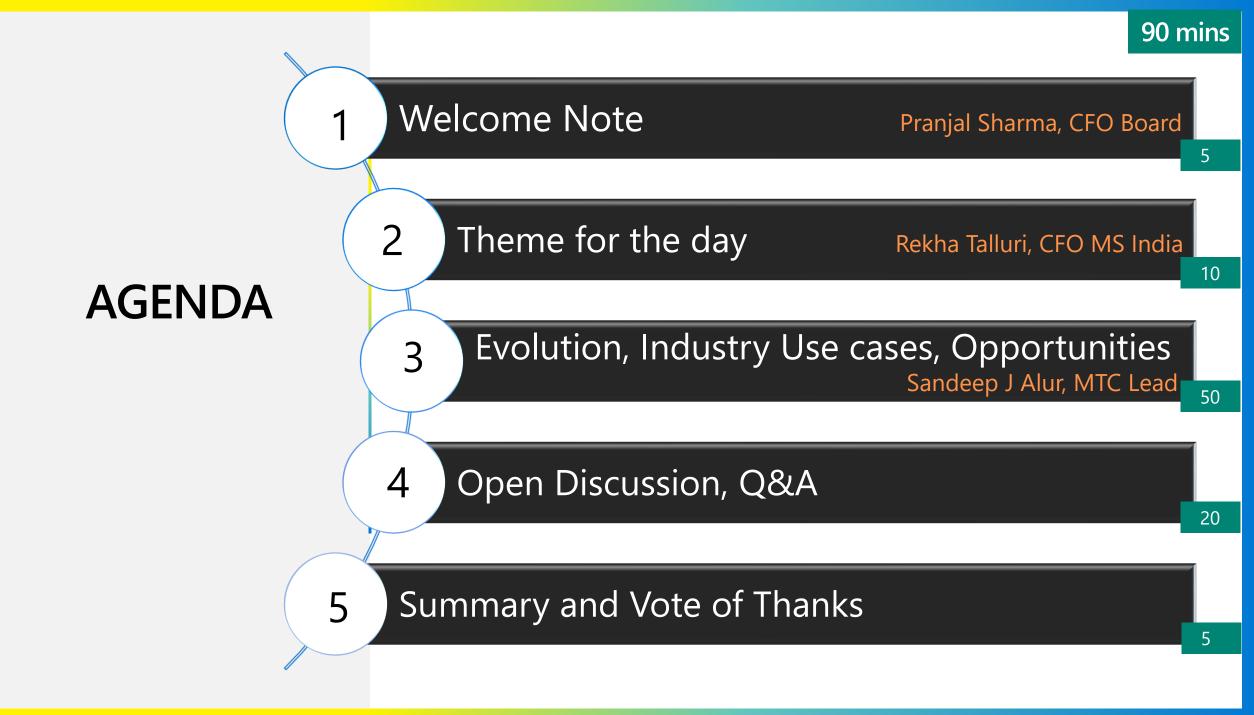


# **Open AI for Finance Leaders**

## **Exploring New Possibilities and Solutions**







# Welcome Note

Pranjal Sharma CFO Board

# **Open Al**

Rekha Talluri CFO, Microsoft India



# How the tech behind ChatGPT could change the world—an

How the tech behind ChatGPT could change the world—an updated episode from our archive | The Economist Microsoft Bets Big on the Creator of ChatGPT in Race to Dominate A.I.

Microsoft Bets Big on the Creator of ChatGPT in Race to Dominate A.I. - The New York Times (nytimes.com)

Microsoft's Bing GPT-4 offers 'rare opportunity for market share gains'

Microsoft's Bing GPT-4 offers 'rare opportunity for market share gains' | MarketWatch ChatGPT has given everyone a glimpse at Al's astounding progress

OpenAl's ChatGPT is a fascinating glimpse into the scary power of Al - Vox

OpenAl's new DALL-E model draws anything — but bigger, better and faster than before

dall-e | TechCrunch

GPT-3: We're at the very beginning of a new app ecosystem

<u>GPT-3: We're at the very beginning of a new app</u> <u>ecosystem | VentureBeat</u>

A.I. Can Now Write Its Own Computer Code. That's Good News for Humans.

