

AI on Solid Ground: Structuring and Sustaining Innovation

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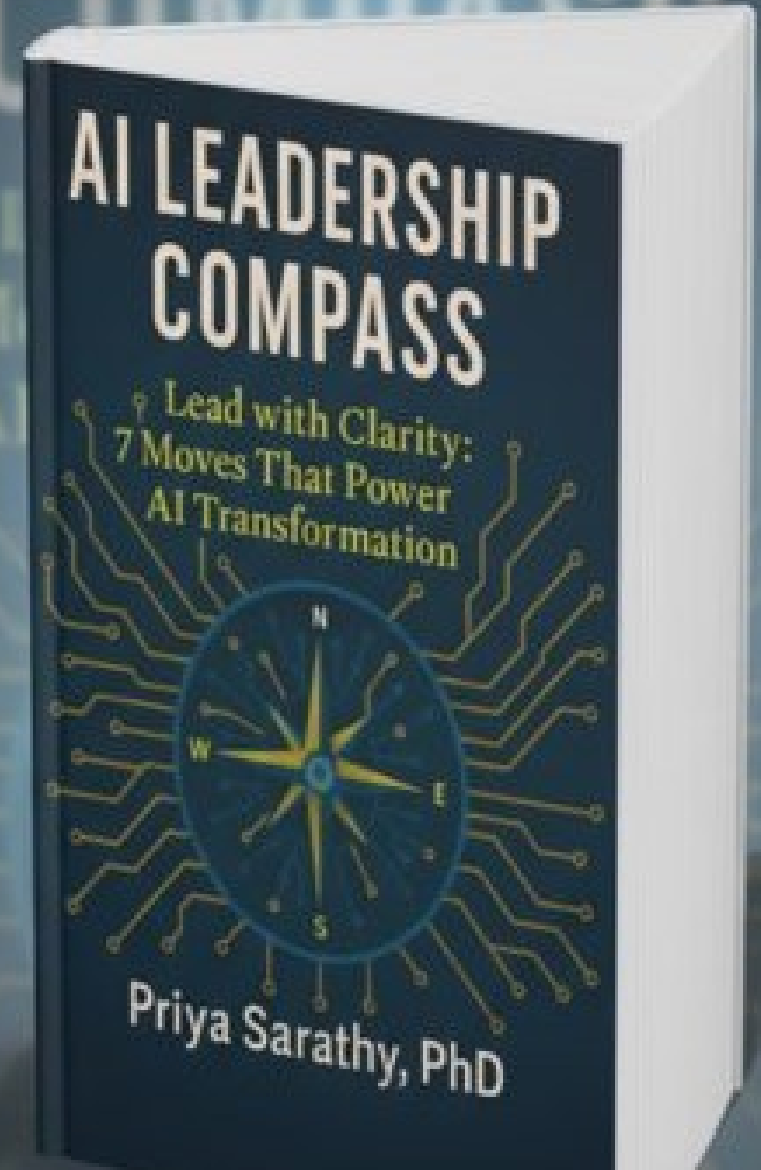


About Me

- ▶ 30+ years designing and scaling data-driven systems across Telecom, Banking, Fintech, Payments industry
- ▶ Architected data strategy frameworks that operationalize ML responsibly at scale

I most care about:

- ▶ Spreading awareness and confidence in the use of AI
 - ▶ Moving from experimentation to scalable AI
 - ▶ Embedding governance without slowing innovation



Workshop Flow

- ▶ Why the status quo is broken
- ▶ Reframing how we think about GenAI
- ▶ GenAI and Business Value
- ▶ Measuring GenAI Value
- ▶ Use Case – lets put our learning to work! How to operationalize and sustain value





AI on Solid Ground

Generative AI is the house; robust data is the bedrock upon which it stands. Without a strong foundation, even the most impressive structures will crumble.

The Urgency: Beyond Experimentation

From Pilot to Production

Shift from isolated experiments to integrated, scalable solutions.

Real-World Impact

Focus on tangible business outcomes, not just impressive demos.

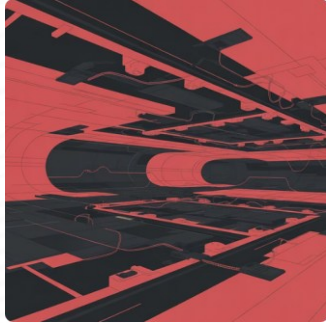
Strategic Imperative

GenAI is no longer an option, but a core component of competitive advantage.



Facts That Reflect Industry in 2025

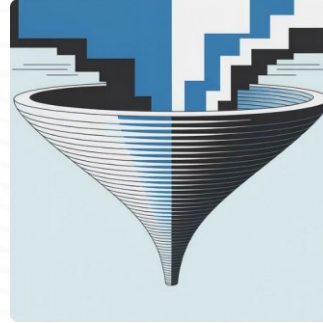
Here is the thing:



A staggering **95% of GenAI pilots fail** to deliver measurable ROI

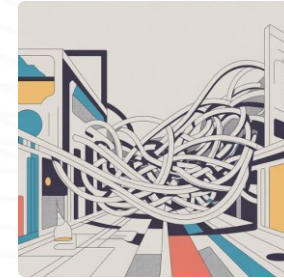
MIT Project NANDA

Think about it

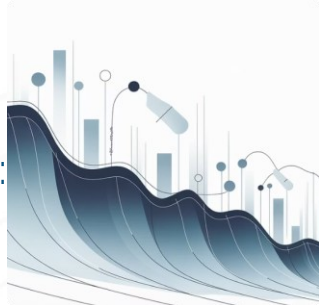


Only **about 5% of pilots actually scale** to create enterprise value.

What's holding them back?



Consider this breakdown:



Roughly **22% move past a Proof of Concept**, but only **4–5% truly drive substantial enterprise value**

Industry Analysis

And Another kicker:



88% of AI pilots fail to reach production

IDC/Lenovo Report 2025

Poor data quality, a lack of clear ownership, and governance costs are consistently the biggest factors that stall most scaling efforts

