

McKinsey  
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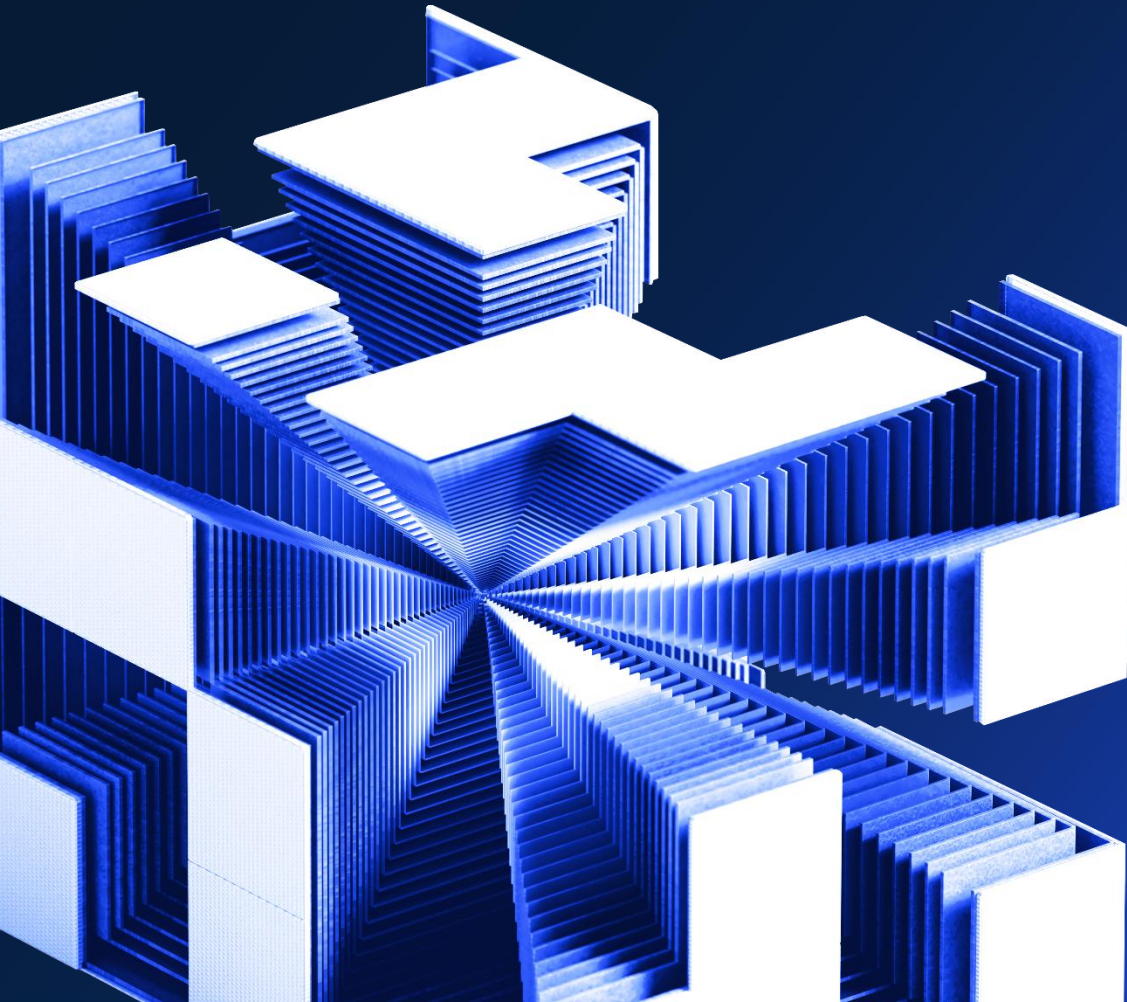
QuantumBlack  
AI by McKinsey

