# Driving disruptive value with Generative AI leveraging Azure OpenAI

—

IBM Consulting

# Contents

- **Business Opportunity with Generative AI**
- The value of Azure OpenAI
- How IBM Consulting and Neudesic can help

# AI models have evolved significantly in the past decade

## Advanced Analytics

Step by step logic & instructions coded by human developers. Very deterministic.

e.g., BI, rule-based anomaly detection etc.

*eg. given a housing database of rate per sq.ft and the size of recent listings, highlight the best value homes*

## Machine Learning

Human crafted features with supervised learning to analyze data for a specific task

e.g., prediction, price optimization etc.

*eg. predict the price of a new house listing, by leveraging features e.g., # yrs old, school rating, mean price per sq ft etc.*

## Deep Learning

Unsupervised learning where AI is fed outcomes and data to create rules and algorithms

e.g., image recognition, autonomous driving etc.

*eg. predict the price of a new house listing*

## Foundation Models

Unsupervised AI that ingests massive amount of data, to then generate net new human-like text, art, images, video etc.

e.g., DALL-e, ChatGPT, BERT, T5, LaMDA, etc.

*eg. you are a realtor. Write the description of a $1M home in South Lake, TX and generate an ad listing*

Foundation models can be adapted to a wide range of downstream tasks...

