



AI Revenue Optimization Strategies for B2B Distributors

Presented by Dan Cakora



Measured inflation at the BLS

Former Pricer at Grainger

**Built commercial excellence
and analytical products**

**Frequent writer about pricing
and the economy**



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How most companies select an AI strategy:

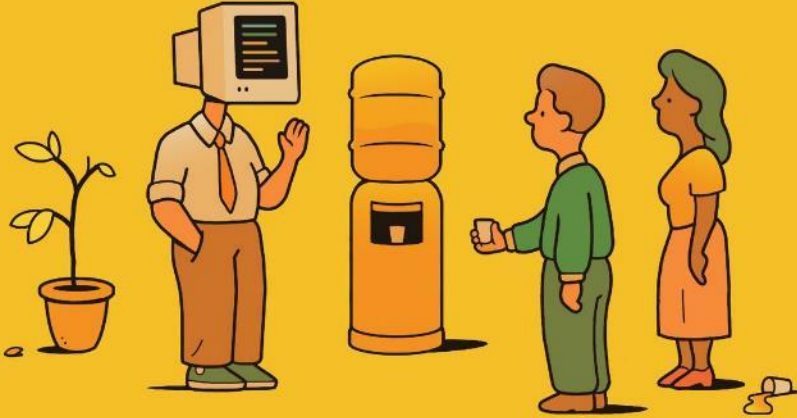


Agenda



- Who uses AI and what is it good at?
- Your AI Map: Choosing the Right Path
 - Purpose Gulch
 - Data Mountain
 - Lake People-N-Culture
- 9 Steps for Choosing the Right AI

Who is using AI?



Smart company

United States, companies using AI to produce goods and services, %

Have done/will do



Have done in the past two weeks, by number of employees

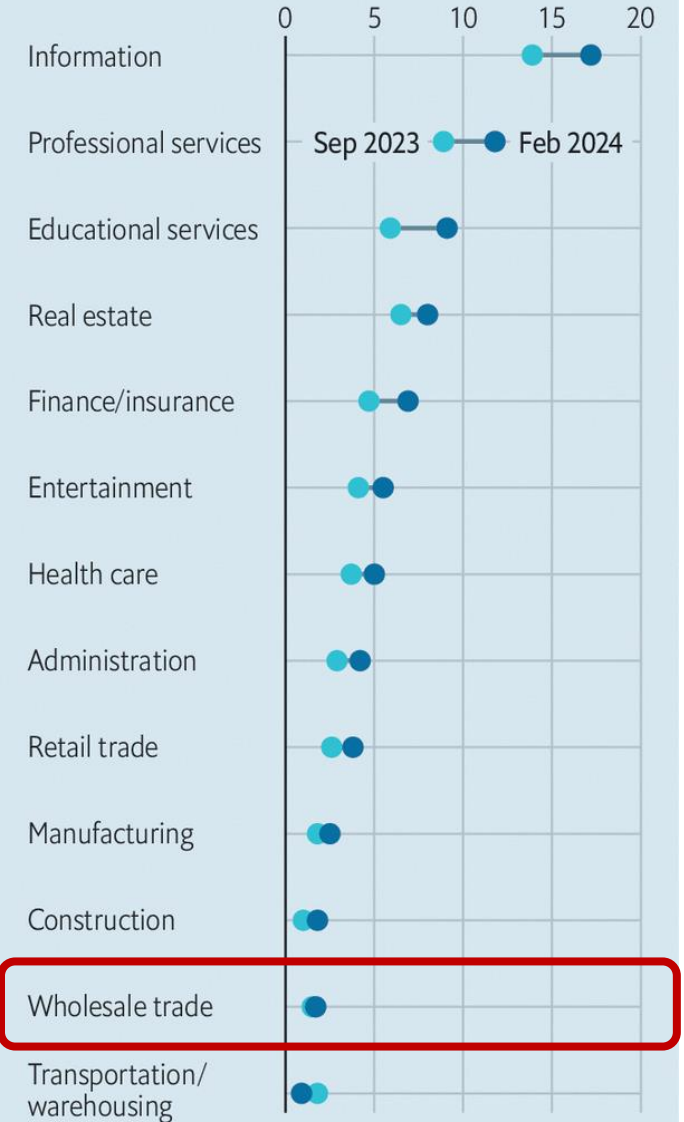


Source: Census Bureau

Smart sectors

United States, companies using AI to produce goods and services, %

Have done in the past two weeks, by sector



AI is good at many things, but not everything.