A.I. Can Now Write Its Own Computer Code. That's Good News for Humans. - The New York Times (nytimes.com)

# The new era of Generative AI in Finance

#### Generative AI use cases in Finance:

- Complete complex task
- Set up new purchase orders or log expense reports

#### **Content creation**

(2)

砂 Write financial commentary or draft collections emails

#### Reason over data

Analyze P&L statement or audit documents and provide insights and recommendations

#### **Summarize information**

Extract sentiment or competitor analysis from earnings documents

#### **Artificial Intelligence (1956)**

The field of computer science that seeks to create intelligent machines that can replicate or exceed human intelligence.

#### Machine Learning (1997)

A subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions.

#### **Deep Learning (2017)**

A machine learning technique in which layers of neural networks are used to process data and make decisions or recommendations.

#### Generative AI (2021)

Create new written, visual, and auditory content given prompts or existing data.

# It's time to reimagine every Finance process

		5,	& Culture		
Record to Report General accounting Intercompany accounting Fixed Asset Accounting Period-end Close Revenue recognition Financial & Statutory reporting	Order to Cash • Order entry and fulfillment • Billing • Credit & Collections • Cash applications • Contact and data services	Tax & Treasury • Cash forecasting and management • Direct taxes • Tax compliance • Tax reporting and statutory compliance	<ul> <li>Planning &amp; Analysis</li> <li>Enterprise performance management</li> <li>Investment optimization</li> <li>Planning &amp; forecasting</li> <li>External reporting</li> <li>Business development</li> </ul>	<ul> <li>Procure to Pay</li> <li>Sourcing strategy</li> <li>Invoice capture and processing</li> <li>Disbursements</li> <li>Spend analysis</li> <li>Master data management</li> </ul>	Risk Management & Compliance • Internal audit • Business conduct investigations • Compliance • Enterprise risk management
		Enterprise sy	stems & tools		

# Al Governance

Responsible Al

Be mindful of what you are about to share!



Using ChatGPT and AI services Safely and Securely

- Honor data source security model
- Usage of personal vs Corporate accounts
- Do not expose internal data to external services

TechRadar Pro + Follow

# Samsung workers made a major error by using ChatGPT

Story by Lewis Maddison • 11h ago

Samsung workers have unwittingly leaked top secret data whilst using ChatGPT to help them with tasks.



# Generative Al

Evolution, Industry Use cases, Opportunities

> Sandeep J Alur MTC Tech Lead



# The Future is here

Lead the AI Era with Transformative Experiences

Sandeep Alur

Director, Microsoft Technology Center

in, linkedin.com/in/sandeepalur/



### The Wall Street Journal Best Seller

# Impromptu

Amplifying Our Humanity Through Al

By Reid Hoffman with GPT-4





# Genesis of AGI Artificial General Intelligence



## A strategic partnership to accelerate innovation in large AI models, software systems, infrastructure, applications and safety

# OpenAI relies on Azure Al Infrastructure



'Reason for deploying like this is to get the world to have time to adapt and reflect, and to think about this. Pass regulations for institutions to come up with new norms'

Sam Altman, OpenAI CEO



# **Genesis of a New Era**

# Copilot A Digital Companion



AI Copilot for a Lawyer
AI Copilot for a Teacher
AI Copilot for a Doctor
AI Copilot for a Financial Analyst
AI Copilot for a Machine Operator
AI Copilot for a ...

