



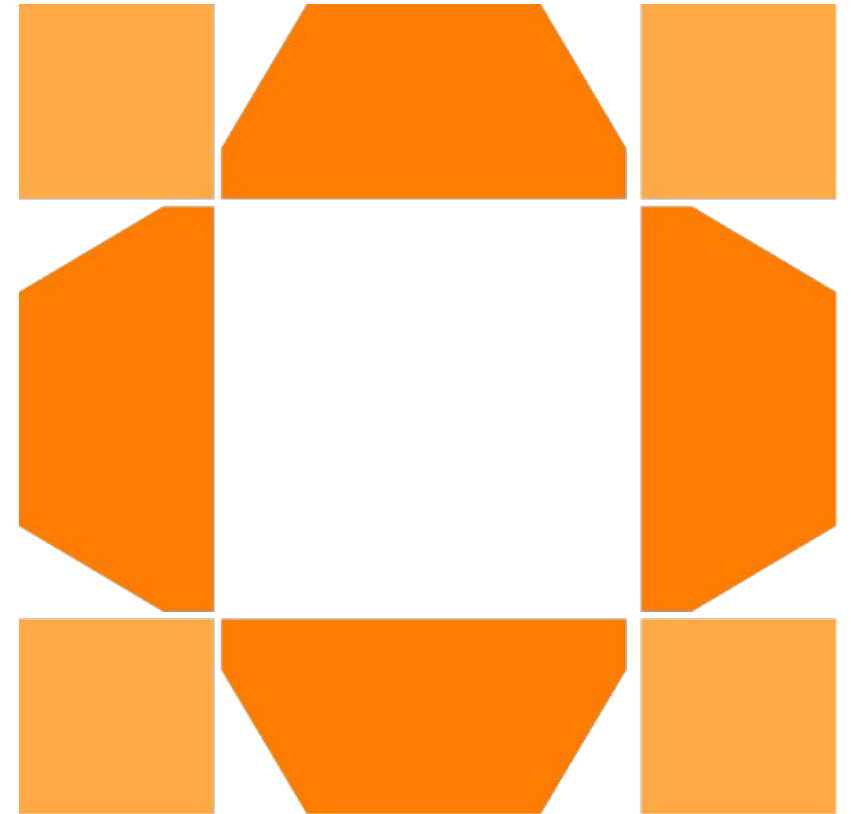
# AI & Machine Learning in Investment Management



ALKYMI

# What you'll hear today

- Introduction
- Hype and confusion
- LLM opportunities
- What is your north star
- Q&A



# Introduction

- Founded in 2017 in NYC
- Building the business system for unstructured data
- Backed by Intel Capital, Canaan, Work-Bench and SimCorp



# A few definitions first....



# AI Hype, speed of innovation = overwhelming

Home / Innovation / Artificial Intelligence

## This new technology could blow away GPT-4 and everything like it

The Hyena code is able to handle amounts of data that make GPT-style technology run out of memory and fail.

Bloomberg Professional Services —

Share in  

### Introducing BloombergGPT, Bloomberg's 50-billion parameter large language model, purpose-built from scratch for finance

March 30, 2023

*BloombergGPT outperforms similarly-sized open models on financial NLP tasks by significant margins – without sacrificing performance on general LLM benchmarks*