Working Paper 24-013

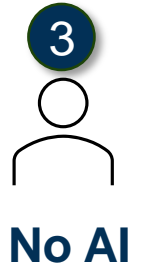
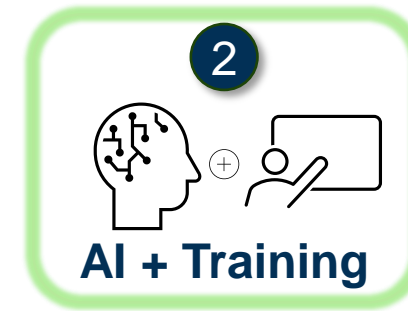
Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality

Fabrizio Dell'Acqua
Edward McFowland III
Ethan Mollick
Hila Lifshitz-Assaf
Katherine C. Kellogg

Saran Rajendran
Lisa Krayer
François Cadelon
Karim R. Lakhani



Harvard
Business
School



Abstract

The public release of Large Language Models (LLMs) has sparked tremendous interest in how humans will use Artificial Intelligence (AI) to accomplish a variety of tasks. In our study conducted with Boston Consulting Group, a global management consulting firm, we examine the performance implications of AI on realistic, complex, and knowledge-intensive tasks. The pre-registered experiment involved 758 consultants comprising about 7% of the individual contributor-level consultants at the company. After establishing a performance baseline on a similar task, subjects were randomly assigned to one of three conditions: no AI access, GPT-4 AI access, or GPT-4 AI access with a prompt engineering overview. We suggest that the capabilities of AI create a “jagged technological frontier” where some tasks are easily done by AI, while others, though seemingly similar in difficulty level, are outside the current capability of AI. For each one of a set of 18 realistic consulting

Who knows how to navigate the Jagged Technological Frontier?



Boldly Go Where [Your Vendor] Has Gone Before!

Vendors have Navigated the Jagged Technological Frontier

Select vendors based on:

- Solution for a specific problem
- Fluency in working with data and IT systems
- Assistance in change management

Data granularity makes analysis get big, fast.

Common distributor use case: Grouping like customers.

	Buyer Type	Size	Industry	Geography	Product Line	Channel
	2	3	4	3	10	3
	Contractor OEM	Big Medium Small	Industrial Construction Food & Bev. Agriculture	Urban Suburban Rural	Abrasives Electrical Fasteners Jan-San Lighting Lubricants Pumps Safety Tools Welding	Counter Phone Ecom
# of Groups	2	6	24	72	720	2,160

Utilizing AI: Choosing the Right Path

Purpose Gulch

What problem are you solving for?

- How will this drive behaviors and better outcomes?
- Narrow, specific objectives
- Can this be scaled / expanded for other purposes?
- Goal measurement

Lake People-N-Culture

Data Mountain

Your Destination:
Choosing-the-Right-
Technology Valley

Vendavo Simplifies Profit Optimization

Simple UX combined with AI that's Explainable and Effective





All models are wrong,
but some are useful.



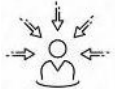




“

George Box, PhD

Former president of the *American Statistical Association*
and the *Institute of Mathematical Statistics*

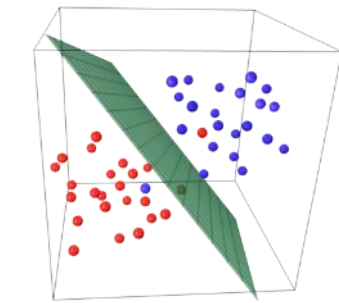
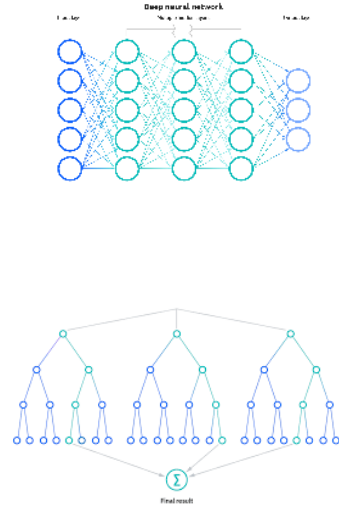
General structure of price optimization for B2B distributors.

