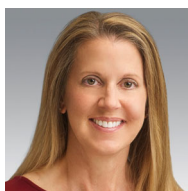
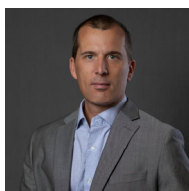


# Harnessing AI: Risks, Engagement, and Opportunity



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## Agenda & Key Learning Objectives

- What is Artificial Intelligence (AI) and what isn't
- AI governance and why you need it
- Practical uses of AI in public sector retirement plans and with participants
- AI trends in the retirement planning industry



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# Artificial Intelligence

## What is AI?

Any computing system designed to perform tasks that normally require human intelligence.

**In general, how does AI work?** These systems ingest large amounts of (training) data, analyze it for patterns (via a neural network), then use these patterns to make predictions (via statistical models).



3

# These Technologies Are All Artificial Intelligence

| Machine Learning   | “Deep Learning”   | Natural Language Processing                                     | Generative AI  |
|--|---|---|--|
| Algorithms trained to detect patterns and make predictions (e.g., Netflix recommendations) | A type of ML that uses neural networks to learn from vast amounts of data for more complex applications (e.g., self-driving cars) | Helps computers understand human language (e.g., Email filters) | Large language model (LLM) based applications that create new text, images, video, and audio. This is the “AI” that is garnering all the attention |

A key fact for you to understand: these systems are generating output based on statistical model-based predictions; there is no actual ‘computer intelligence’ involved.

4

## How Does AI Feel?

|   |   |  |
|---|---|--|
| <p>“It’s like collaborating with an alien.”</p> | <p>“What used to take me around a half-hour to write now takes one minute.”</p> | <p>“It’s enormous fun.”</p>                  |
| <p>“It feels like I’ve hired an intern.”</p>    |   | <p>“Everything is becoming much easier.”</p> |




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5

## Artificial Intelligence Myth Busting

|  |                 |  |  |   |
|--|-----------------|--|--|---|
| <b>NOT</b>   | <b>NOT</b>      | <b>NOT</b>   | <b>NOT</b>   | <b>NOT</b>  |
| <b>Sentient</b>  | <b>Robotics</b> | <i>The problem-solving tool</i>  | <b>Interpretive</b>  | <i>The decision-making tool</i>   |
| <p>Generative AI is not self-aware. It is not Artificial <i>General</i> Intelligence (AGI)</p> |                 | <p>You (the human) still have to know how to formulate a problem to get good results</p> | <p>GenAI cannot use common sense or understand nuances like humans can</p> | <p>You (the human) still have to apply critical thinking to the output.</p> <p>Ask: Does this make sense?</p> |



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6

# Some Generative AI Tools

The image displays a comprehensive grid of logos for various generative AI tools and services. The logos are organized into several main categories:

- INFRASTRUCTURE:** Includes logos for providers like AWS, Azure, Google Cloud, and OpenAI.
- ANALYTICS:** Lists tools such as Tableau, Power BI, and Qlik.
- MACHINE LEARNING & ARTIFICIAL INTELLIGENCE:** Features logos for platforms like IBM Watson, Microsoft Azure ML, and Amazon SageMaker.
- APPLICATIONS - ENTERPRISE:** Shows logos for solutions like SAP, Oracle, and Salesforce.
- APPLICATIONS - HORIZONTAL:** Includes logos for productivity and collaboration tools like Microsoft Office 365, Google Workspace, and Slack.
- APPLICATIONS - INDUSTRY:** Displays logos for specialized AI applications in sectors like healthcare, finance, and manufacturing.

7

7

# AI Risks

**Salesforce and YouGov survey of 14,000 employees around the world revealed:**

**55%**

Have used unapproved generative AI tools at work

**64%**

Have passed off generative AI work as their own

**69%**

Have never received training on how to use generative AI safely and ethically at work

**It's about governing the use of AI and enforcing that governance**

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8

### AI Governance includes:

- Avoiding and correcting misinformation
- Removing embedded bias and preventing the insertion of new bias
- Protecting privacy
- Implementing and monitoring security controls
- Complying with intellectual property laws
- Prevent shadow IT
- Review and identify ethical considerations
- Spot emerging legal issues
- Complying with regulations
- Avoiding bad optics (PR)



**Avoid Hallucinations!**

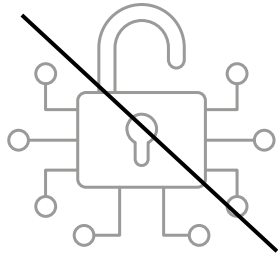


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Segal

### Biggest AI Risk

AI may lull people and organizations into the false sense of security that they don't have to use their critical thinking skills.