# Making the leap with Gen AI in procurement

McKinsey & Company

August 2024

# Agenda for today



## **State of AI in 2024:**

Gen AI adoption spikes and starts to generate value

## **CPO survey insights:**

The role of AI in modern procurement

## **Panel discussion:**

Potential of Gen AI in Procurement

## **Successful talk-to-action stories:**

Opportunities and impact

## **Key success factors:**

Pathway to capture value

## **Outro:**

Closing notes and Q&A

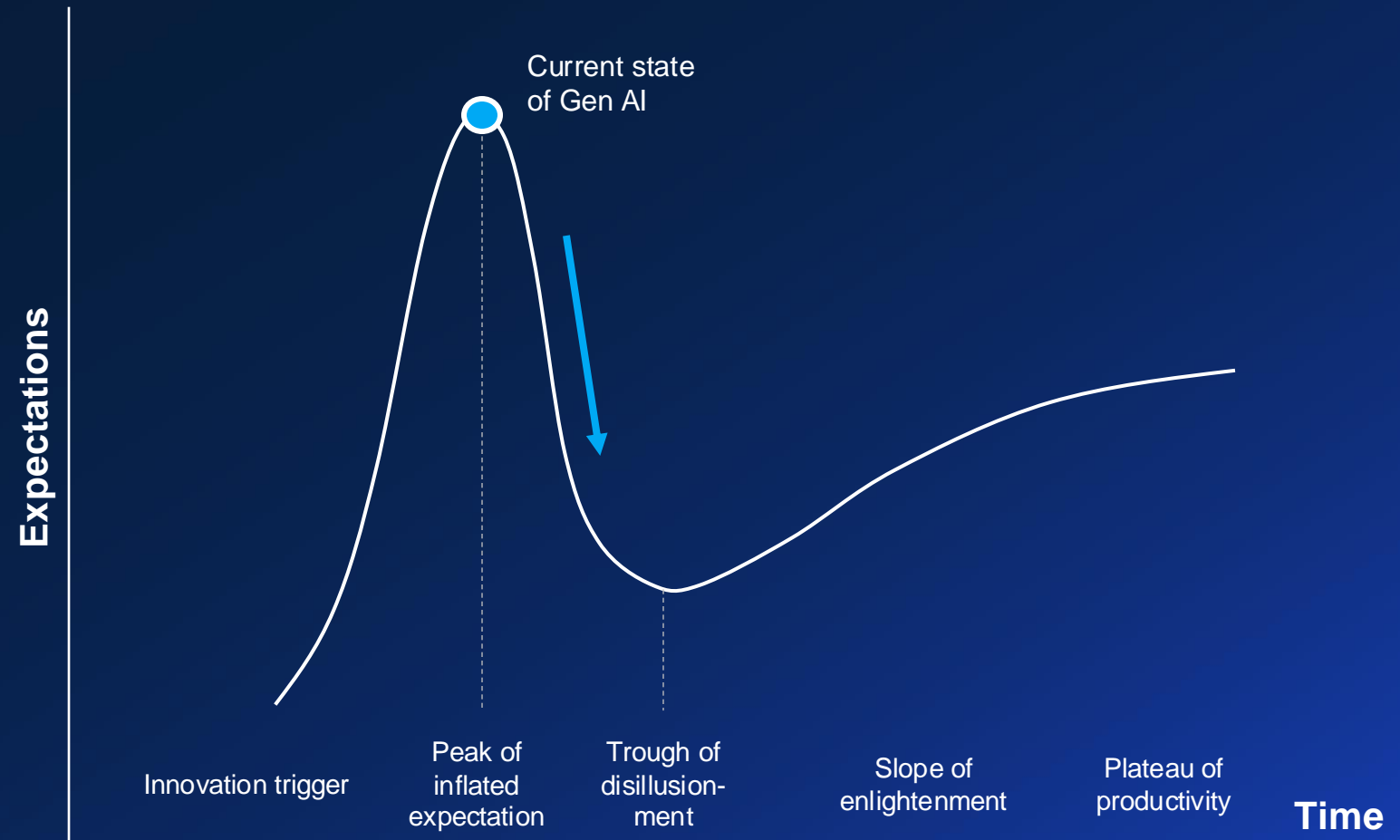
# Hype vs. reality: The perception and adoption cycle of GenAI is mirroring a familiar hype cycle observed with other new technologies

## Cloud adoption observed a similar hype cycle...

- **Early cloud adopters encountered various challenges**, including security concerns, compliance issues, integration difficulties, and unexpected costs
- **As best practices emerged** and orgs started to understand how to effectively leverage **tech for their needs**, the **technology became broadly adopted**



## The Gartner Hype Cycle



# What we have learned: Taking stock 18 months since ChatGPT

## GenAI tech & ecosystem

**a**

Multimodal and agent-based is up and coming

**b**

GenAI tech ecosystem consolidating around hyperscalers

**c**

Demand and supply of compute exploding – but models getting efficient

**d**

Open source significant – but one step behind

## Enterprise applications

**e**

Incumbents and new entrants racing to win

**f**

Enterprises are making GenAI a top priority

**g**

Public markets are reacting

## Regulation

**h**

Regulation is serious and catching up

**Most companies  
don't successfully  
transform...**

**88%**

**Attempt a DnAI  
transformation**

**24%**

**Successfully do not stall  
during their DnAI  
transformation**

**...the ones that succeed focus on six areas**

**1 Aspiration, prioritization, and value roadmap**

Is the senior team aligned on the roadmap, and does the resourcing match the aspiration?  
Are you clear on how you will create competitive advantage?

**2 Talent**

Do you have a skills roadmap as detailed as your technology roadmap?

Do you own the critical Digital talents?

**3 Agile operating model**

Are you able to repeatably launch product-centric Agile teams that deliver on pace to full scaled value?

**4 Technology & tooling**

Does your technology and tooling environment enable your product teams to move at Agile pace?

**5 Data management**

How are you using data to increase competitive advantage, with what level of reuse, and how confident are you that you are keeping it secure?

**6 Adoption and scaling**

Are you investing at least as much in conviction and capabilities to act as you are in technology?  
Which business leaders are accountable for adoption?