Data

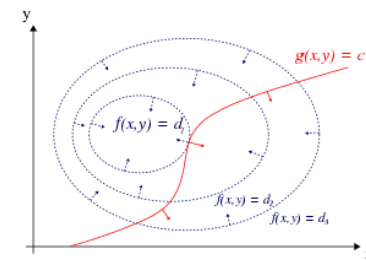
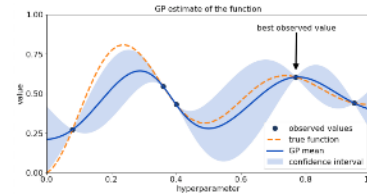
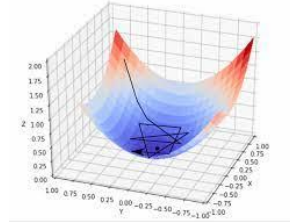
-  Sales/Transactions
-  Product Attributes
-  Customer Attributes
-  Competitor Prices
-  Win/Loss Conversion
-  Clicks
-  Visit Duration

Statistical Approach






Classification



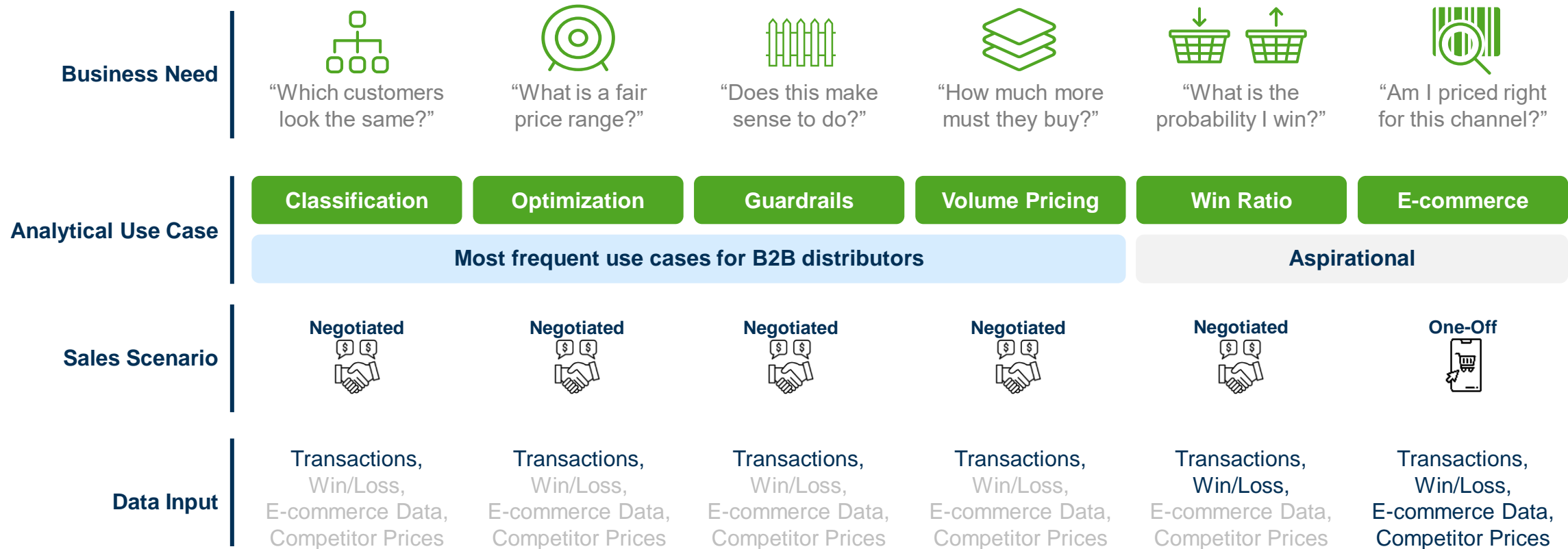
Optimization



Output: Unique Profit Optimizing Price

-  \$129
-  \$127
-  \$133
-  \$135
-  \$131

Vendavo's Pricing Optimization Landscape for Distributors

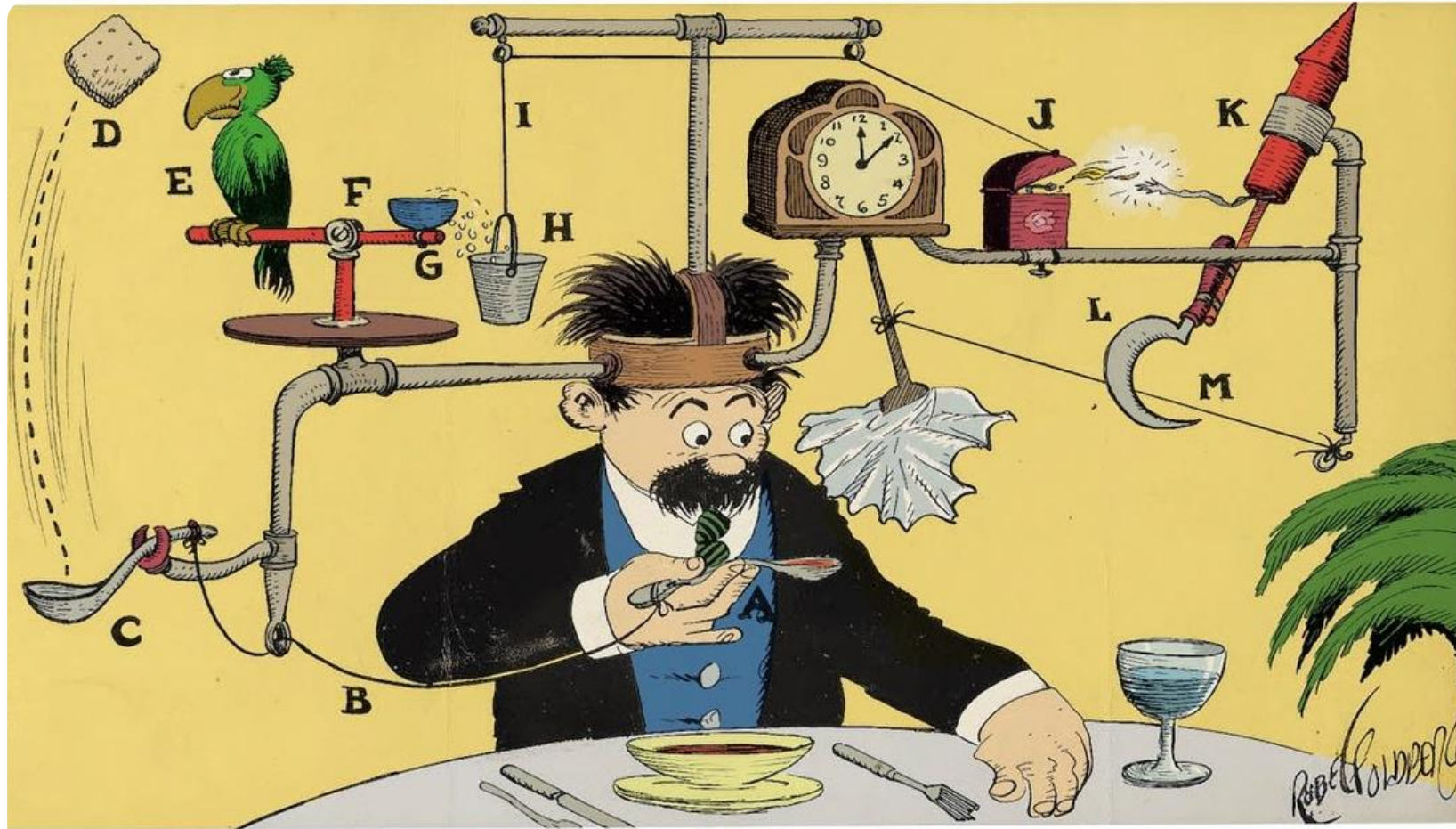


AI Must be **Explainable** to Ensure Success



- 1 User acceptance and adoption
- 2 It can improve the system
- 3 It helps assess fairness
- 4 Regulatory compliance calls for it

Solutions cannot be **too complex**, nor too simple



Rube Goldberg's *Self-Operating Napkin*

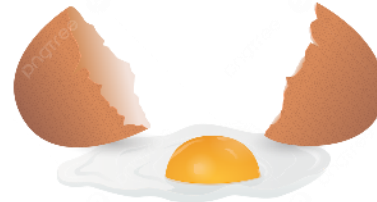
Solutions cannot be too complex, nor **too simple**

Simple! Just add water, mix, bake



Felt "too easy"; sold poorly

Bakers want to bake



Add a step:
Crack an Egg!

Users feel like a part of the process. Now we're baking!