ChatGPT is a good example

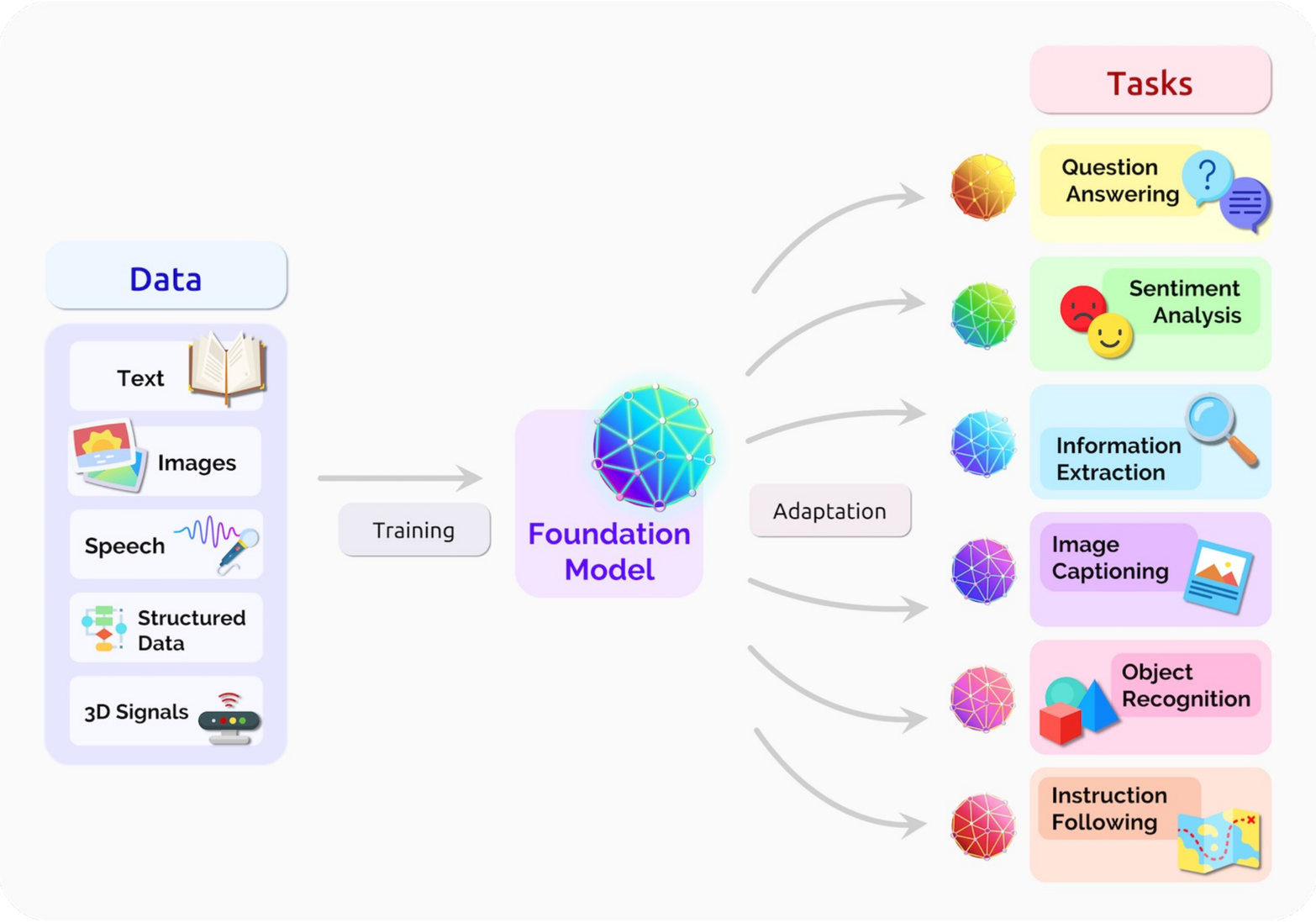
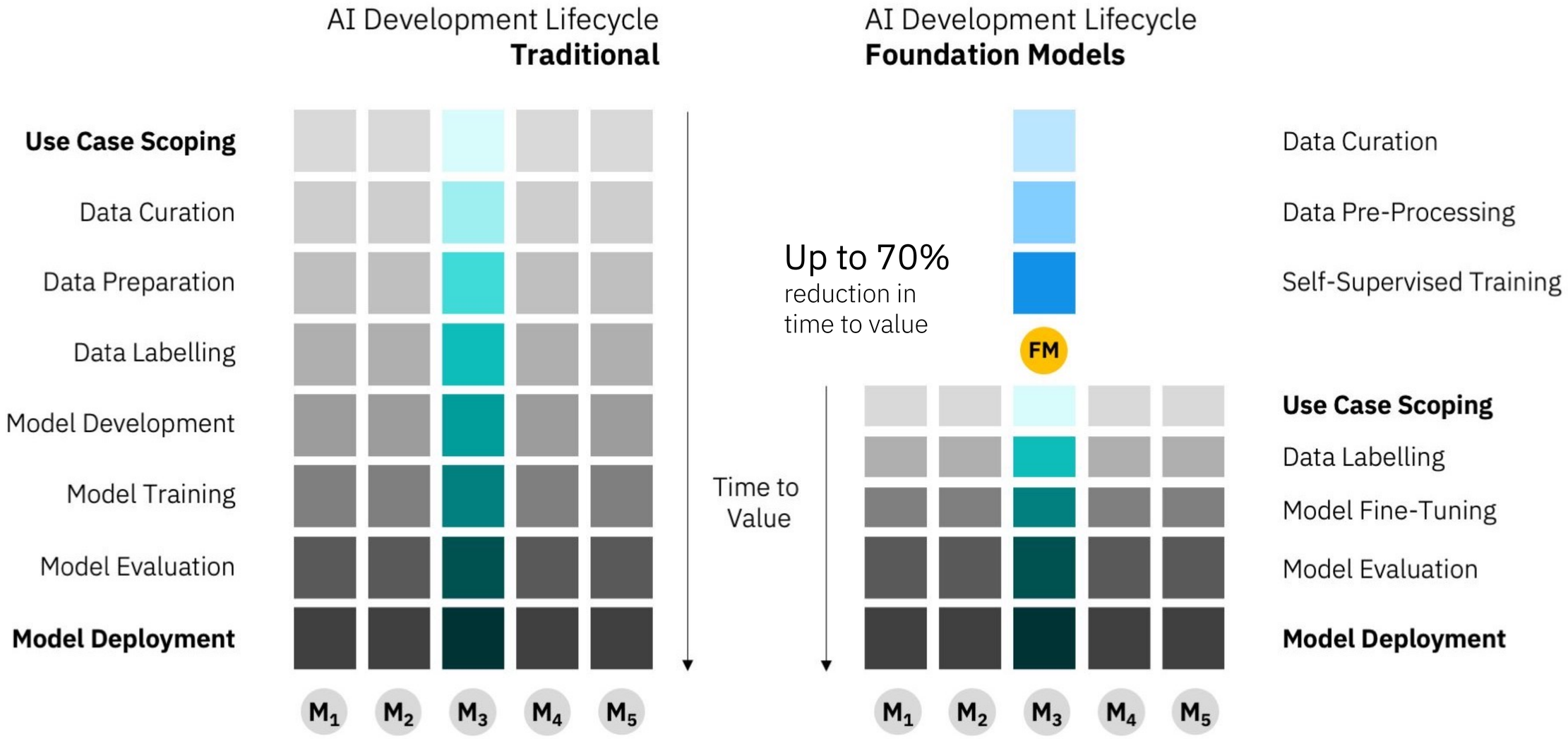



Image source: On the Opportunities and Risks of Foundation Models paper – CRFM Stanford

# Foundation models establish a new paradigm for AI development



# Foundation models establish a new paradigm for AI development

## Enhanced AI Capabilities…

**Summarization** eg. call center interactions, documents such as financial reports, analyst articles, emails, news, media trends etc.