**Do dumb things . . .**



**Faster (with AI)**

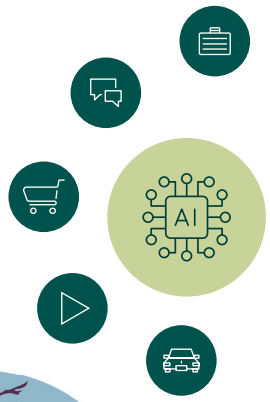
Leading them to . . .



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# Leveraging AI for Enhanced Participant Engagement and Retirement Outcomes

AI exists in all facets of our daily life...



...and at Fidelity, we've been harnessing AI to improve the customer and associate experience

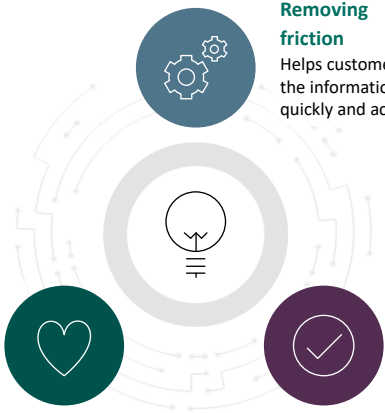


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# Leveraging AI for Enhanced Participant Engagement and Retirement Outcomes

At Fidelity, we are pursuing the use of AI and machine learning in three ways:

**Understanding customers**  
Anticipating customer needs to improve personalization



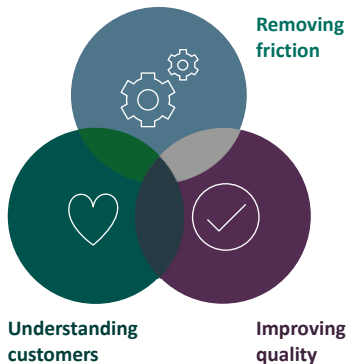
**Removing friction**  
Helps customers access the information they need quickly and accurately

**Improving quality**  
Driving higher operational quality and reducing errors with predictive quality control



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## Leveraging AI for Enhanced Participant Engagement and Retirement Outcomes



- **Friction**
  - Using AI in phone systems to understand caller intent and route the call to the right Fidelity representative.
  - Bringing insights and data to phone representatives for faster and more needs-specific service.
- **Understanding Customers**
  - Optimizing call transcriptions to gather insights, sentiment and patterns to help ensure higher quality service.
  - AI powered Learning Agenda with our Seminar Recommendation Wizard to help our Communications Consultants deliver personalized education
- **Quality**
  - Automating document processing to rapidly produce a decision, speeding up processing times.
  - Improving quality assurance automation in outbound regulatory communications.

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13

13

## Power of AI in Investing for Retirement

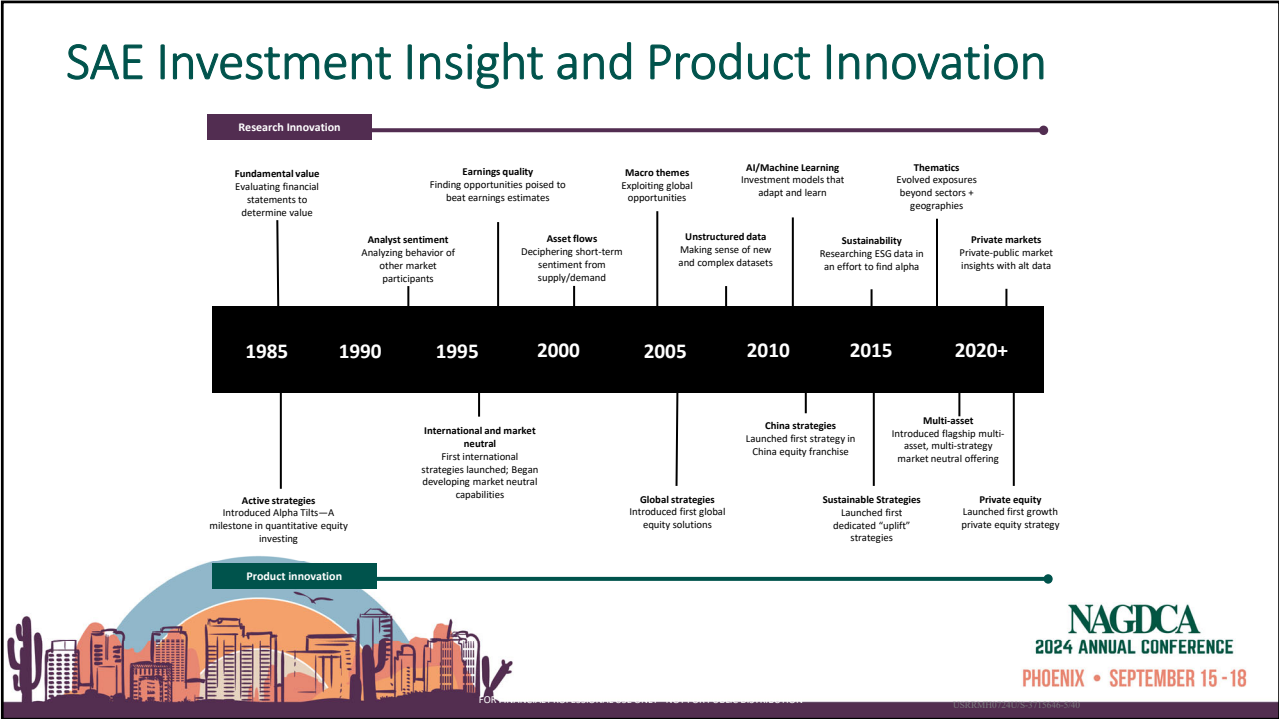
- Evolution of data / technology within investing and lessons learned – “how to approach the space”
- Examination of how AI, data science, and NLP are reshaping investment strategies. – “what are we doing to deliver alpha”
- With the advent of ChatGPT, is this now becoming the standard in the market – “human intuition matters and drives the process” compare SAE to GPT
- Discussion on the future state of the industry / role of PMs – “evolution of delivering outcomes”