Sales skyrocketed

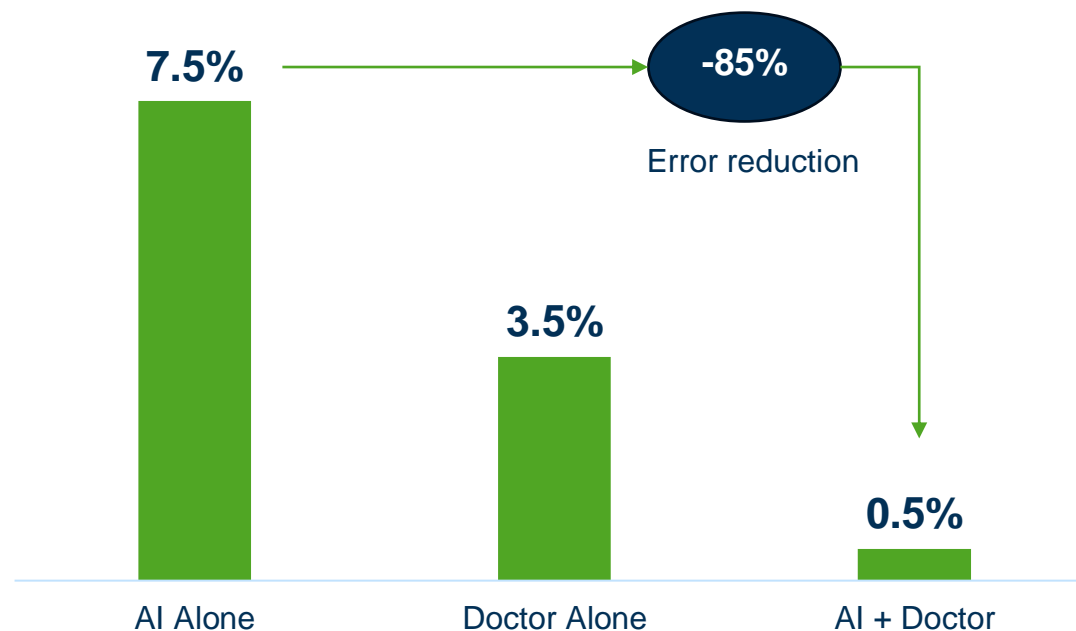
Best results come from cooperation of humans and AI

“Human labor adds distinctive value... [to increase adoption] focus on features or tasks that allow users to feel proud and involved.”

- Yalcin, G. & Puntoni, S. (2023). How AI Affects Our Sense of Self. Harvard Business Review. 101 (5)130-136



Error Rate
Detecting whether or not a cell contains cancer



Dayong Wang, Aditya Khosla, Rishab Gargeya, Humayun Irshad, Andrew H. Beck, “Deep Learning for Identifying Metastatic Breast Cancer,” June 18, 2016, <https://arxiv.org/pdf/1606.05718v1.pdf>.

Utilizing AI: Choosing the Right Path

Purpose Gulch

What problem are you solving for?

- How will this drive behaviors and better outcomes?
- Narrow, specific objectives
- Can this be scaled / expanded for other purposes?
- Goal measurement

Does the data support the goals?

- Data mechanisms are automated
- Limited manual touch
- Harmonized data models
- Effective monitoring
- Understand internal and external sources

Data Mountain

Lake People-N-Culture

Your Destination:
Choosing-the-Right-
Technology Valley

Get off the Bench: Avoid the “Perfect Data” Trap



Using data is the best way to clean it up

1

Start with a **pilot area**

- Work with a team that wants to move forward
- Focus on the big picture, not specific lines

2

Visualize the data and **share** results

- Quickly identify data issues or quick wins
- Vet the data with people who know what it should be

3

Describe data issues and **resource** accordingly

- Saying “data is wrong” is not detailed enough to fix
- IT can help, but only if they have bandwidth

4

The goal is “**good enough**”

- Reasonable people can make the right decision.
- If people are nitpicking due to small issues, then the data is good enough