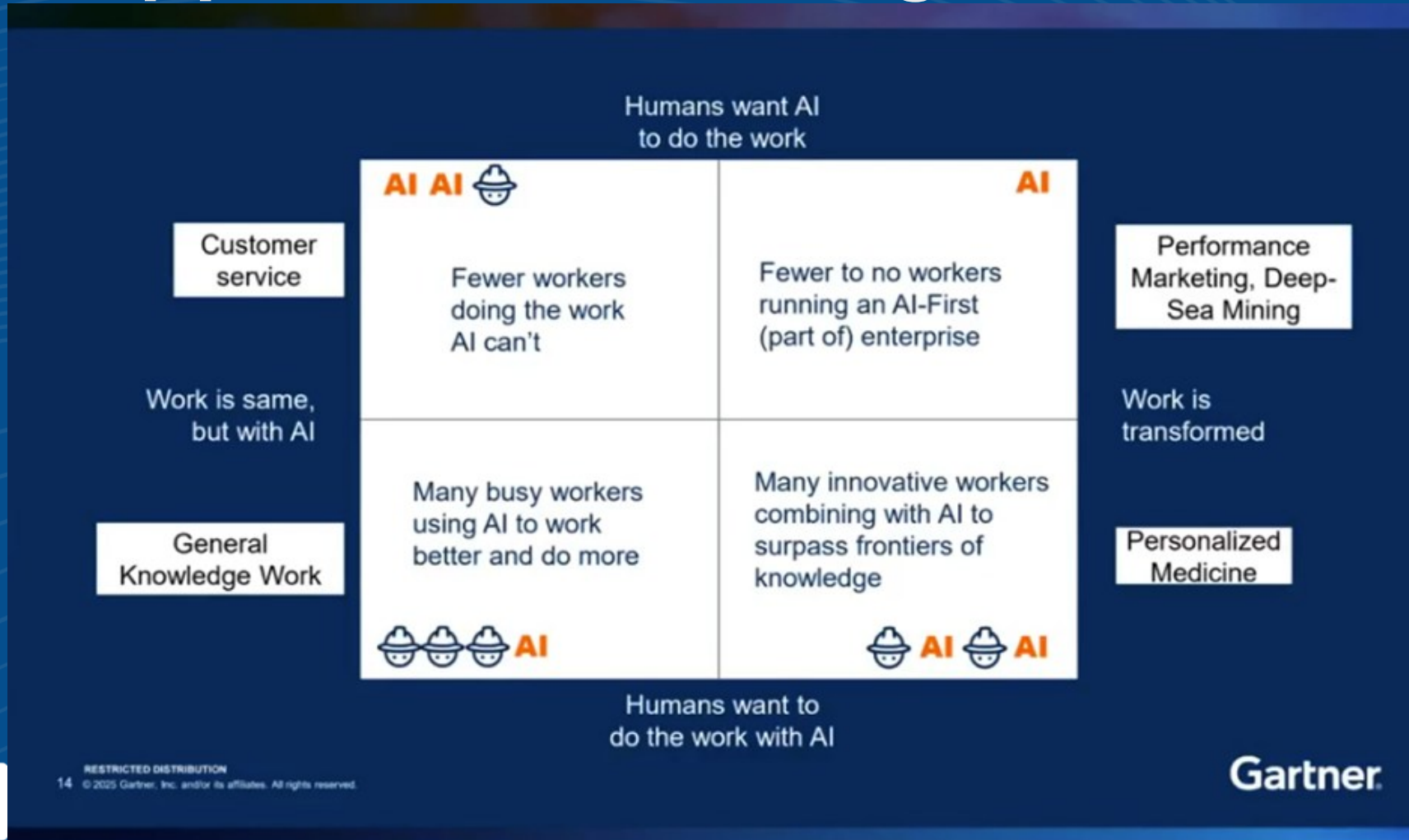
Bain Report





Resetting How We Think About AI

GenAI Ripple Effect: Working With AI

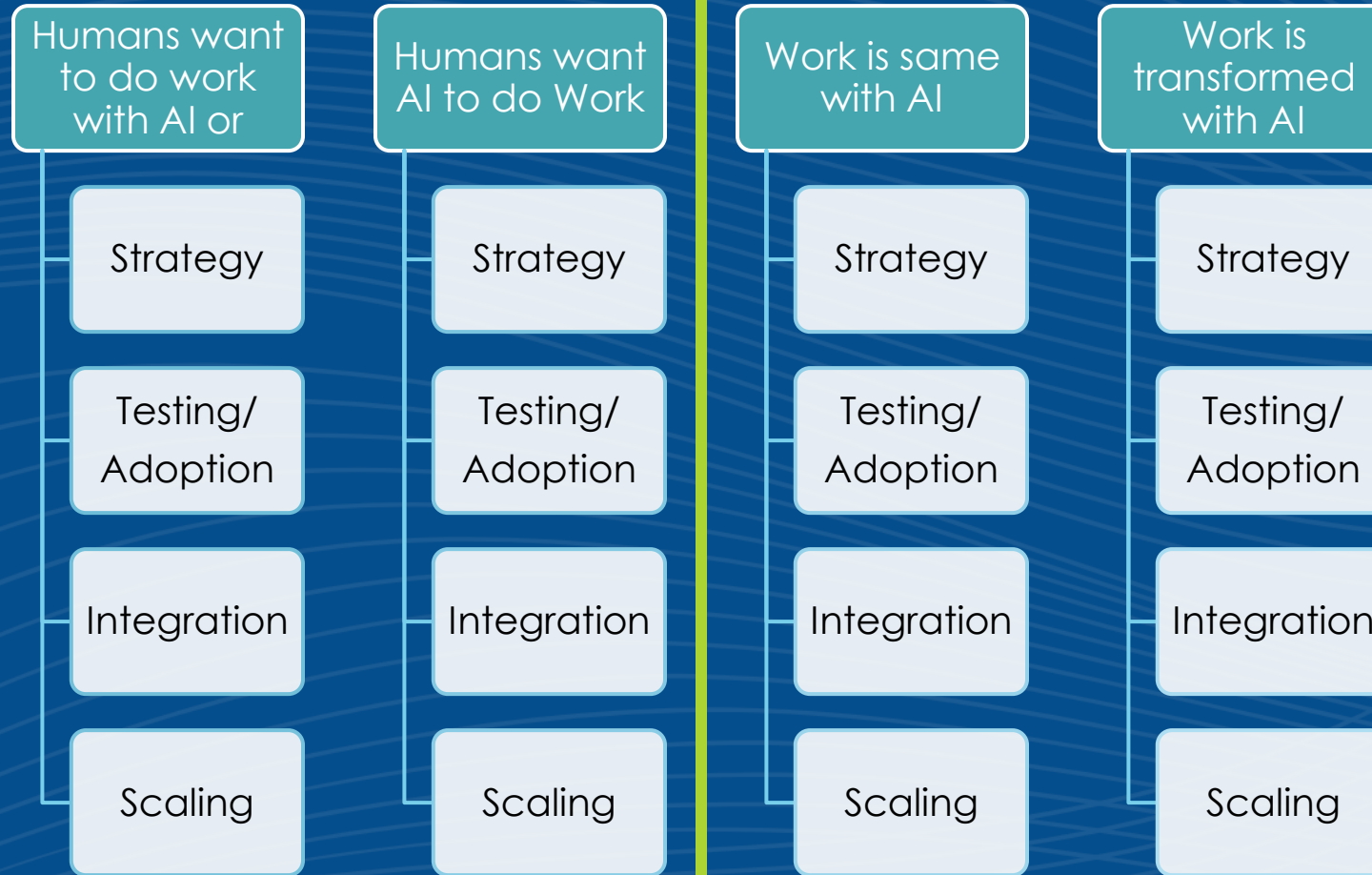


GenAI Ripple Effect

- ▶ AI completed 12.2% more tasks than average, 25% more quickly
- ▶ Customer support agents increased productivity by 14% on an average. A novice showed a 35% improvement
- ▶ Customer satisfaction – 25% decline in request to speak to a manager