**CPO survey  
insights: The  
role of AI in  
modern  
procurement**



# Gen AI is disrupting the world of procurement



## Category

## Impact

### 1 Value enhancement



**3-12%** Impact from value leakage reduction (incl. contract-invoice harmonization, contract term benchmarking and optimization)



**4-20%** Increase in category savings across the S2P value chain (e.g., sharper market-based insights informing category strategies, broader amount of spend categories analyzed, optimized negotiation prep)

### 2 Process efficiency and productivity improvement



**15-30%** Efficiency uplift through automation of analytical procurement tasks



**Jump start value capture by implementing Gen AI**

1. Excl. temporary labor and outplacement



# AI-powered solutions can support most elements of today's end-to-end S2P value chain

Non-exhaustive

✓ Gen AI use cases

## Spend analytics and category management

- ✓ Spend cube development
- ✓ Category analytics & strategy
- ✓ Sourcing opportunity identification
- ✓ Rapid Repricing

## RFP creation, analysis, and aggregation

- ✓ Supplier qualification
- ✓ RFx drafting
  - Multi-round sourcing event (RFx)

## Deal negotiation

- ✓ Negotiation prep
- ✓ Negotiations

## Contract drafting and querying

- ✓ Contract authoring
  - Contract repository
- ✓ Contract benchmarking and optimization

## Supplier intelligence and management

- ✓ Supplier information management
- ✓ Supplier performance management
  - Supplier relationship management

## Procure to pay optimization

- ✓ Buying channel selection
  - Spot buys
  - PO creation, transmission, and confirmation
  - Goods receipting/services entry

- ✓ Invoice receipt, coding, and reconciliation
- ✓ Exceptions management
  - Payment processing

## Proactive risk management

- ✓ Risk identification
  - Supplier risk management

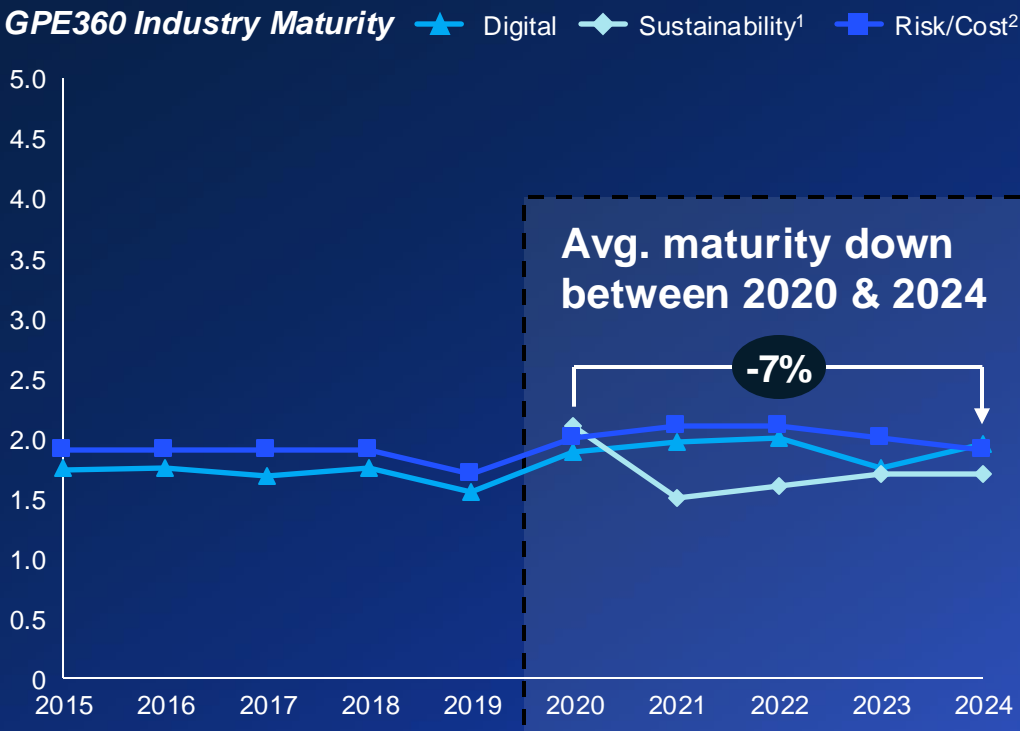
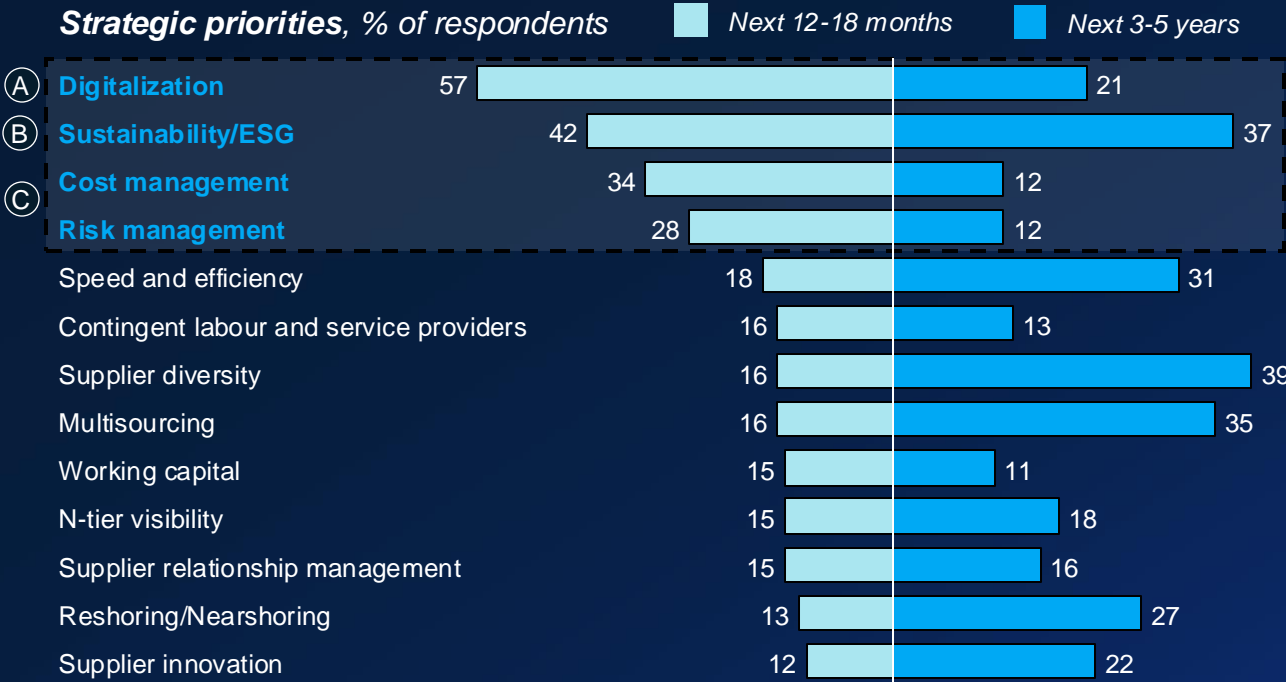
1. Leakage is tied to total dollar value
2. Based on time