FORBES > INNOVATION > ENTERPRISE TECH

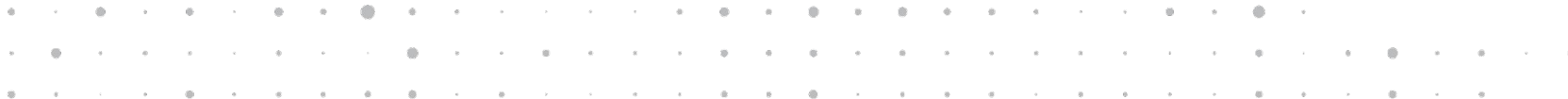
EDITORS' PICK

## Auto-GPT May Be The Strong AI Tool That Surpasses ChatGPT



**The question isn't “how do I use LLMs?”**

**The question is “what do I miss out on if I don't?”**

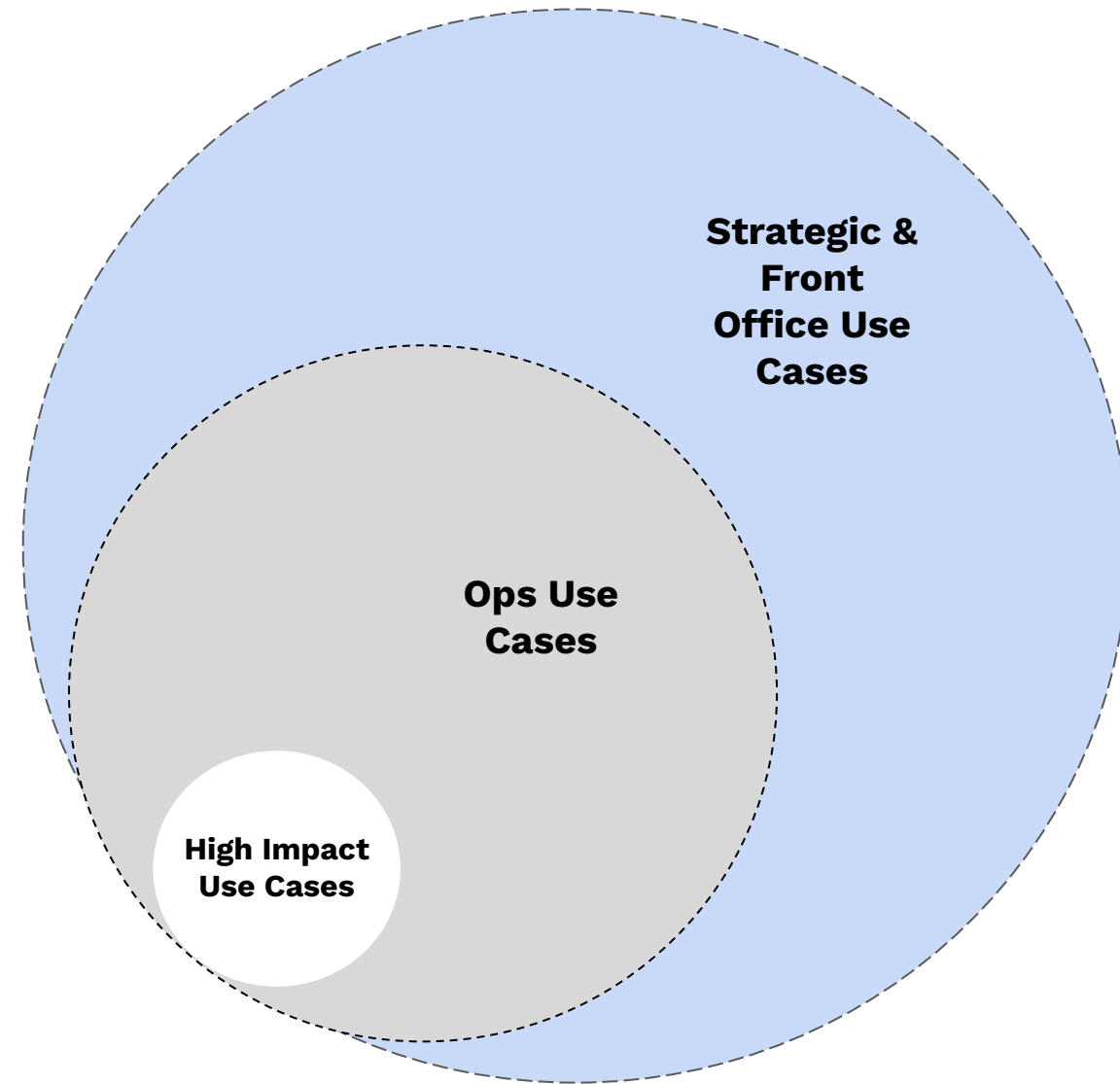


## Before GPT

Only some **data** workflows justified investment in automation.