**Semantic Search** eg. reviews, knowledge base, product descriptions etc.

**Content creation** eg. personas, user stories, synthetic data, generating images, personalized UI, marketing copy, email/social responses etc.

**Code creation** eg. Code co-pilot, code conversion, create technical documentation, test cases etc.

OpenAI ChatGPT Microsoft salesforce
IBM Google Meta Open Source

## … supporting multiple enterprise use cases

### Cross-industry
- Call Center Analytics
- Knowledge Mgmt.
- Email Automation
- Marketing content creation
- Contract AI
- Code creation & conversion
- Code documentation
- Persona generation
- UI & App design
- HR automation
- Agent Assist

### Retail
- Sales summarization
- Hyper Personalization
- Product classification
- Computer Vision
- Price Optimization

### Industrial
- Technical documentation
- Industrial design
- Production optimization
- Recall analysis
- B2B back-office AI

### Healthcare
- Prior Auth, Benefits admin
- Regulatory reporting
- Real World analysis
- Explain claims, benefits
- Summarize history

### FSS
- Know Your Customer KYC
- Wealth Mgmt. AI
- Regulatory changes
- Summarize earnings etc.
- Automate personalized email

### Public/Fed
- Govt forms translation
- Policy research
- Explain citizen benefits
- Summarize cases
- Regulatory compliance

### Telco
- Offer personalization
- Network optimization
- Explain bill
- B2B back-office AI

## … delivering rapid business value

Large global payments firm achieved **91% accuracy** and near real-time insights into customer complaints to rapidly react to emerging issues

Large global Telco achieved **90% reduction** in time to insights unlocking **$20M+** in operational improvements identified from agent conversations

Large global Bank achieved **25% improvement** in conversational AI accuracy and **80% efficiency** gain in testing and classification

Large global Bank reduced **30,000 hrs** of internal audit across **5,000+** controls needed to maintain regulatory compliance by analyzing control documents at scale


IBM Microsoft

# Contents

- Business Opportunity with Generative AI
- **The value of Azure OpenAI**
- How IBM Consulting and Neudesic can help

# The unique value of Microsoft OpenAI Partnership

## OpenAI Accessability

Azure OpenAI Service provides quick and easy access to OpenAI products such as GPT-4, Codex, and ChatGPT.

Easy access enables customers to apply Large Language Models into their use-cases.

OpenAI is being deployed commercially at scale via Azure by many customers.

## Compatibility and Integration

Azure OpenAI co-develops the APIs with OpenAI, ensuring compatibility and a smooth transition from one to the other.

As a publicly available service on Azure, the OpenAI Service can be used in combination with various Azure services.

OpenAI products are already integrated into Microsoft solutions such as Office 365 Copilot,  Microsoft Bing and Microsoft Loop.

## Data Privacy & Security

With Azure OpenAI, customers get the security capabilities of Microsoft Azure while running the same models as OpenAI.

Azure OpenAI offers private networking, regional availability, and responsible AI content filtering.

# OpenAI Use-Cases

As of March 2023, OpenAI Foundation Models can handle three modalities - text, image, and audio.

## Text

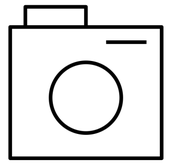
### OpenAI GPT-4

**Summarization**
- Subject Matter Expert Document Summarization (e.g. financial reporting, analyst articles)
- Social Media Trends Summarization

**Semantic Search & Knowledge Extraction**
- Search reviews for a specific product / service
- Information Discovery and Knowledge Mining

**Content Generation**
- Search reviews for a specific product / service
- Information Discovery and Knowledge Mining

## Image



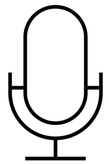
### OpenAI Dall·E 2

**Product Design**
- Generation of multiple design options quickly and easily by using prompts that describe the desired product in natural language

**Marketing Content Generation**
- Generation of AI-generated unique visuals for marketing campaigns (ads, social media posts etc.)