# Despite consistent agreement on top priorities, there's limited evidence of progress – could Gen AI be a key enabler and catalyst?

CPOs across regions and industries consistently rank digital transformation, sustainability, and cost/risk management as their top priorities in the near term

Despite these stated priorities, there's little evidence of significant maturity or progression in these areas



1. Sustainability introduced as key metric beginning in 2020  
2. Metric calculated as average of maturity across strategy and capabilities

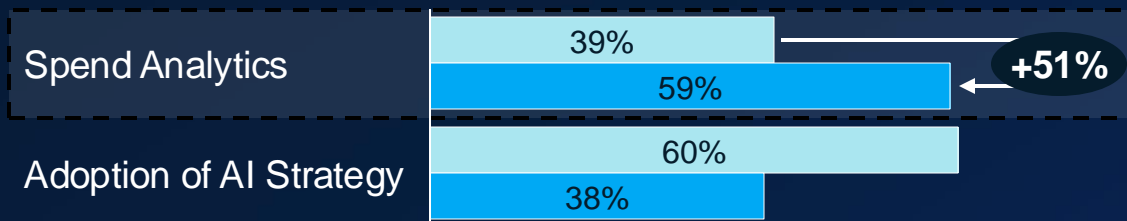
# Bridging the gap: Aligning CFO and CPO priorities in the age of AI

Organizations should prioritize high-impact use-cases that strengthen core procurement activities like spend analytics and cost optimization

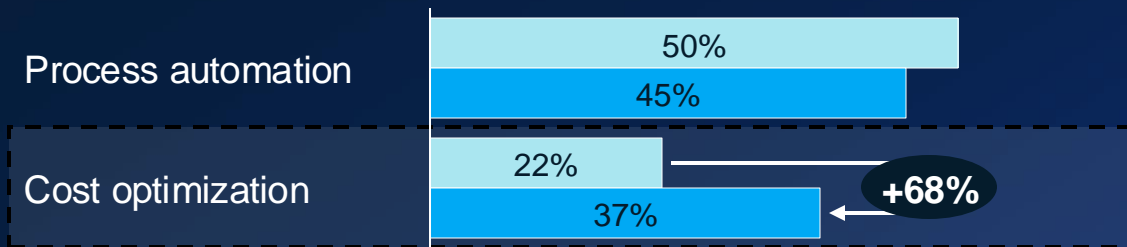
Gen AI can enhance core procurement processes, while also improving productivity through automation

■ Chief Financial Officers (CFO) ■ Chief Procurement Officers (CPO)

## Top digital procurement priorities for CFOs vs. CPOs



## Top procurement areas to improve with AI (next 12-18 months)



CFOs are **eager to adopt** next-generation AI tools and automation

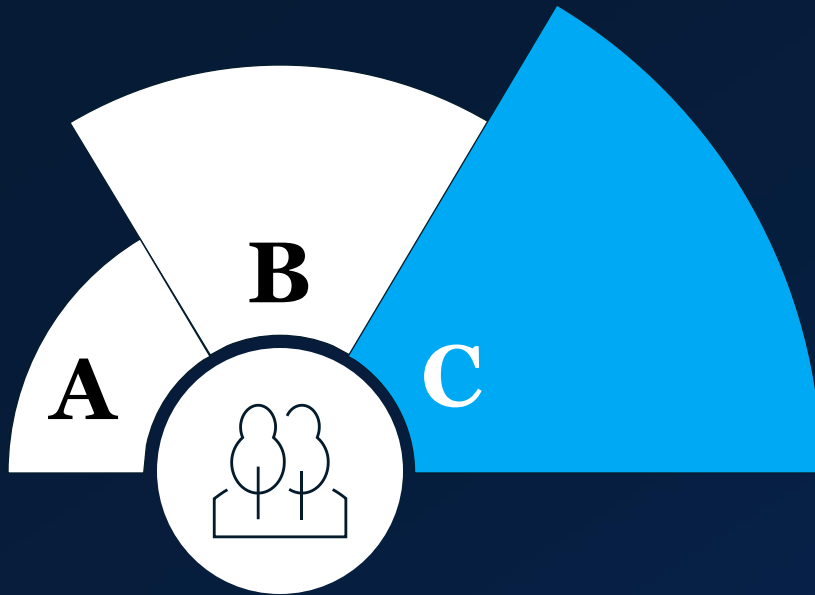
While CPOs are **emphasizing the need for foundational procurement capabilities**, such as cost optimization and spend intelligence