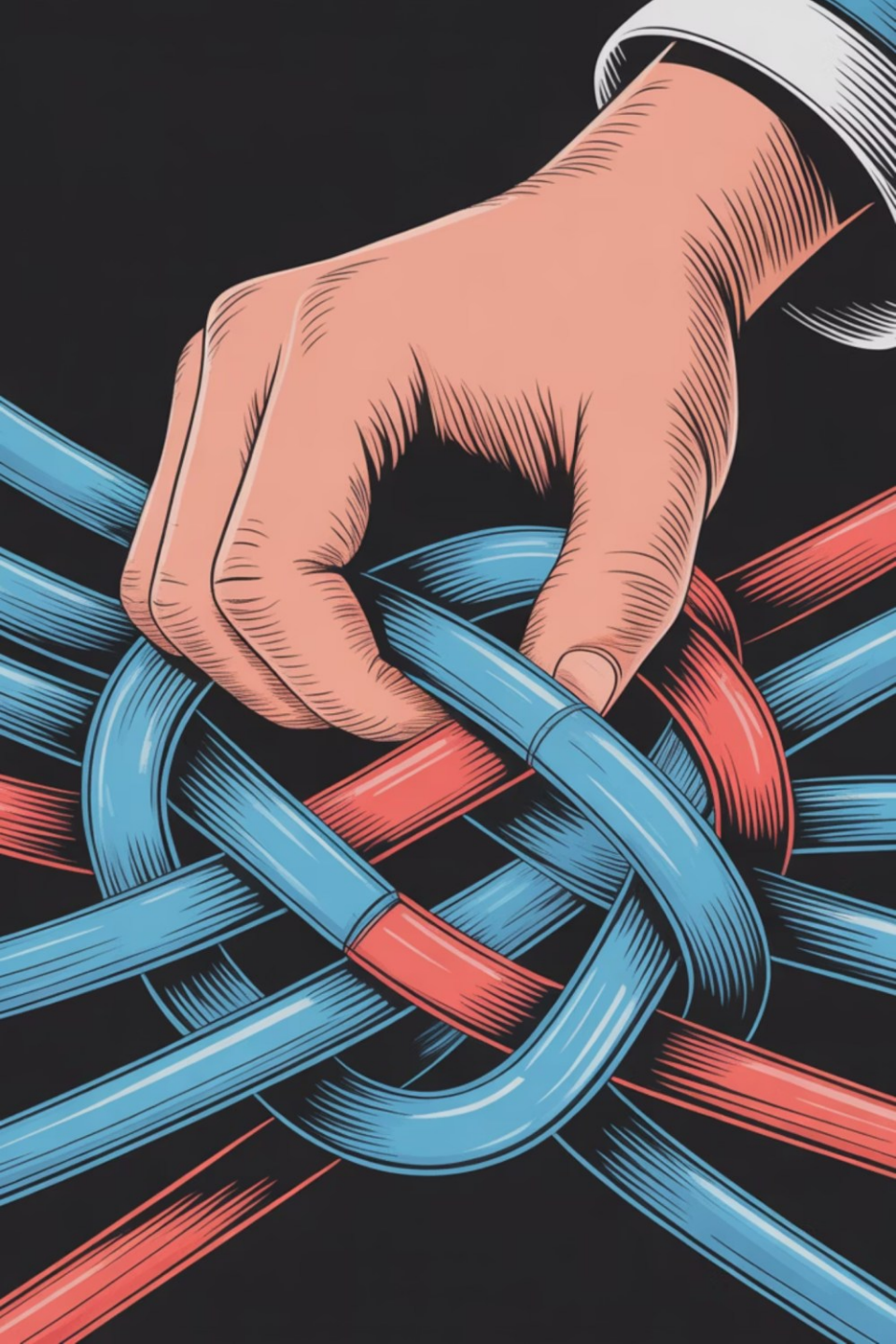


Activity: Organizational Culture - Where are you?



“ What would have to change for you to move one step right on this diagram ”





The Human Constraint to Innovation

Data Literacy Gap

Change Management Challenge

Organizational Inertia

Skill & Talent Shortages



‘Try spilling your unfiltered thoughts into its engine. AI can give them shape outside your mind, quickly and at little cost: any notion whatsoever, output visually in seconds. The results are not images to be used as media, but ideas recorded in a picture.’

IAN BOGOST
THE ATLANTIC





Strategy → Architecture → Culture → Risk → Measurement

Why Scale Breaks Demos

BUILDING BLOCKS ON SOLID GROUND





Scaling With GenAI

Proof of Concept

1

- ▶ Initial testing and validation
- ▶ Small-scale experiments
- ▶ Demonstrating feasibility

Operational Stage

2

- ▶ Integration into workflows
- ▶ Expanding use cases
- ▶ Building infrastructure

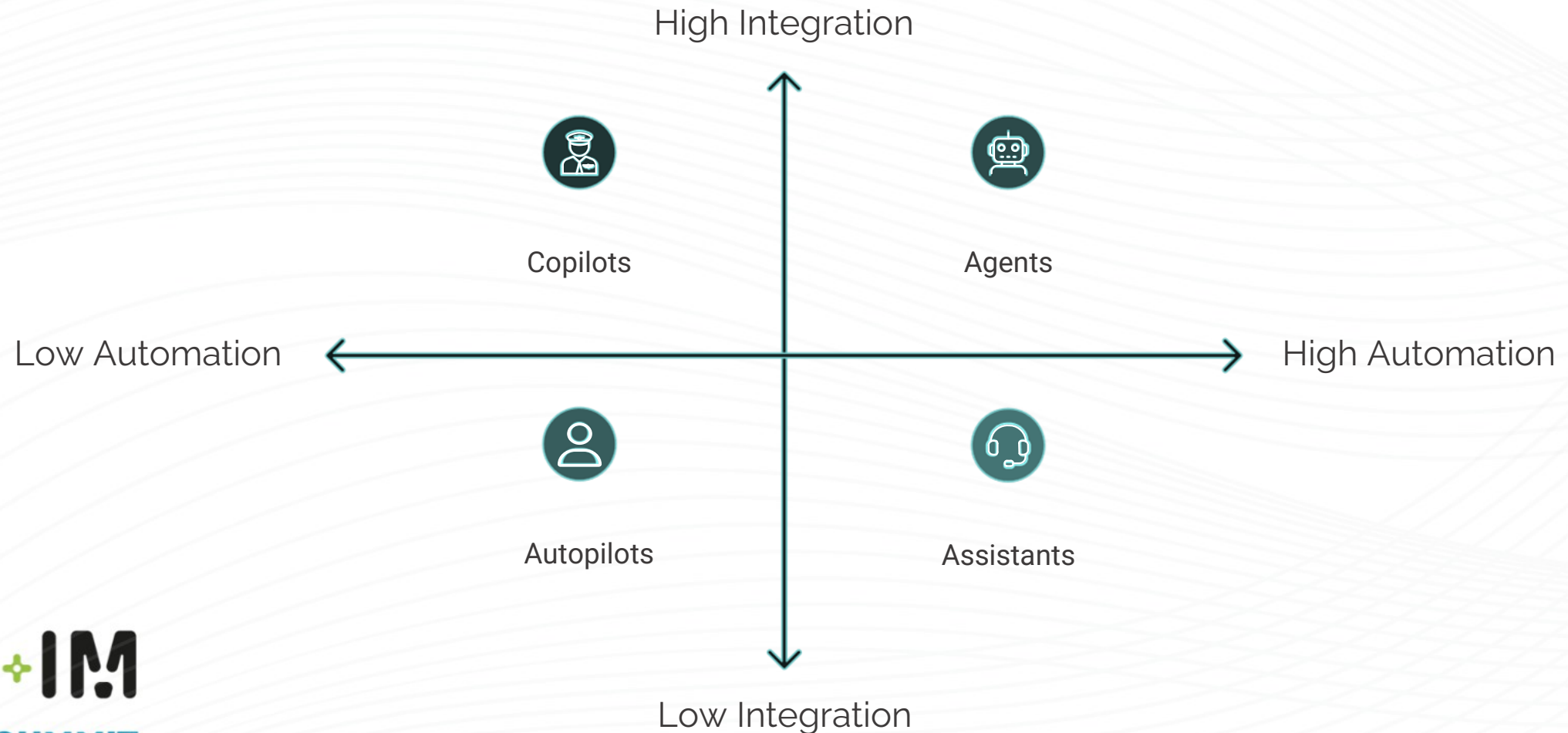
Enterprise Scale

3

- ▶ Full deployment across organization
- ▶ Standardized processes
- ▶ Measurable business impact