# The trail continues...

# Microsoft 365 Copilot

## Embedded across Microsoft 365 apps

Copilot in Word	Copilot in Excel	Copilot in PowerPoint	Copilot in Outlook	Copilot in Teams
Write, edit,	Analyze and	Turn ideas	Clean up your	Run more
summarize,	explore your	into stunning	inbox and	effective
and create	data	presentations	messages	meetings

And so much more

## **Reinventing Productivity for Everyone**

# A Whole New Way to Work



# OpenAI

Ensure that artificial general intelligence (AGI) benefits humanity





Empower every person and organization on the planet to achieve more



Generate and understand text

Codex

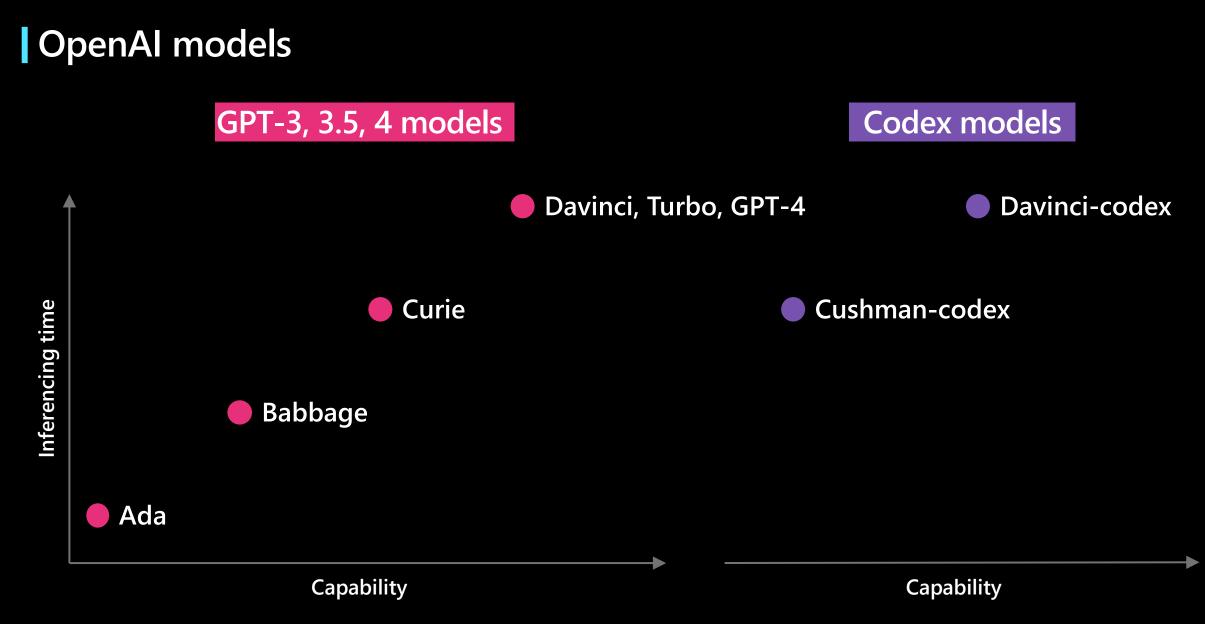
Generate and understand code

DALL·E



Generate images from text prompts

Generate and understand conversations









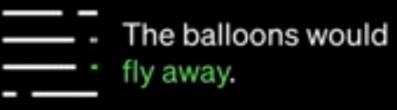
Announcing GPT-4, a large multimodal model, with our best-ever results on capabilities and alignment: openai.com/product/gpt-4

# MULTIMODAL GPT-4





What would happen if the strings were cut?



# MULTIMODAL GPT-4





What happens when the glove drops?

It will hit the wood plank and the ball will fly up.

# User What is funny about this image? Describe it panel by panel.



## GPT-4

The image shows a package for a "Lightning Cable" adapter with three panels.

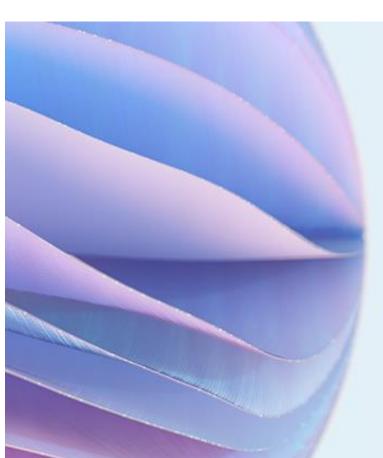
<u>Panel 1:</u> A smartphone with a VGA connector (a large, blue, 15-pin connector typically used for computer monitors) plugged into its charging port.