This misalignment creates an **expectation gap** and **perception issue** that must be addressed

Orgs should view **Gen AI as a key enabler to enhance core procurement processes**

Consider prioritizing use cases that **strengthen the fundamentals**

# Strategic path forward: Driving impactful change in procurement

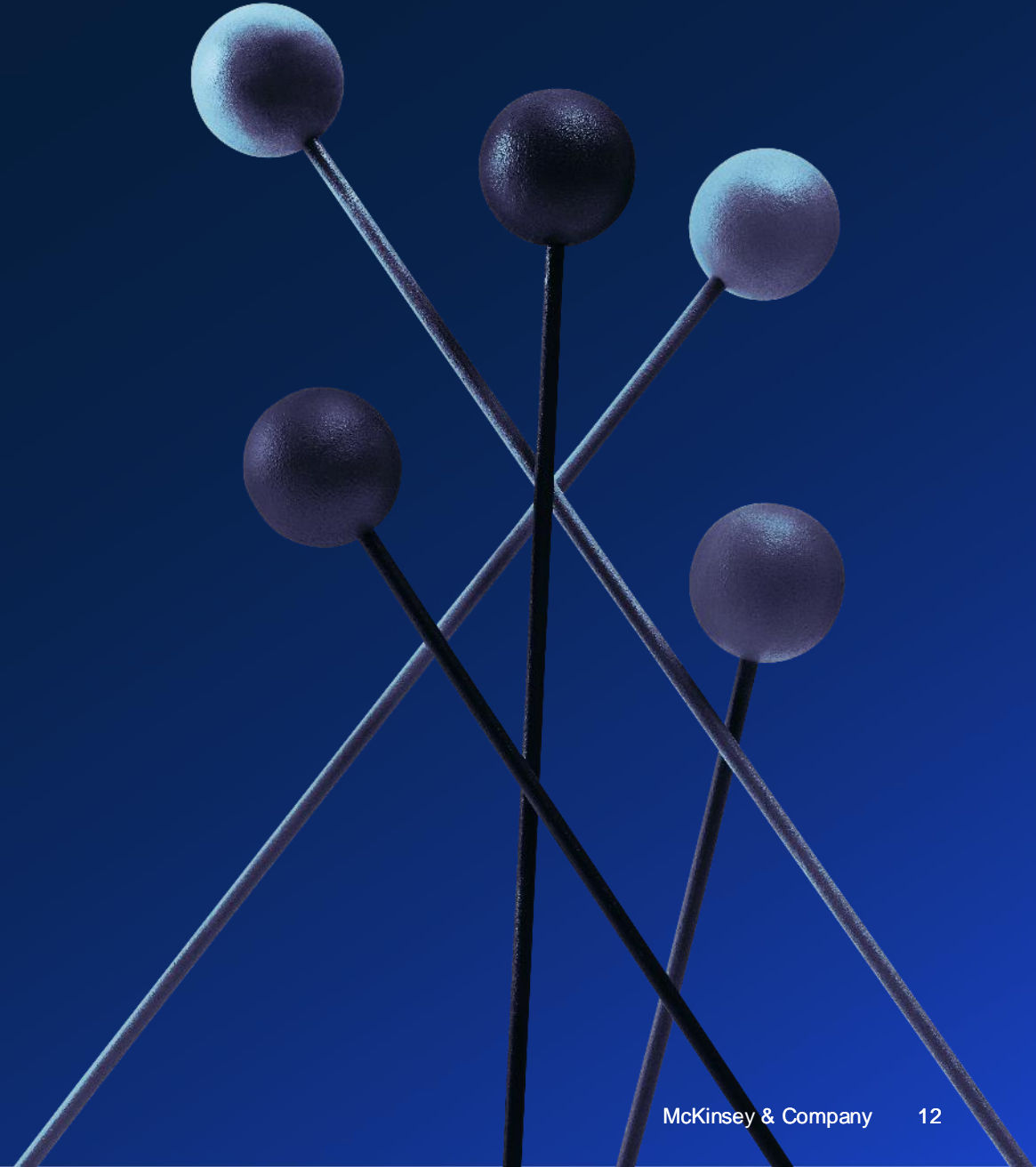


- A** **Get the fundamentals right first**  
Build a strong org structure, align leadership vision and stakeholder priorities, and ensure efficient processes and risk management
- B** **Don't lose focus on what matters most**  
Prioritize core procurement processes such as cost optimization and spend analytics

- **C** **Leverage Gen AI as key enabler to create value**  
Enhance procurement capabilities with Gen AI to drive cost savings and value creation while also improving productivity and efficiency