Scope Of GenAI: Assistants to Agents





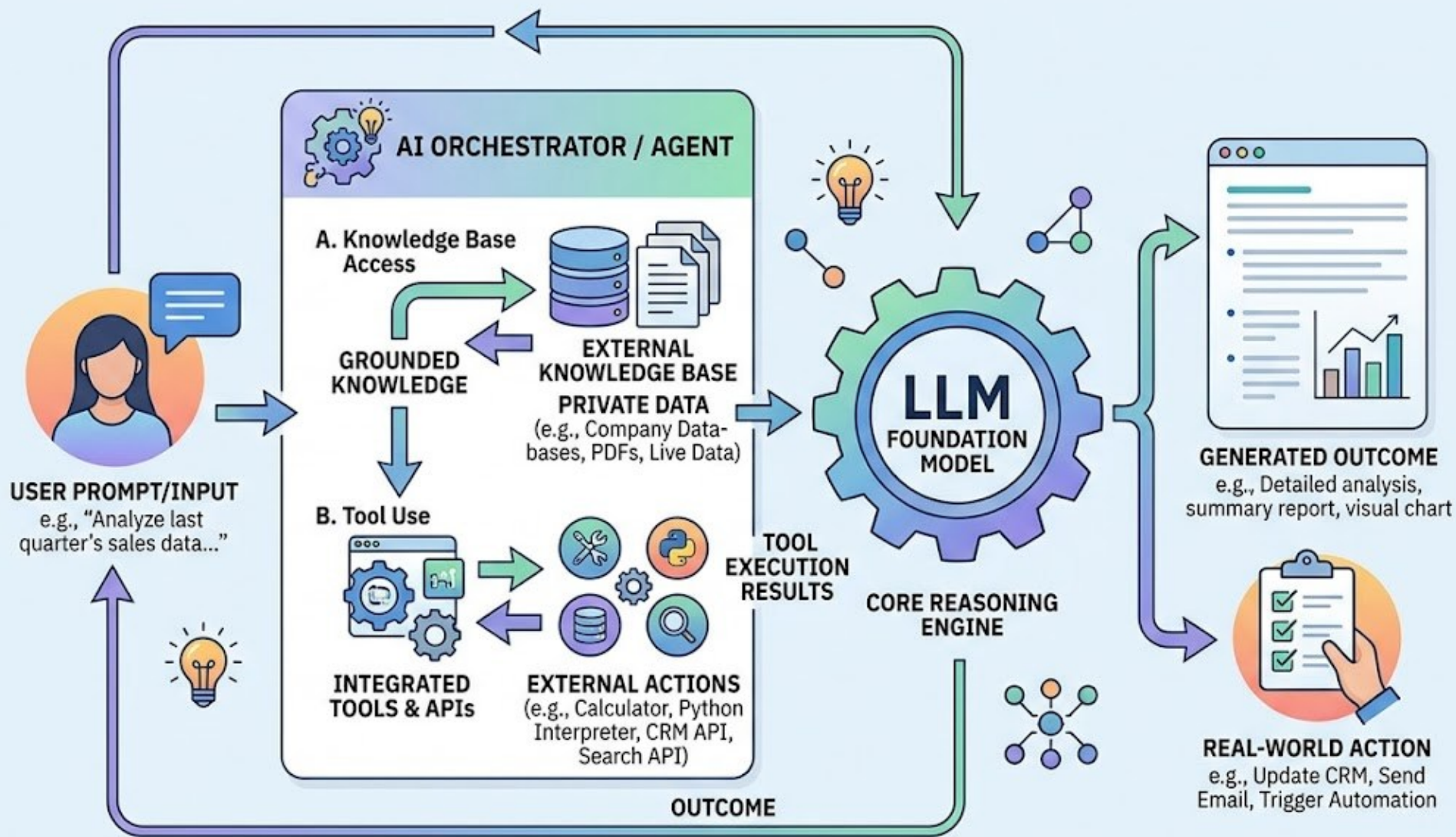
The Hard Truth: Scale Exposes Weakness

"Scale is where weak data goes to die."



MODERN LLM PROCESSING: BEYOND THE FOUNDATION MODEL

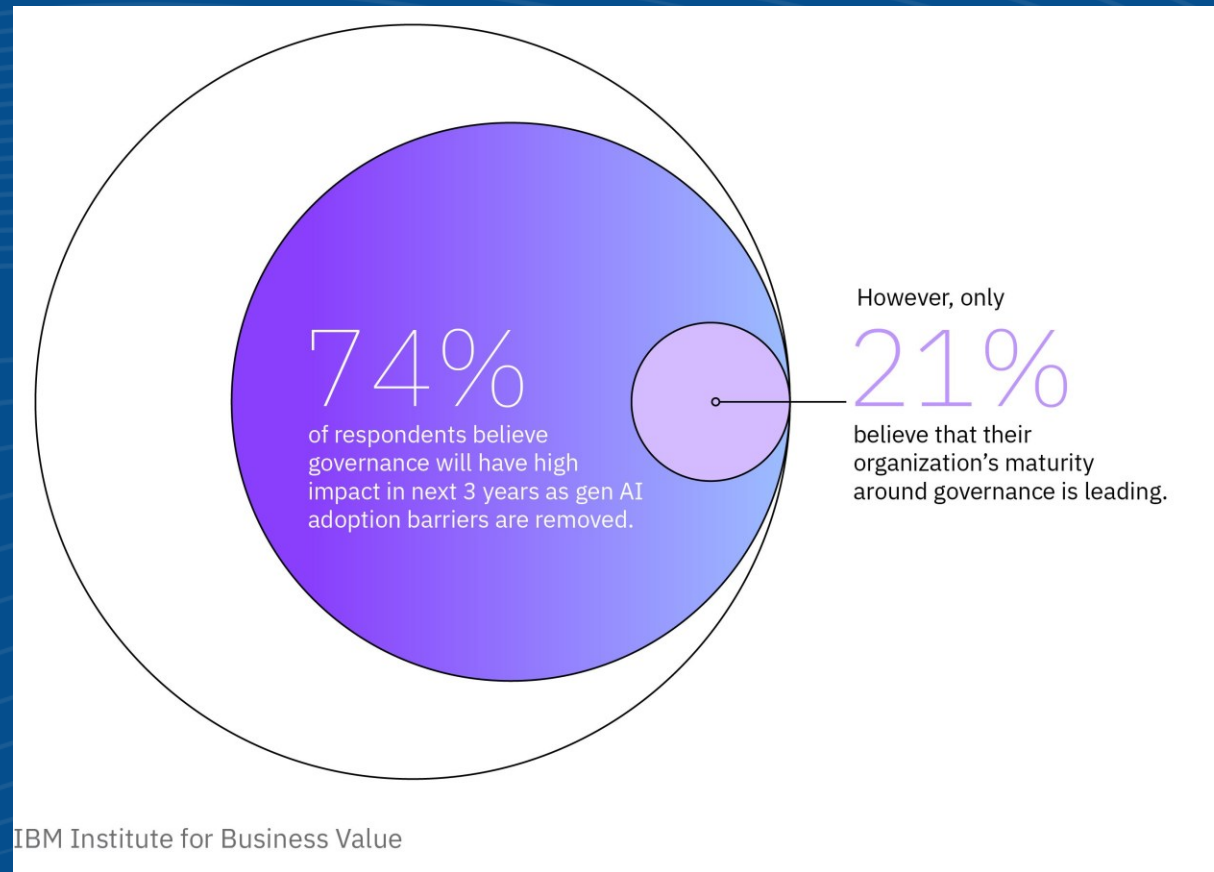
Using GenAI!