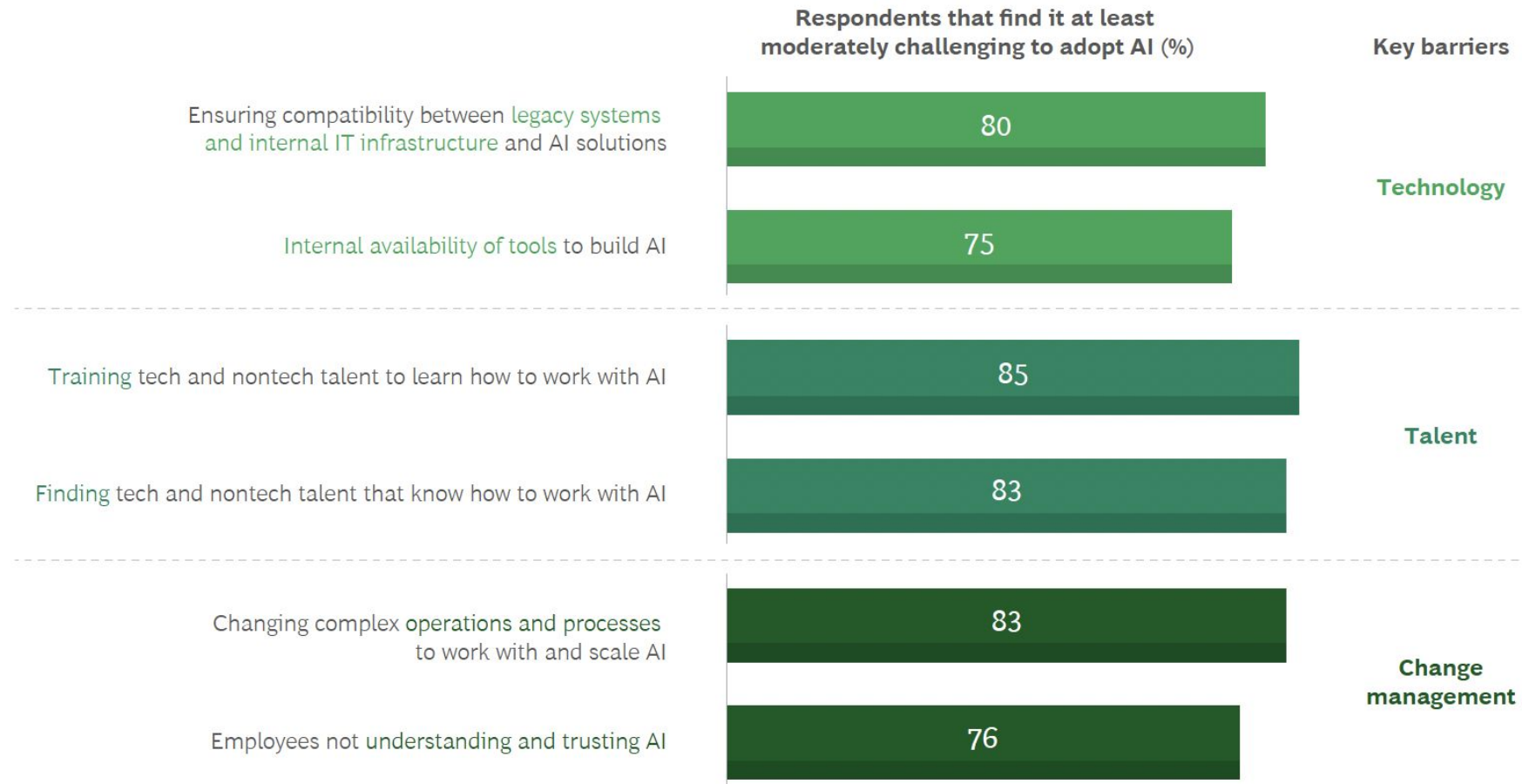
## Since GPT

LLMs unlock virtually 100% of all use cases and introduces a completely new set of applications.



# Key Challenges to Adoption

## Key Barriers That Incumbents Face when Adopting AI



Source: BCG and BCG Henderson Institute 2022 survey of 600 industry incumbents in six countries (China, France, Germany, India, UK, and US).