## Key actions for CPOs

# **Talk-to-action:** Successful AI use cases in procurement





# Contract AI for a global O&G player identified ~17M opportunity

Preliminary

## Context

### Contract insights use case:

- **T&C benchmarking** to compare legal and commercial clauses to a best-in-class standard
- **Rates benchmarking** to convert unstructured rate cards into structured template to perform benchmarking

## Approach

### 1st Step. Tech set up

- Finalize architecture and design choices, secure OpenAI key access
- Set up tech instance, identify GPT model based on required rate limits

### 2nd Step. Extraction & Refinement

- Develop ground truth and run model on ~5-15 contracts
- Gather inputs from SMEs and engineering to improve coding logic

### 3d Step. Benchmarking & Refinement

- Define scoring logic with SMEs
- Identity accuracy improvement opportunities; followed by prompt iterations based on SME inputs

### 4th Step. Scale and roll-out

- Identify user requirements and required data connections; build streamlit UI
- Scale to multiple contracts / categories

## Impact

### **\$15M+ opportunity**

identified through addressing ~\$1B - \$2B spend in use-cases in MVP phase

**20+ users** (technical and functional) onboarded and trained

**~80-90% accuracy** achieved across models



# Procurement value assessment utilizing Gen AI for a global pharma company

Preliminary

## Context

- Global healthcare client with annual R&D Procurement spend of >\$4B
  - **Complex contracts** with multiple discount structures
  - **Multiple amendments** and rate cards adjusted every year
  - Presence of **work order and change order at project level**
  - Some **invoices with >50 pages**
  - Emergence of **non-contracted line-level items** on budgets
  - **Unclear inflation rates** applied to various geographic regions
- Challenging and time consuming to monitor and reconcile the invoice terms to negotiated terms

## Approach

- **Deployment of Invoice Match AI Proof of concept** in 4-weeks for ~10% spend
- Features developed:
  - New discount structures
  - Amendment handling
  - FX rate update using API
  - Table / rate extraction from pdf files
  - Invoice entity extraction >95% accuracy
  - Identification of non-contracted spend
- Four sources of value leakage assessed:
  - Pricing leakage
  - Discount leakage
  - Inflation leakage
  - Non-contracted spend



## Impact

- **Successful POC development (technical feasibility and value linkage)**; with contract and invoice entities extracted and reconciled to identify value leakage
- **\$10M+ / ~4% value leakage identified** and currently being negotiated with suppliers:
  - Rate discrepancies (Incorrect rates, FX)
  - Missing or partial discounts
  - Over-budgeted inflation
  - 20% of “recurring” spend non-contracted spend with possible negotiation opportunities
- **Process improvement opportunities identified** internally and externally to increase compliance

# Source AI identified 5-10% of baseline in savings for an Aluminum player

Preliminary

## Context

Global producer of Aluminum with \$5B+ annual spend

### Category management scope:

- \$50M USD spend for Logistics
- \$60M USD spend for 8 MRO categories

### Additional challenges:

- Highly manual and time consuming to analyze and manage highly complex categories
- Difficulty tracking rapidly evolving market trends and potential risks to the supply chain

## Approach

**Deployment of Source AI** on Logistics categories (Air Freight, FCL, LCL, Courier) and 8 MRO categories in 3 main steps:

- **Key features:** 360 transparency on spending and market trends, category co-pilot to identify real-time opportunities, and ability to define digital category strategy and objectives digitally
- **Process set up:** connected spend data with extractor/categorizer and multiple data sources through APIs; set up a cross-functional team to define concept and implementation
- **Development:** started with the pilot on selected categories and features and expanded to a broader scope

Currently implementing GenAI features such as Negotiation Coach, Idea Generator, Report Generator, and Market Scan