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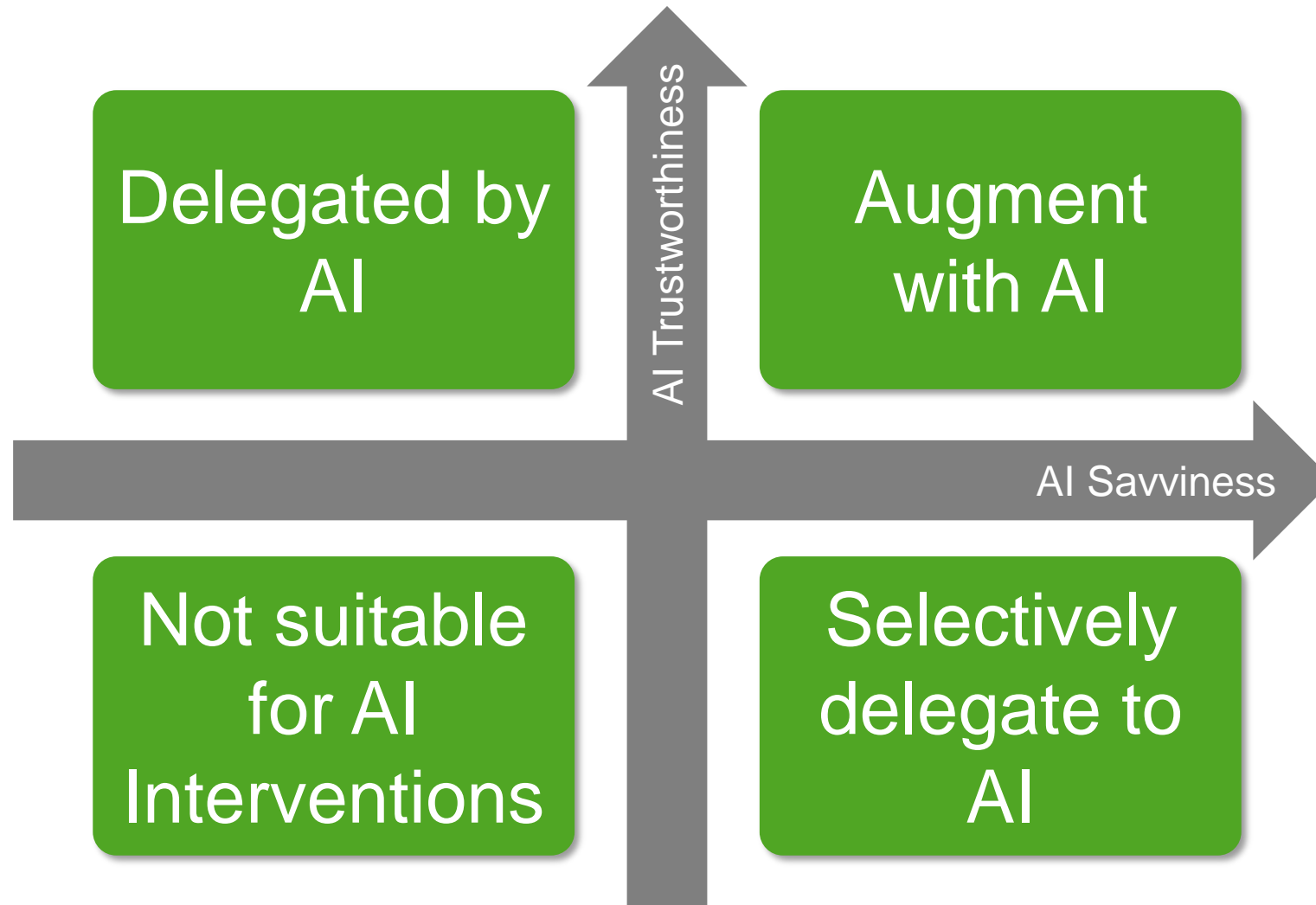
Lake People-N-Culture

Who needs what, when, and where?

- Resistance to change
- Acceptance of new technologies
- Explain-ability
- Trust hesitation
- Ability to interpret analysis

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Technology Valley

How you use AI depends on Savviness and Trustworthiness



Phasing Your AI Project for Success

Start Small

Focus on specific use case where data is available



Review and Adjust

Establish goals and KPIs. Evaluate regularly.



Verify, then Expand

Measure outcomes. Expand vertically and horizontally after wins.



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Nine Steps for Choosing the Right AI

- 1** “I Declare AI” is not a strategy.
- 2** It’s early days of AI adoption in B2B distribution. It’s hard to know what AI can and cannot do.
- 3** Partner with vendors that have solved specific problems.
- 4** Vendavo simplifies profit optimization with explainable, effective AI.
- 5** AI must be explainable to ensure adoption. It can’t be too simple or too complex.
- 6** Best results come from cooperation of humans and AI.
- 7** Don’t wait for perfect data. The goal is “good enough” data.
- 8** Assess your organization’s Tech Savviness and AI Trustworthiness.
- 9** Start Small; Review and Adjust; Verify and Expand.



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