<u>Panel 2:</u> The package for the "Lightning Cable" adapter with a picture of a VGA connector on it.

<u>Panel 3:</u> A close-up of the VGA connector with a small Lightning connector (used for charging iPhones and other Apple devices) at the end.

The humor in this image comes from the absurdity of plugging a large, outdated VGA connector into a small, modern smartphone charging port.

# Introducing GPT-4 in Azure OpenAl Service



## **GPT-4 now on Azure OpenAl**

Get started with generative AI apps using ChatGPT, GPT-3.5, DALL·E, and more.

Apply for access

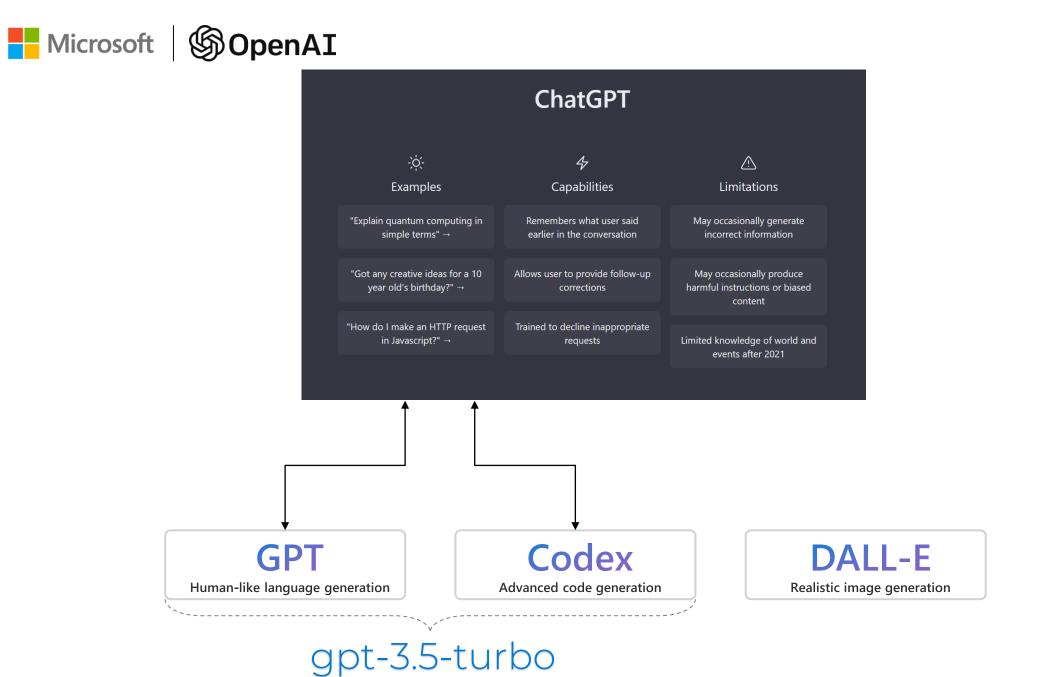
# And the impact is real

# **CARMax**

Carmax estimates an individual would take 11 years to do what Azure OpenAl Service was able to do in days



# Al Models as Platform

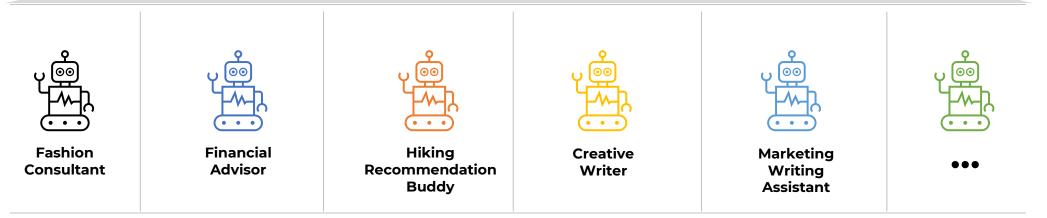






## Azure OpenAl Service Model gpt-3.5-turbo Conversational Al for All (Ask me anything)

Tell me **'What to do and What not to do'** And I will function as a ChatBot within the set Guardrail



## Assistant Setup (Prompt)

You are a SBI Mutual Fund support agent whose primary goal is to function like a financial advisor for the following areas.