# Where are we? Experimental phase

## AI 2023 Readiness Report from Scale AI

- 72% of companies plan to increase their AI investments every year over the next three years
- 59% of those companies view AI as critical to their business next year, while 69% believe it'll be critical in next three years

Survey: 1,699 respondents in North America who label themselves as 'ML practitioners' (e.g., ML engineers, data scientists, development operations, etc.) as well as leaders involved with AI in their companies. 24% of respondents work in financial services / insurance.  
Full survey: <https://go.scale.com/hubfs/Scale-Zeitgeist-AI-Readiness-Report-2023.pdf>



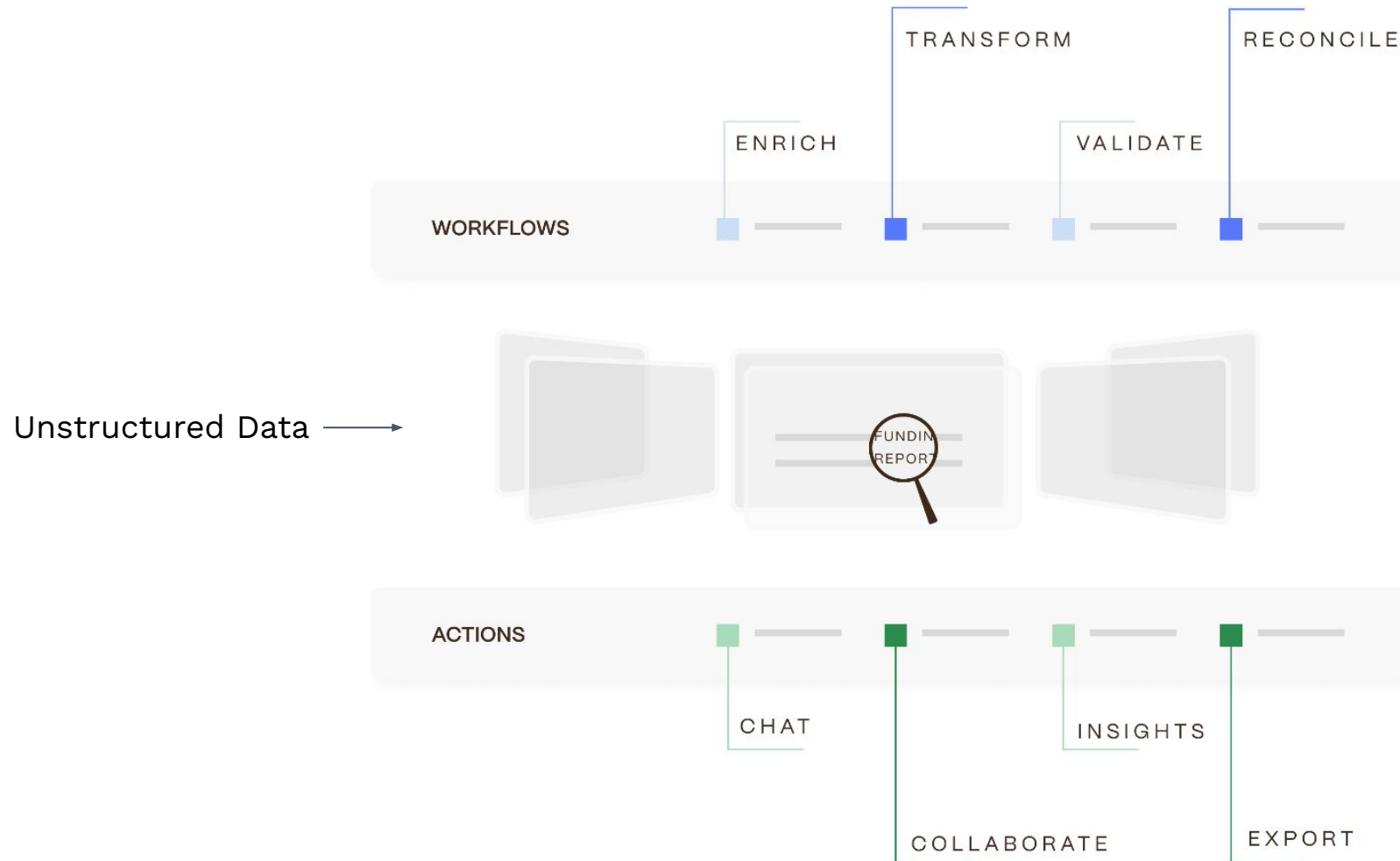
“Companies that use specialized or proprietary data to fine-tune applications can achieve a significant competitive advantage over those that don’t.”

