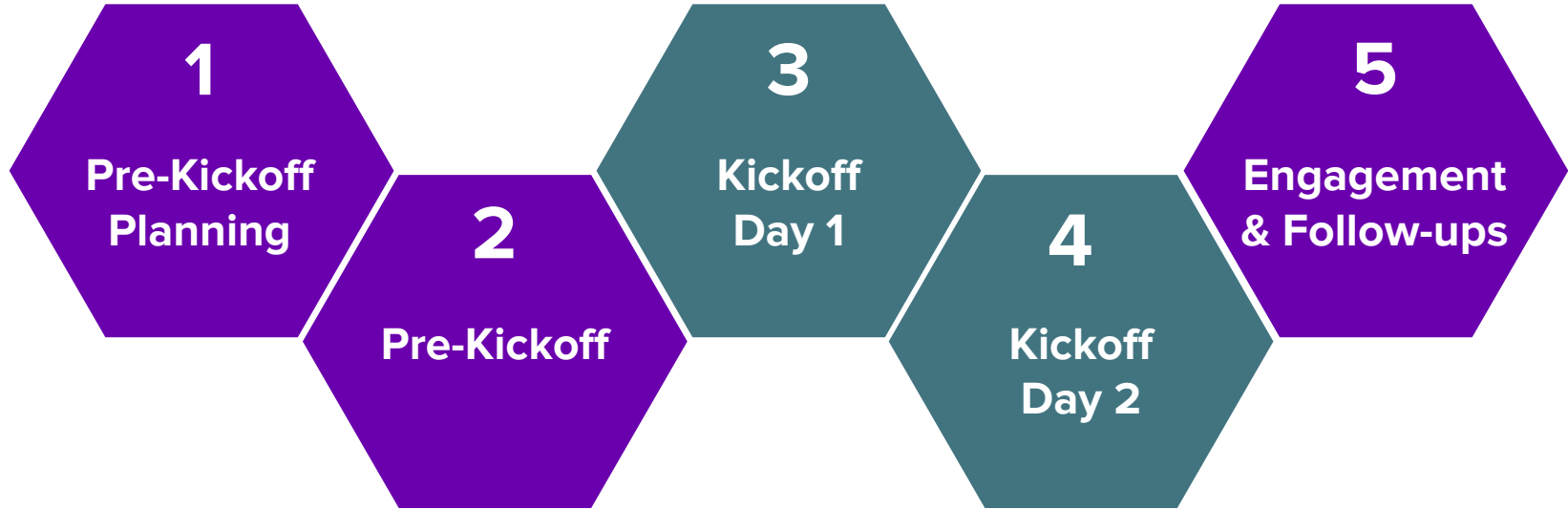
Based on your month-level purchasing patterns, it is time to replenish this item. In the last 24 months, you have bought in 19 distinct month(s) with an average cadence of 1 months. The latest purchase month was 0.9 months ago. We predict that the upcoming purchase event will occur in the subsequent next 6 months with a purchase probability of 99.9(on a scale of 0 to 100) and a quantity range of 4,052 to 102,504 GAL.

List of common suppliers: PPG Industries, Actega North America, Sherwin Williams

This segment has a total potential savings opportunity of **\$472K USD** in the last 12 months over a spend of **\$10M USD** for a savings percentage of 4.7%.

Our Recommendation: Conduct a procurement event to confirm quoted pricing with **Incumbent Alternative Suppliers**.

'Live in 5' Execution Framework





“Just as we provide our customers with integrated systems rather than mere components, our procurement team is evolving from a traditional cost centre to a strategic business partner bringing additional value. It’s about people moving from a “support” mindset to a “growth” mindset by embodying key cultural shifts.

We believe a value-led approach is limitless. While fiscal discipline remains our foundation, we recognise that chasing the lowest “price per unit” is a short-term tactic, not a long-term strategy.

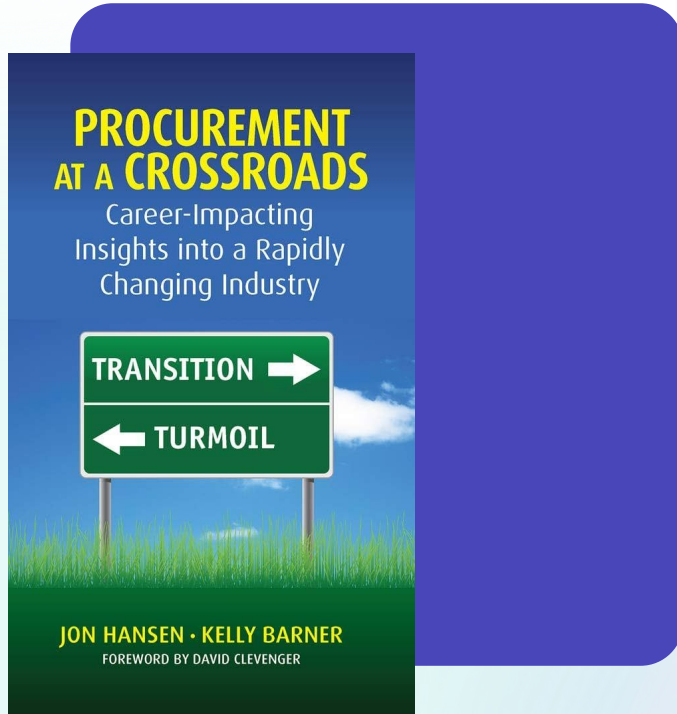
We don’t just manage spend. We want to empower our team to be proactive partners to the business by identifying opportunities to improve business outcomes, and drive the competitive advantage that our customers expect from us.



We're moving from categories to ecosystems, acknowledging that the traditional days of siloed spend categories are over and leaning into our value of "connecting as one". Culture is about relationships so we aim to foster a culture of radical collaboration, both internally across departments, and externally with our partners. By transitioning from "managing categories" to "cultivating supplier ecosystems", we unlock innovation and resilience that a simple contract could never provide.

And, finally, our goal is to be a critical business partner and a function of choice, a team people genuinely want to do business with. We do this in part by focusing on transparency. In doing so, we move from being a support function to a culture of reliance where the business views procurement as indispensable to its success. We don't want to be seen as just negotiators who manage price, but as business influencers, collaborators and value-creators.

Agility was always just the beginning of value. The unlock comes from connecting the dots



List out the top 5 C-Suite strategic goals of a business:

- Revenue growth
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- M&A activities

Which of these does supply chain agility NOT enable?



Thank You