POWERED BY HYBRID-BY-DESIGN ARCHITECTURE



Getting out of Demo Trap – Where is the next organizational change coming from?



Value From GenAI Investments

HOW IS IT GENERATED?





Value Sources

AI READINESS

RISK MITIGATION



GenAI Success Depends On-



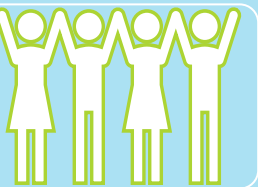
Data Quality



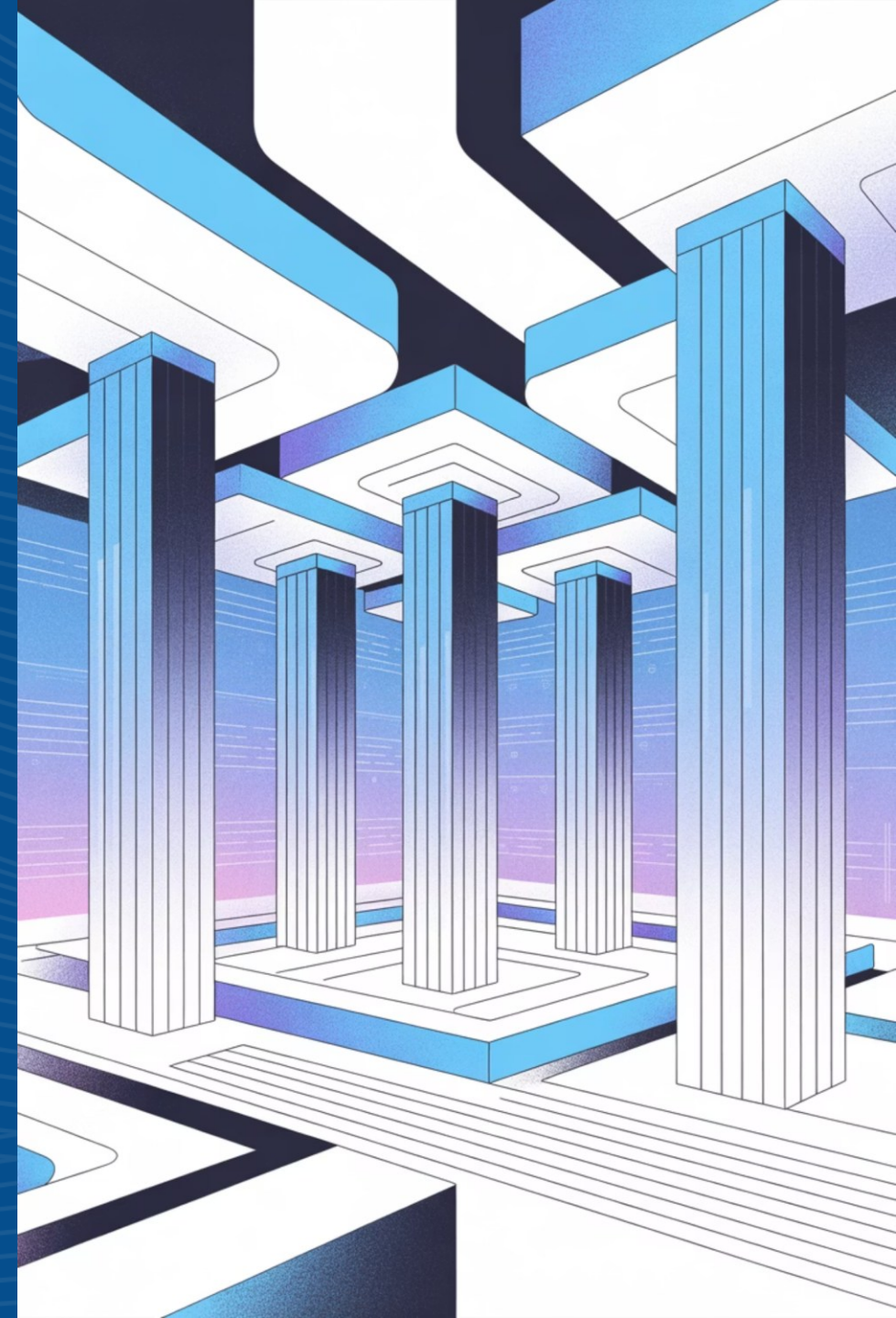
Data -AI Governance



Data Architecture



Data Culture & Ownership



Rethinking AI Readiness

Beyond Surface-Level
Checklists

Not: **"Do we have data?"**
But: **"Is our data fit for
purpose?"**

From Quantity to Quality

Garbage in, garbage out is
amplified for GenAI

Continuous Data Evaluation

Readiness isn't a one-time audit; it's an ongoing process
of monitoring

Hidden Costs: GenAI Risks

- 1 Data Drift
- 2 Securities Vulnerabilities
- 3 Compliance Penalties
- 4 Reputational Damage



Business Value & ROI From GenAI

20%-35% ROI

Time reduction for manual responses



Customer Service & Contact Centers



Sales & Marketing

30%-50% ROI

Less time spent on content creation

15% ROI

Time reduction in coding-related activities



Software Product Development



Back Office & Other Operations

20%-50% ROI

Task automation for document comparison

Reference : <https://medium.com/technology-media-telecom/genai-business-value-creation-roi-19c1077543ec>

Activity: 5 Minutes

What Slows Down Value in Your Organization?

Data Literacy

Change Management

Organizational Inertia

Talent Shortages



“ If you fixed just one thing
in the next 90 days, what
would unlock
momentum? ”





Measurement
What to measure?



Activity: What are some metrics of GenAI Readiness?

Areas of Readiness

- ▶ Data Quality
- ▶ Data-AI Governance
- ▶ Data Architecture
- ▶ Data Culture-Ownership

Readiness Metrics

- ▶ % of high-quality, labeled data available for training
- ▶ Existence of cross-functional AI governance framework (Yes/No)
- ▶ Time to deploy a model into a production workflow meets SLA
- ▶ % of staff with AI/data literacy training completed



Assessing Innovation

▶ McKinsey

- ▶ Research and development-to-product (RDP) conversion and
- ▶ New-products-to-margin (NPM) conversion as metrics for innovation

▶ Ernst and Young (EY):

- ▶ Percentage of total sales and sales growth coming from new product development (NPD)
- ▶ New-products-to-margin (NPM) conversion
- ▶ Balance scorecard (BSC)
- ▶ Cumulative three-year or five-year NPV
- ▶ Operating total shareholder return (O-TSR)
- ▶ Consumer-product fit, including the after-use weighted purchase intent (WPI).