McKinsey  
& Company

*Exploring opportunities in the  
generative AI value chain*

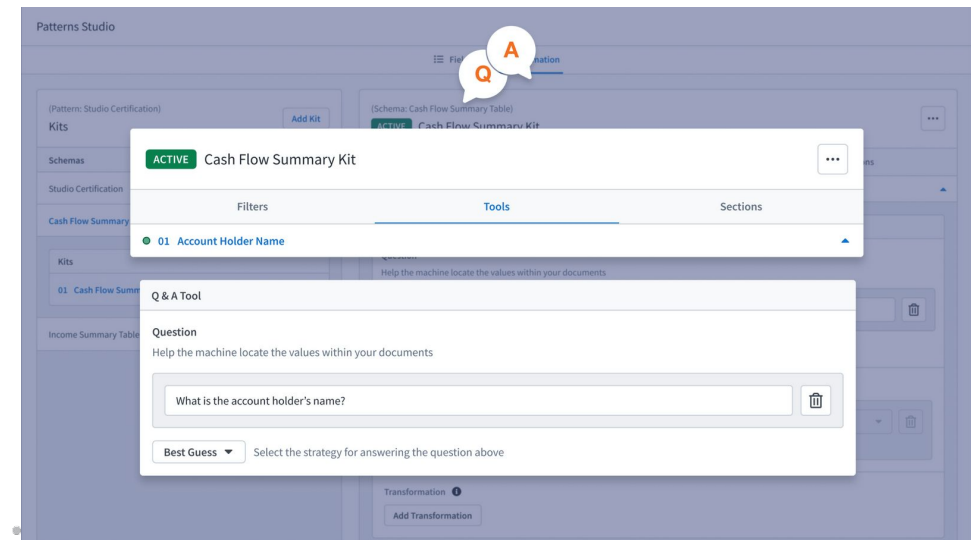


# The Big Picture: LLMs at the Heart



# How do LLM-powered tools change the game?

- Ask a natural language question, and get an answer
- Summarize documents on demand, in any language
- Quickly identify all People, Places, Organizations & more
- On-demand reporting and data enrichment



# Opportunity: Transforming Operations

Machine Learning Automates Investment Operations

The screenshot displays a document viewer interface for a PDF document titled "Quest Sun Rise Partners XII\_L LP Capital Call Notice\_04\_23\_2019\_Redacted (5).pdf". The document is on page 6 of 7. The main content area shows the following text:

**Open Equity People (2017) Onshore Domestic Sales Blocker Ltd**  
**April 10, 2019**  
**9th Capital Call**  
**Page 6**

Your portion of the capital call is provided in the summary below.

Open Equity People (2017) Onshore Domestic Sales Blocker	
Capital Call Detail	Amount Due on
(In U.S. Dollars)	April 23, 2019
ABC III Holdings, LLC	\$148,169.65
HvC Chlorine Management II LLC	\$198,469.80
Single Pear Wind, LLC	\$437,813.62
PearLabsHub VIII, LLC	\$30,731.30
Labrador Connect, LLC	\$28,989.70
Rocks&Gems Resources, LLC	\$6,348.52
Volcano Dive Exploration Ltd.	\$3,524.47
Explosion Prevention & Cleanup, LLC	\$186,070.05

Below the table, there is a "Portfolio Company Transactions" section with a table:

	Company Name	Category	Grouping	Transaction Type	Local Amount
1	ABC III Holdings, LLC	Call	Investment	Investment	\$148,169.65
2	HvC Chlorine Managem...	Call	Investment	Investment	\$198,469.80

The interface also includes a sidebar with navigation options (Dashboard, Data Inbox, Records, Patterns, Add Pattern, Downloads, Settings) and a right-hand panel with metadata (Fund, Currency, Legal Entity, Net Amount, As-of Date, Transaction Date) and record counts (14 records).