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14



15



16



## Big Data: New Tools of the Trade

### COMPANY FUNDAMENTALS

#### Real-time activity tracking

Tracking B2B activity through trucks



Observe evolving transportation in real-time for a better understanding of company fundamentals and industry trends.

### MARKET SENTIMENT

#### Natural language processing

Conference call sentiment

«p>»</p></div>

Text mine over 5,000 earnings call transcripts every quarter for a real-time read on company sentiment.

### MACRO THEMES

#### Regime identification

Market Regime Similarity

Use advanced modeling techniques to identify similar past periods based on macro variables and state of the economic environment to predict industry returns.

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17

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17

## Using AI to navigate changing markets

### 1. HUMAN

Expert portfolio manager insight underlies each step, from identifying themes to expressing insights

### 2. MACHINE

Large language models (LLMs) enable a systematic approach to building equity baskets that is fast and flexible

### 3. DATA

Process leverages vast unstructured datasets in seeking to uncover differentiated insights

## Thematic Robot

- Defines the theme/scenario
- Ability to add seed companies
- Can correct LLM logic and iterate on the output before implementing

- Identifies exposed business models at a granular level
- Brings speed and scale to constructing baskets while providing full transparency

- Conference call transcripts and other data sources provide deeper insight on how companies are impacted by themes

For illustrative purposes only. Source: BlackRock, as of 06/30/2024.  
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18

9

### HUMAN

Portfolio manager influences entire process, from customizing scenario to expressing insights in portfolios.

**Prompt the Robot**

```
params = {'situation': 'the release of a drug that suppresses
appetites and induces substantial weight loss',
'start_date': '2021-02-01',
'end_date': '2023-01-01', # OOS date
'universe': 'global-equities',
'temperature': 0, indicating that the output should be highly
deterministic
'seed_companies_long': 'STOCK A', 'STOCK B'}
```

Portfolio manager uses simple language to describe the GLP-1 theme and parameters for the analysis.

The option to add seed companies allows portfolio managers to include names with known exposure - in this case, GLP-1 manufacturers.

### DATA

Alt data + LLM with a detailed view of how companies are being impacted by market dynamics in real-time.

**Conference call text analysis**

The output shows that the LLM suggested shorting the bariatric surgery company highlighted in the news article on slide 2.

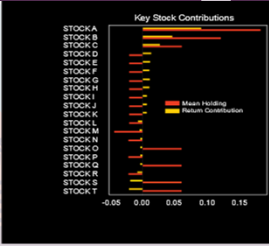
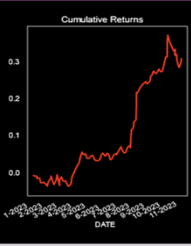
**Why? Conference call analysis picked up the below excerpt:**


"Within one of our target procedure areas, bariatric surgery, our **growth rate in the US slowed** during the quarter. Some **customers have indicated that they are seeing increased patient interest in weight loss drugs**. It is too early to conclude if the slowing growth is a temporary pause as patients evaluate these new drug therapies or if it is a trend that continues."

**LLM's rationale:** The company's growth rate in bariatric surgery slowed due to increased patient interest in weight loss drugs.

### MACHINE


Beyond key winners of a theme, the LLM uncovers business models with even the most subtle exposure.



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## Questions?

1. In the conference app, select this session from the schedule.
2. Select "External QA/Survey."
3. Type your question and tap send.

CONTINUING EDUCATION CODE:



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# Questions

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