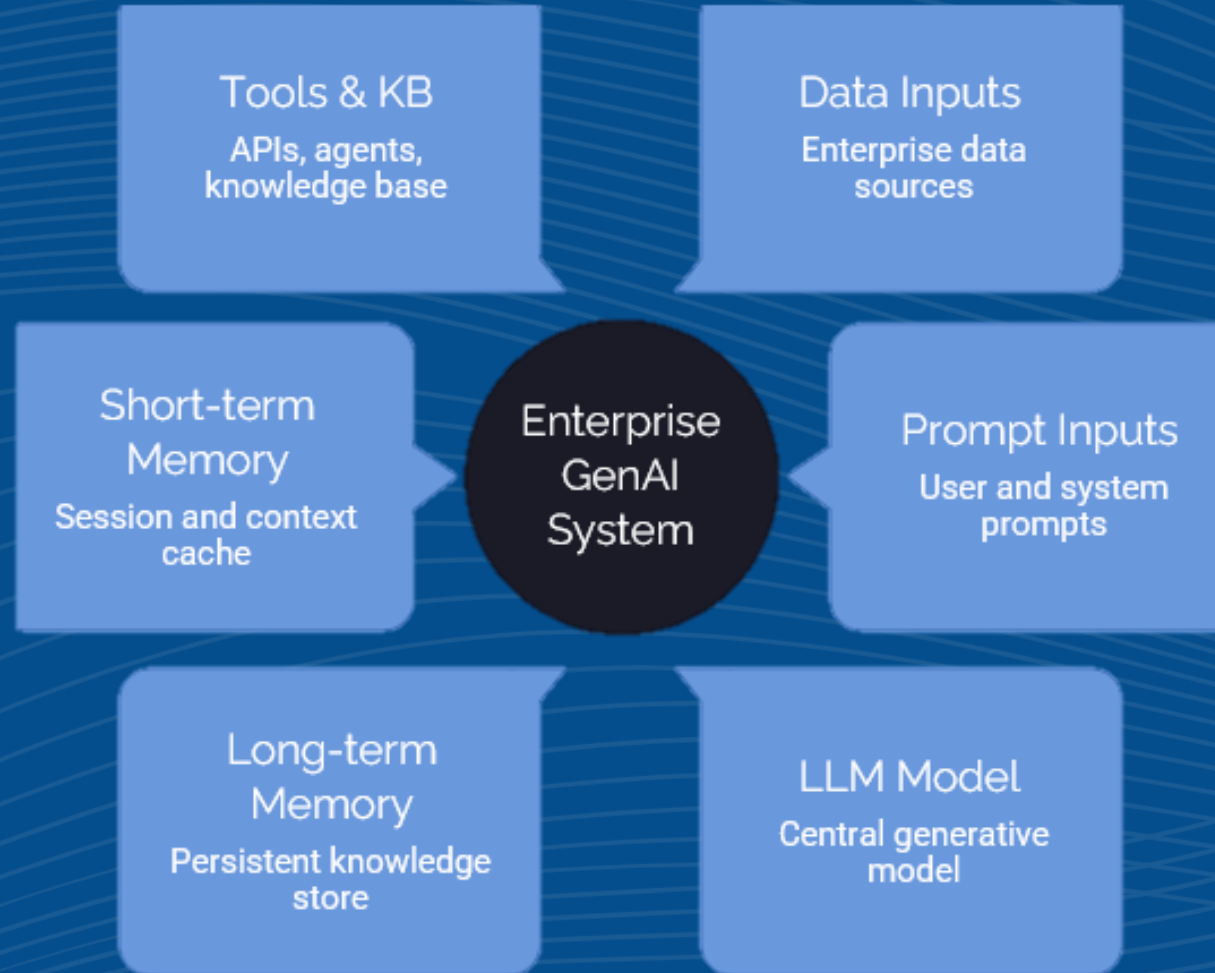


Understanding AI Ecosystem

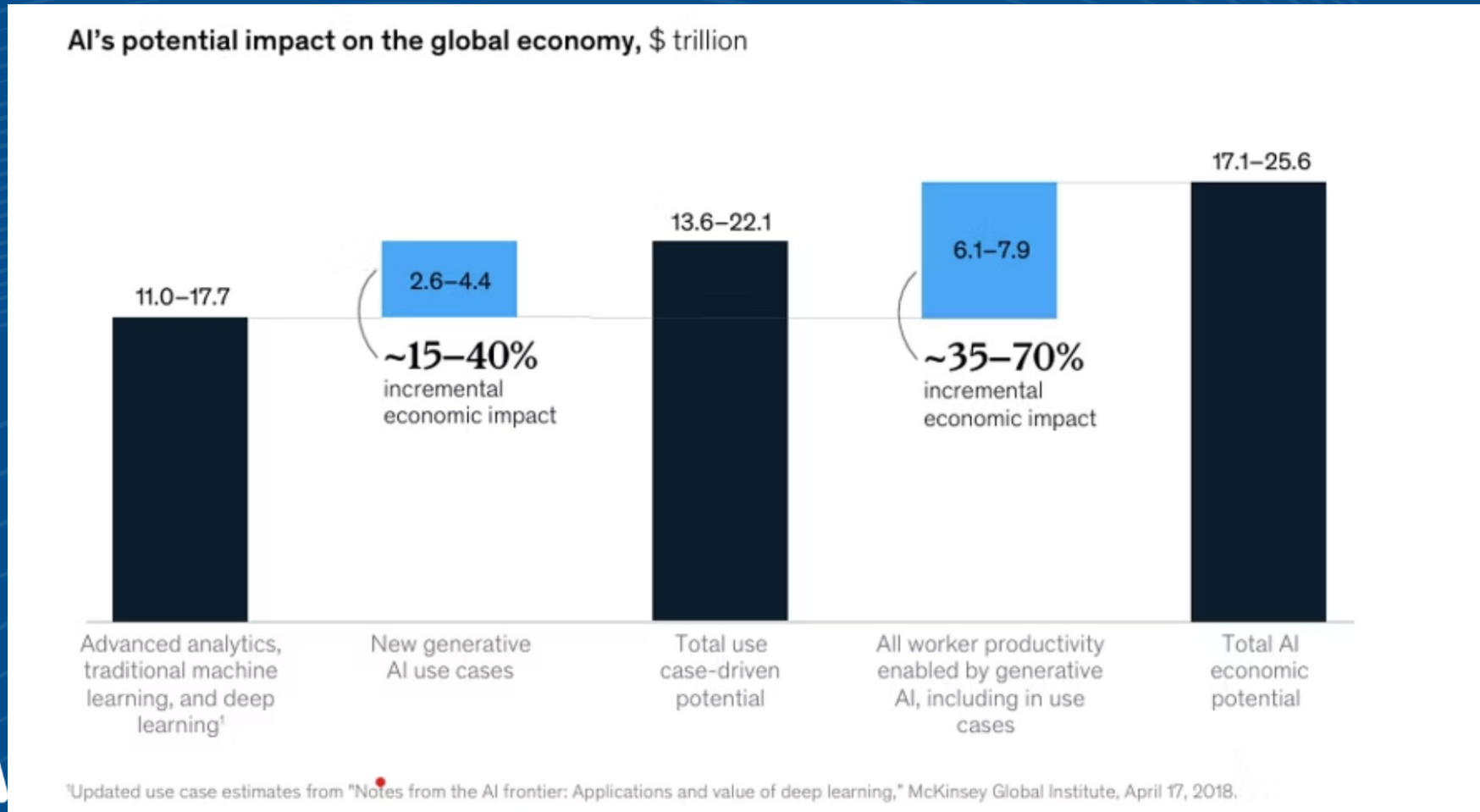
ALGORITHMS AND INFRASTRUCTURE



Recap: How GenAI Systems Work in Enterprises

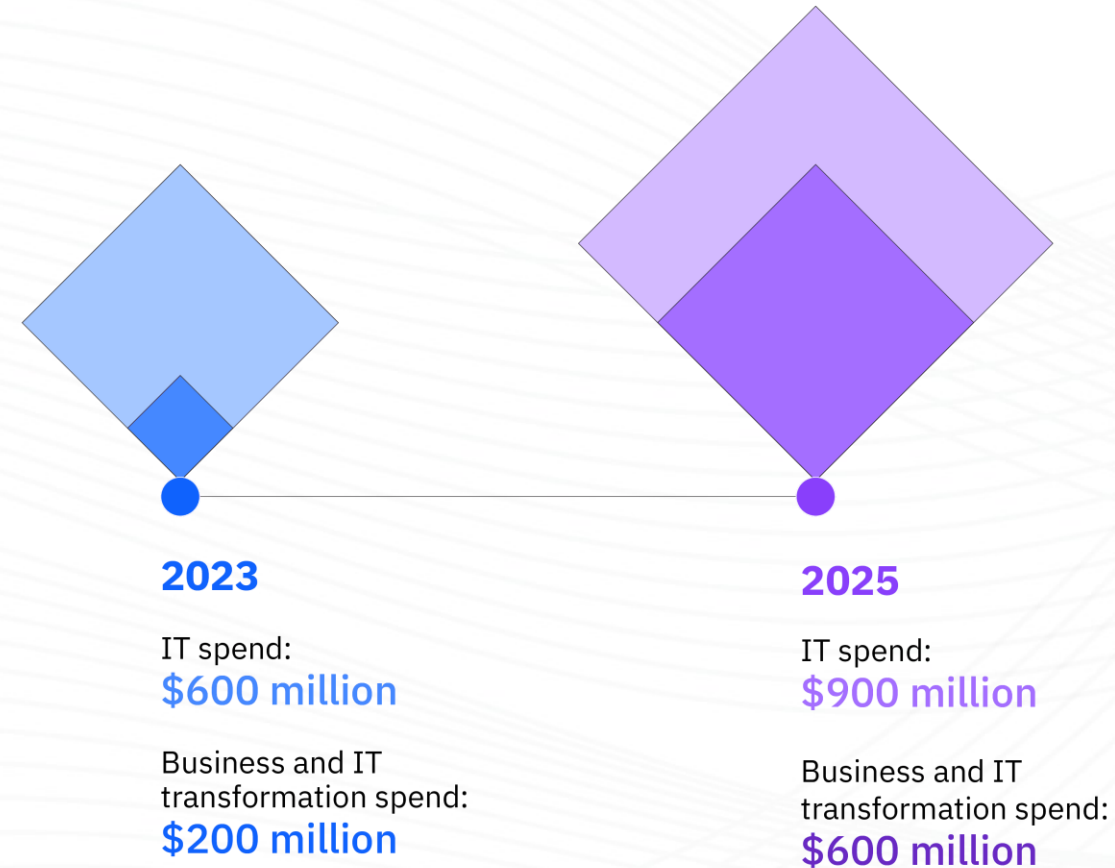


It's Not About GenAI Alone—It's About the AI Ecosystem



Investment In the Ecosystem

- ▶ Building end-to-end intelligent workflows
- ▶ Optimizing operations for AI-powered ROI



IBM Institute for Business Value





USE CASE: REQUIREMENTS TO SCALE



Use Case Walkthrough

"Scale changes the math of every decision."



POC Phase Decisions

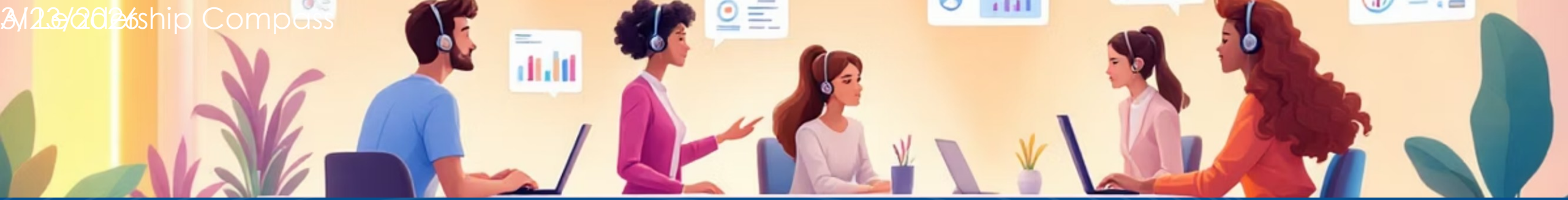


Operational Phase Decisions



Enterprise Phase Decisions





Use Case: Scaling AI-Powered Customer Support

Business Context & Objective

- Reduce response time and support costs
- Automate routine customer queries
- Improve overall customer satisfaction and experience





Stage 1: POC-Experiment

"Failure here is cheap. Use it to learn."

Exploratory Prototyping

- Launch small-scale pilots
- Target specific and controlled problems
- Focus on technical feasibility and initial performance

Learn from Iterative Failures

- Embrace a culture for rapid iteration
- Encourage "fail fast"
- Incremental learning

Validate Promising Use Cases

Identify and prioritize high-potential GenAI applications that demonstrate tangible value and align with strategic objectives, before scaling up



Decisions for Stage 1 POC

- ▶ Exploratory Prototyping
- ▶ Learn from Iterative Failures