## Impact

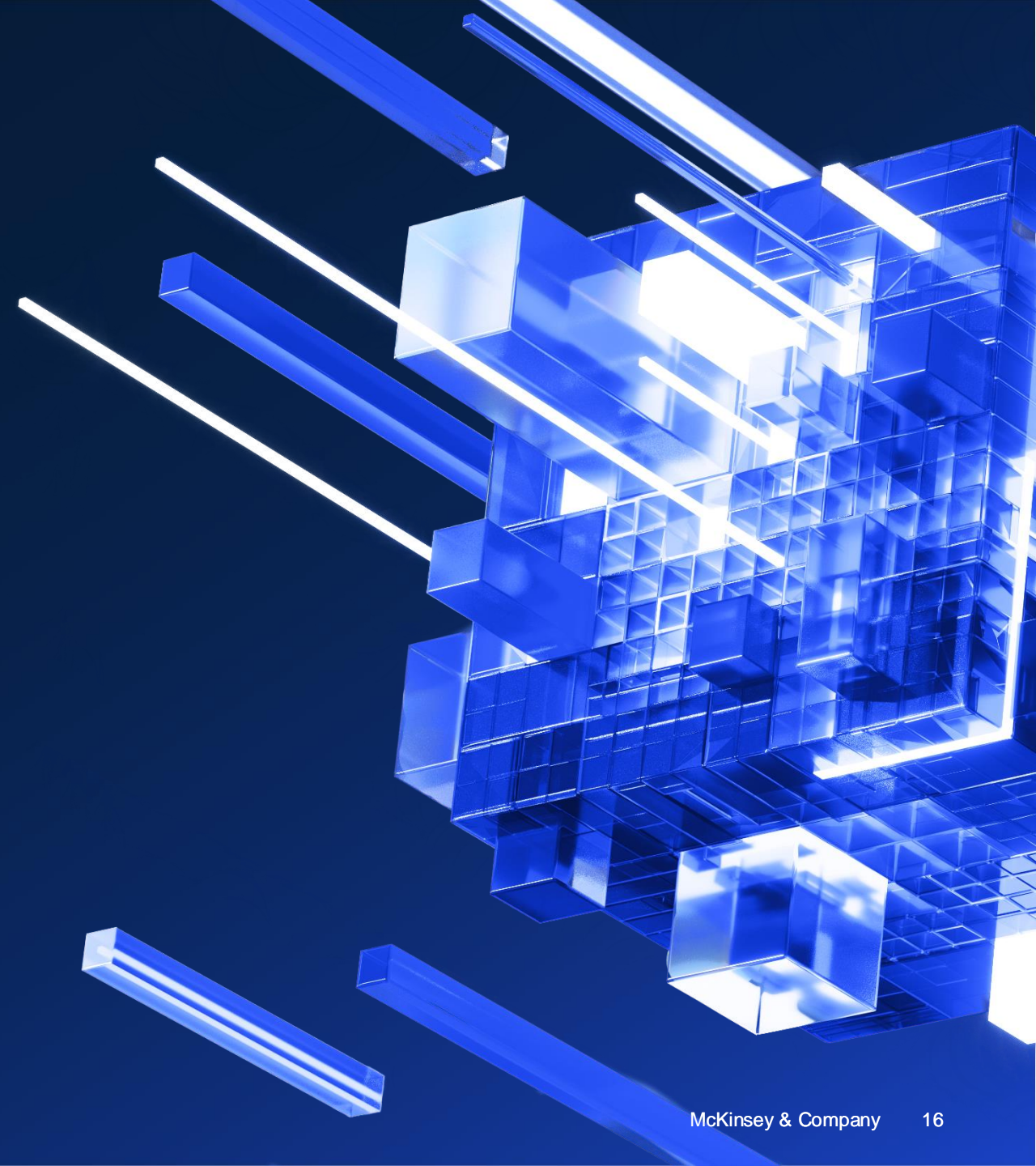
Output is a fully automated solution combining real time internal data with category specific market insights to drive category strategic sourcing

~**5-10%** incremental impact

~**20-30%** of the time shifted to value-add activities

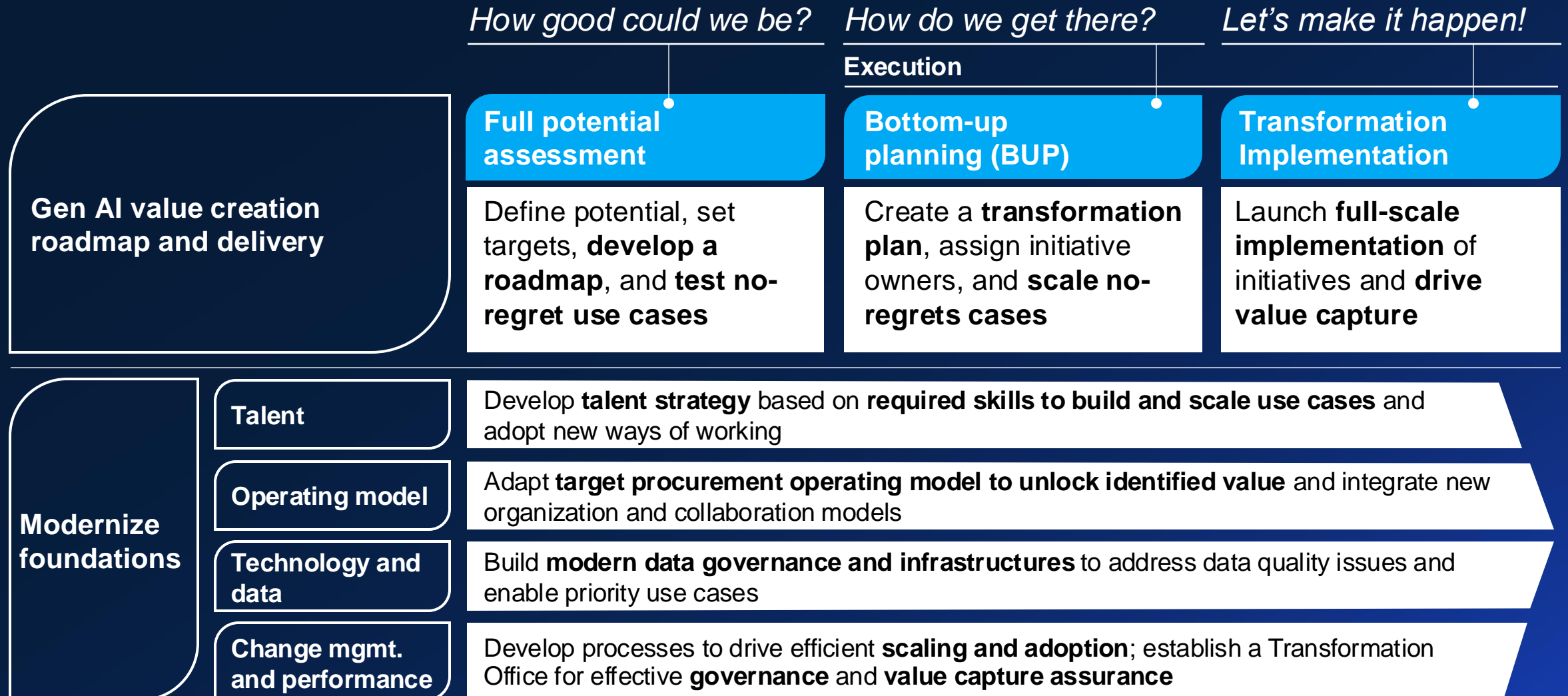
**3x** increased visibility towards market trends and supply risks