# Opportunity: Transforming Front Office

## Machine Learning Offers New Insights, Accelerates Decisions

The image shows a document viewer interface for a research report on Hermès. The document is titled "Hermès" and is dated "23 October 2020". It is categorized as "Branded Goods" and "Analyst Meeting". The price is listed as € 800.40, and the target price is € 650.00 (from € 610.00). The rating is "Neutral".

The main text discusses the company's performance in 3Q20, noting that the top line returned to growth in 3Q20, driven by retail. It mentions that the Asia Pacific region was the fastest-growing region in 3Q20, at +29% at constant currency, above expectations of +20%. The Americas region declined by 5% at constant currency, heavily impacted by the closure of stores in Hawaii.

The chat window on the right contains the following questions and answers:

- Question: "What is the fastest growing region for this company this quarter?"  
Answer: "Asia Pacific was the fastest-growing region in 3Q, at +29% at constant currency, beating expectations of +20%."
- Question: "What is the earnings per share projection?"  
Answer: "EPS projections have been lifted by 4% both for this year and next year, mainly as the result of the higher top line."
- Question: "Where was the weakest growth?"  
Answer: "The Americas was the only soft spot internationally as sales in the region declined by 5% at constant currency. This was heavily impacted by the closure of the stores in Hawaii."

The document also includes a table with financial data for 2019, 2020E, 2021E, and 2022E:

	2019	2020E	2021E	2022E
EPS Adj (€)	14.57	10.12	14.21	16.58
DPS (€)	4.55	3.60	5.00	5.80
BVPS (€)	63.11	67.81	77.07	87.92
EV/Ebitda(x)	21.2	37.0	29.7	25.7
P/E adj (x)	41.4	78.7	56.0	48.0
Div. Yield(%)	0.7%	0.4%	0.6%	0.7%
OpFCF Yield(%)	2.7%	1.1%	2.2%	2.3%

Market Data:

Market Cap (€m)	84,171
Shares Out (m)	105

# Value Map: AI/ML Use Cases in Wealth Management

Use Cases	Example Data Sets		
Client Onboarding	Brokerage Statements	Onboarding Questionnaires	KYC and Identify Verification
	Signatures / Stamps / Seals	Asset Transfers	and more...
Alternatives and Private Market Data	Allocation, Sector & Exposure	Capital Calls & Distributions	K1 Reports
	NAV / Estimated Nav	Portfolio Summaries	Performance Estimates
	Monthly & Quarterly Reports	Exposure Report	and more...
Investment Performance Reporting	Global Reporting Initiatives	Data & Information Security	Climate & Risk Emissions
	Board Materials	EDGAR (N-PX, 13-F)	and more...
ESG Data Sourcing	Annual Sustainability Reports	Press Releases	Risk management Assessments
	Regulatory Filings	ESG Metrics and targets	Corporate Governance Guidelines



“Incumbents adopting AI should seek a transformer that provides three critical ingredients: tech, talent, and change management.”



*What's missing from your AI transformation is a transformer*





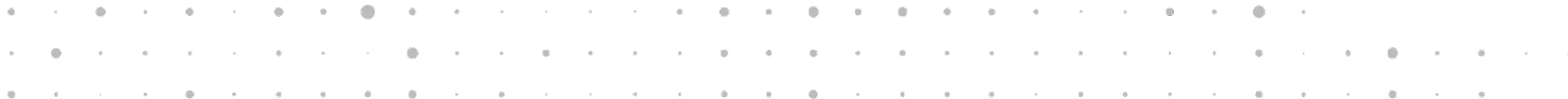
# When can I use LLMs in my business?

## Challenges

- lack of internal expertise
- data security and governance
- rapid technology iteration

## Catalysts

- fast-follower advantages
- develop technology partnerships
- talent retention and satisfaction



# Navigating security with LLMs

## Myth

- If I use a LLM, my IP will be public information
- OpenAI will own my proprietary information
- My prompts are visible to everyone

## Reality

- Open source tools like ChatGPT can store and learn from user input
- Companies using LLM models via API or their own self-hosted/created LLMs can offer more security, ensure customer data isn't shared externally



“To foster meaningful relationships with transformers, incumbents need to change their approach to risk and experimentation.”



*What's missing from your AI transformation is a transformer*





**Thank you**

Harald Collet, CEO of Alkymi

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