- ▶ Validate Promising Use Cases
- ▶ Small set of FAQs, manual tagging
- ▶ Scaling: CRM and ticketing system integration
- ▶ Enterprise: real-time insights across global service centers



Stage 2: Operationalize

"Ownership is the bridge to ROI."



▶ Clear Ownership

- ▶ Define and assign explicit ownership for GenAI models, data pipelines, and application outcomes, ensuring clarity from development to deployment.



▶ Defined Accountability

- ▶ Establish performance metrics, monitoring frameworks, and responsibility structures to track GenAI impact and ensure continuous improvement.



▶ Robust MLOps & Processes

- ▶ Implement mature MLOps practices, automated workflows, and standardized operational procedures for scalable, reliable, and secure GenAI deployment.



Decisions for Stage 2 Operationalize

- ▶ Clear Ownership
- ▶ Defined Accountability
- ▶ Robust MLOps & Processes
- ▶ Begin with pre-trained LLMs (e.g., GPT, Claude)
- ▶ Scale to multi-agent systems with escalation logic and personalization
- ▶ Add company-specific fine-tuning and explainability



Stage 3: Enterprise

"Success is measured in business outcomes, not uptime."



Revenue Growth

GenAI solutions are directly contributing to new revenue streams, increased sales, and expanded market share.



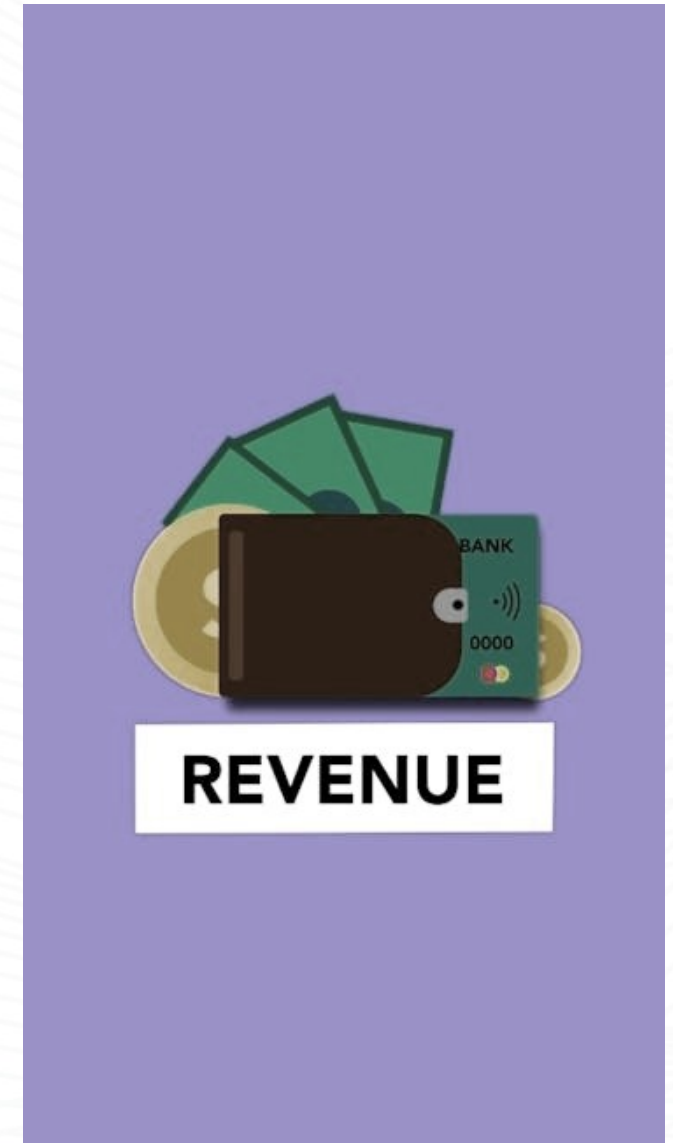
Efficiency Gains

Significant improvements in operational efficiency, cost reduction, and faster time-to-market across business functions.