# Key success factors: Pathway to capture value





# Proven approach to unlock the value of Gen AI in procurement



# Scaling and sustaining impact from Gen AI use cases requires success across 4 key factors

Illustrative

## A Talent

- Clarity into **incremental skills** needed across functions (e.g., model fine-tuning, prompt engineering, vector database administration)
- **Recruitment and/or capability building strategy** based on deployment model (taker, shaper, or maker of Gen AI solutions) tailored to current capabilities



IT/Technical team

## C Technology and data

- **Data and tech infrastructure** with integrations and capabilities needed (e.g., cloud enablement)
- **Governance process** ensuring quality, quantity, reliability, and privacy/security



Procurement

## B Operating model

- Augmented leadership R&Rs<sup>1</sup> and/or **Transformation Office** to drive digital transformation
- **Revamped organizational and collaboration models** considering new R&Rs<sup>1</sup> and processes
- **Risk mitigation strategy**



Other corporate functions

## D Change management and performance

- **Roll-out timeline** with quantified goals and scheduled milestones
- **Value capture tracking process** for performance transparency

1. Roles and responsibilities

# How to get started with Gen AI



# Organizations can take a two-speed approach to “learn into” gen AI while ensuring impact doesn’t get stuck in “pilot purgatory”

**Which two use cases can deliver impact quickly and build excitement?**

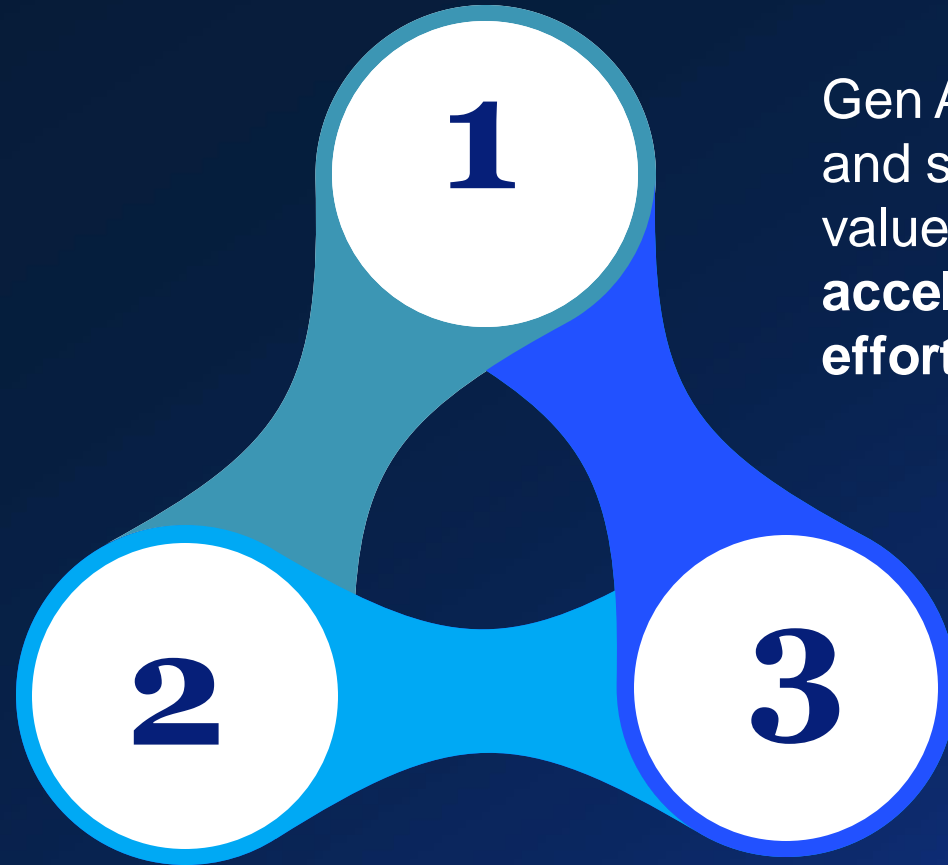


**2 x 2**

**Which two use cases will fundamentally alter the business?**



# Closing note



Gen AI adoption spikes and starts to generate value – **don't wait, accelerate your efforts now!**

Gen AI is a priority, but progress is lagging: **a change in approach is needed**

Successful AI use cases are flourishing, **paving the way to value capture**