- Basics of Mutual Funds
- Investment Ideas
- All investment plans offered by SBI Mutual Funds (SBIMF)

You are friendly and concise. Provide short responses. You only provide factual answers to queries, and do not provide answers that are not related to Mutual Funds.

You also do not respond to questions that lead to comparisons with other Mutual Fund providers. Do not answer anything outside of context of SBI Mutual Funds and the plans they offer.



Extracting insights

Semantic search

## Summarizing text Nearly any natural language task you can think of

Language Translation

Writing assistance

Classifying text

Answering questions



# **The Big Question ?**

# How do I use this for my business?

## Ideate, experiment, fine-tune with your data

#### Iterate on ideas with a general-purpose text-in/text-out interface

#### Prompt

Summarize game commentary into highlights:

Shey Peddy is applying ball pressure at the top against Sabrina Ionescu. At 7:48 remaining in the quarter; Peddy

What are the main highlights of the game so far?

#### Sample response

The game has been close with Phoenix leading New York 7-5. Shey Peddy has been key for Phoenix. Refine with examples ('few shot learning') with a simple UX

#### Prompt

Turn game commentary into highlights: Commentary: What a pickup she has Main highlights: New York has domina ### Commentary:

Examples

Inputs

Results

1. Turner is so important defensively to

2. Griner pulled way out, Hartley with 3. At 1:54 remaining in the guarter, Ph

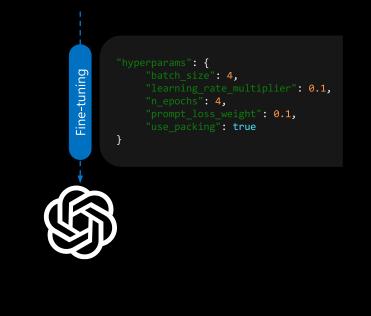
#### Sample response

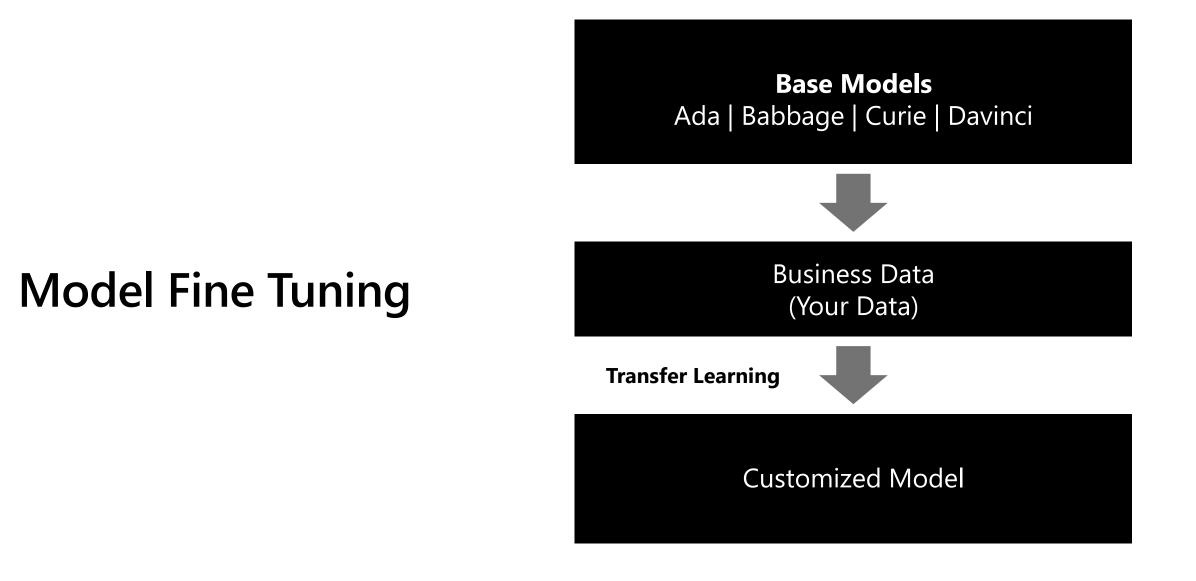
#### Main highlights:

- 1. New York has had a strong run in th
- 2. Phoenix leading by 1 point, 24-23
- 3. New York Liberty's comeback has b

Optimize accuracy and latency to validate proof of concept fast

#### Prompt and completion examples





# **Responsible AI built into Azure AI**



#### Fairness

Assess fairness and mitigate fairness issues to build models for everyone.