Strategic Advantage

GenAI provides a distinct competitive edge, enabling innovative products, superior customer experiences, and market leadership.



Decisions for Stage 3: Enterprise Scale

- ▶ Revenue Growth
- ▶ Efficiency Gains
- ▶ Strategic Advantage
- ▶ Expand to vendor and compliance agreements
- ▶ Integrate with systems like SharePoint, Salesforce
- ▶ Introduce explainable AI (XAI) for legal transparency
- ▶ Begin ROI tracking (e.g., time saved, disputes avoided)



The Critical Shift

"Stop managing files; start managing choices."

Traditional Data Management

Focus on **files** and **storage**

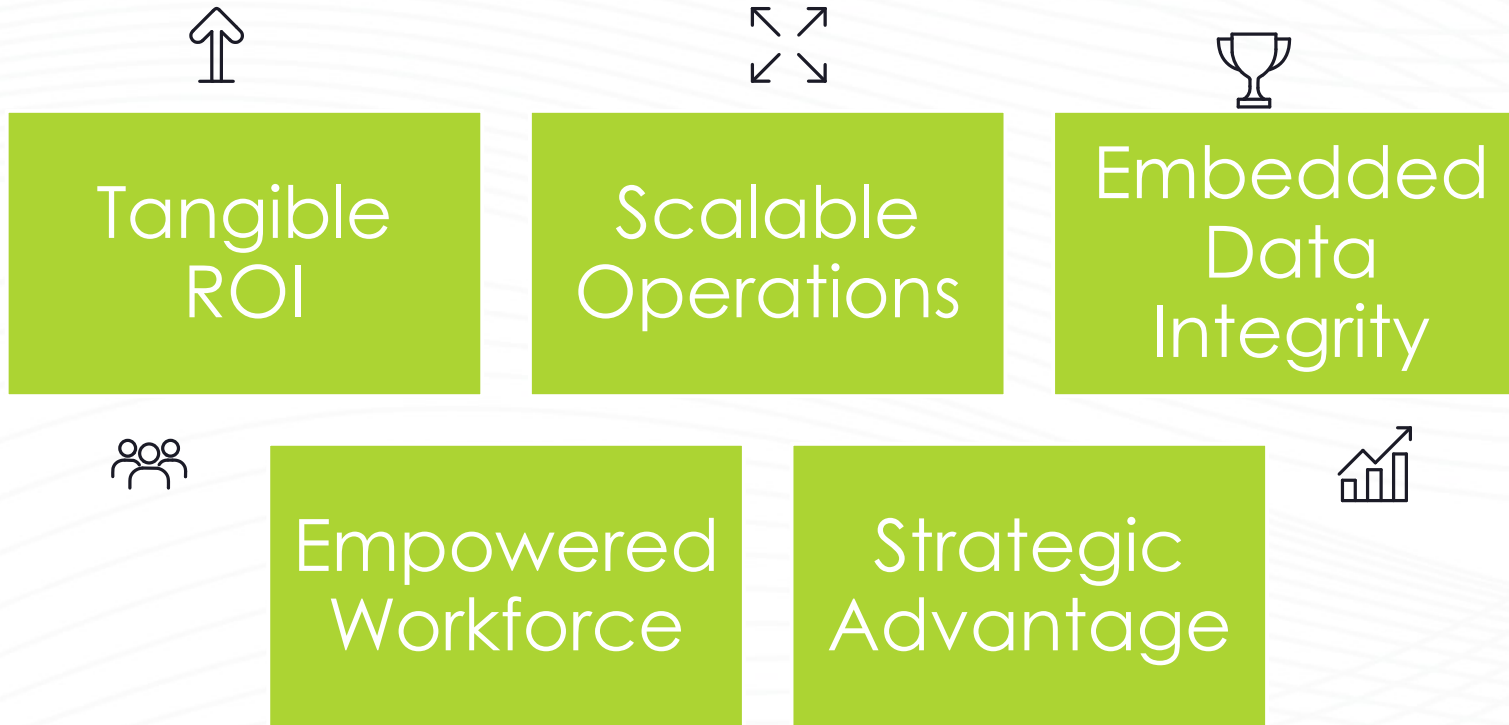


GenAI-Driven Data Management

Data becomes the **foundation for intelligent choices**



The Success Signals



Can you sustain the innovation?

- ▶ Tangible ROI
 - ▶ Customer relevance is able to evolve in a streamlined manner
 - ▶ Alignment with business objectives – lock-step
 - ▶ return on investment (ROI) measurable and drives iteration
- ▶ Scalable Operations
 - ▶ Feasibility is proven but flexible to adapt
 - ▶ Implementation rate can handle changes to business objectives
 - ▶ Time to implementation is not a guessing game
- ▶ Enhanced Data Integrity
 - ▶ Originality of curated data use is secured
 - ▶ Potential impact of drift monitored
 - ▶ Customer relevance drives data at scale
- ▶ Empowered Workforce
 - ▶ Employee engagement and change adoption



What Must Change

"Growth requires a bigger safety net."



Adaptive Infrastructure



Enhanced Governance & Ethics



Proactive Risk Management



Operational Excellence



Take Action: Your Next Step



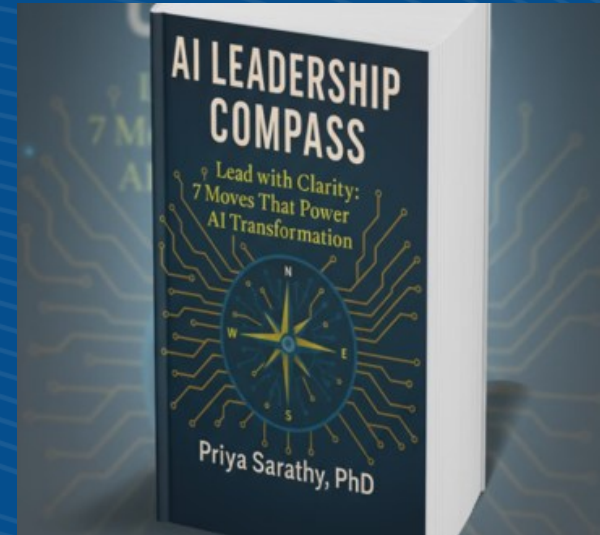
- ▶ Assess your current data readiness across the 4 domains
- ▶ Identify quick wins and high-impact use cases
- ▶ Build your data foundation before scaling
- ▶ Start with Stage 1: Experiment with clear success metrics



THANK YOU!



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