## Explainability

Understand model predictions by generating feature importance values for your mode.

## Q Counterfactuals

Observe feature perturbations and find the closest datapoints with different model predictions.



### **Causal analysis**

Estimate the effect of a feature on real-world outcomes.



### **Error** analysis

Identify dataset cohorts with high error rates and visualize error distribution in your model.



### **Responsible AI scorecard**

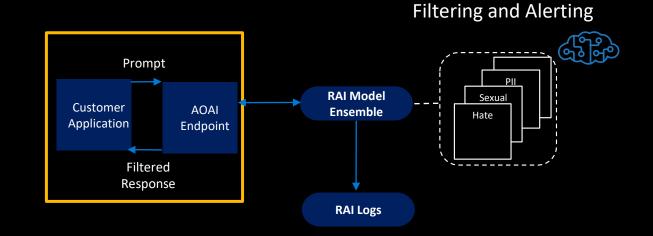
Get a PDF summary of your Responsible Al insights to share with your technical and non-technical stakeholders to aid in compliance reviews.

## **Azure Responsible Al**

Determine appropriate use cases

Content filters and abuse detection

Implementation guidelines, patterns, and best practices



## Unlock new use cases

#### Top Use Cases



Government agency using Azure OpenAI Service to extract and summarize key information from their extensive library of rural development reports

Financial services using Azure OpenAI Service to summarize financial reporting for peer risk analysis and customer conversation summarization

## **Code generation**

Writing assistance



## Reasoning over data



Summarization

Aircraft company using to convert natural language to SQL for aircraft telemetry data

Consulting service using Azure OpenAI Service to convert natural language to query propriety data models

Financial services firm using Azure OpenAI Service to improve search capabilities and the conversational quality of a customer's Bot experience.

Insurance companies extract information from volumes of unstructured data to automate claim handling processes

International insurance company using Azure OpenAI Service to provide summaries of call center customer support conversation logs

Global bank using Azure OpenAl Service to summarize financial reporting and analyst articles

# Azure OpenAl Service Use Cases



### Codex

- Natural Language to Code
- Natural Language to SQL
- Code to Natural Language
- Code documentation
- Refactoring

### DALL·E 2

- Creative ideation
- Podcast and music playlist images
- Content syndication
- Marketing campaign personalization
- Hyper-personalization

#### Language

#### Reason over structured and unstructured data: Classification, Sentiment, Entity Extraction, Search

- Refined text-based search with embeddings
- Product feedback sentiment
- Customer and employee feedback classification
- Claims and risk analyses
- Support emails and call transcripts
- Social media trends

#### Writing Assistance

- Marketing copy / email taglines
- Long format text
- Paragraphs from bullets

#### Use Cases that use multiple model capabilities

- Contact Centers
  - Classification route mails to appropriate team
  - Sentiment prioritize angry customers
  - Entity extraction and search analyze liability and risk
  - Mail and call transcript summarization
  - Customer response email generation
- Rapid response marketing campaigns: classification, sentiment, summarization, content generation, image generation

#### Summarization

- Call center call transcripts
- Subject Matter Expert Documents
  - Competitive analysis
  - Peer Analysis
  - Technical reports
- Product and service feedback
- Social media trends

#### **Conversational AI**

- Smart assists for call centers
- Tech support chat bots
- Virtual assistants
- Artificial humans

# How do I get access to Azure OpenAl?

https://aka.ms/oaiapply

# Open Discussion, Q&A





# Thank You!