**Synthetic Data Generation**
- Generation of synthetic images and enrichment of training data behind Deep Learning models

## Audio



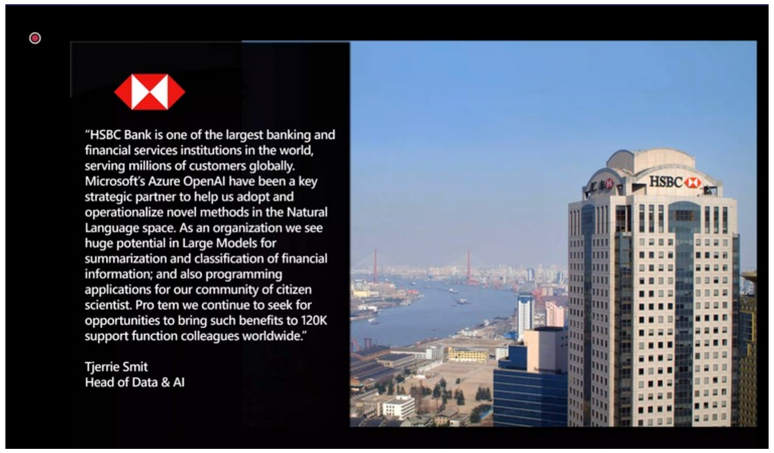
### OpenAI Whisper

**Speech to Text Transcription**
- Transcribe Customer Center calls and prepare text datasets for further NLP applications

**Speech to Text Translation**
- Transcribe non-English speech into English text via automatic translation

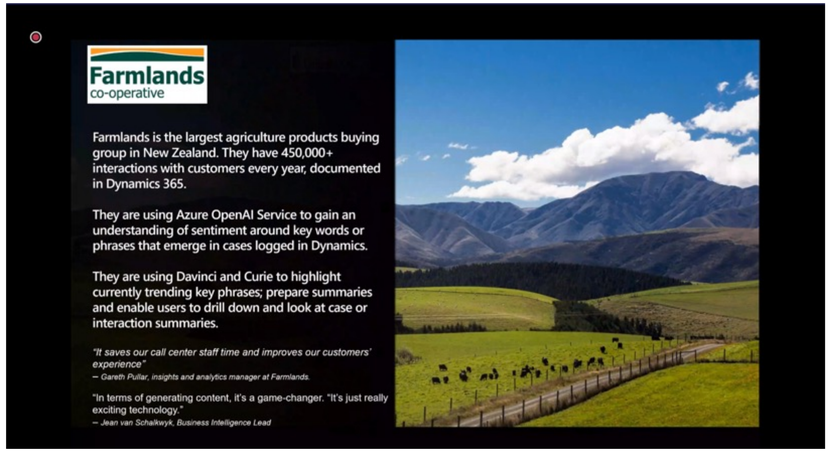
**No Speech Detection**
- Clean up audio datasets by identifying and removing any audio parts that do not contain spoken words

# Azure OpenAI is already driving value across a number of use cases

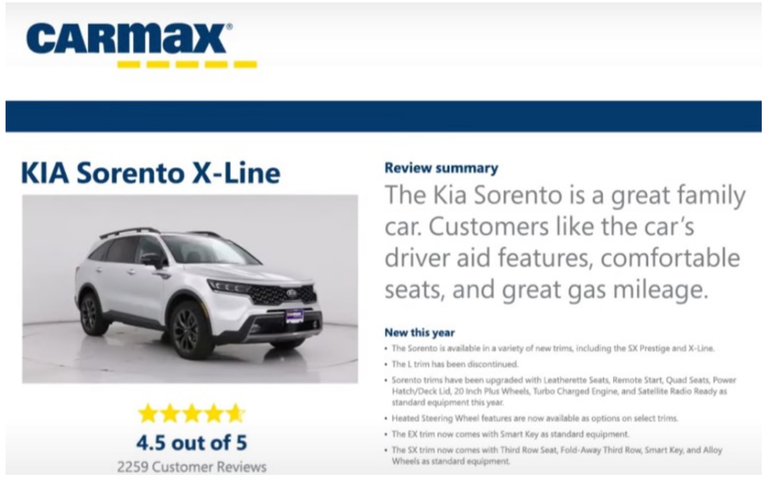



Summarization and classification of financial information. Helping their citizen developers with programming.

AI assistant  Wealth Mgmt Advisors are using it to find and tailor the right information created to be personalized to each client.




Large Language Models for sentiment analysis; Davinci & Curie to highlight trending key phrases and summarization




Used car retailer CarMax has used Azure OpenAI Service to help summarize 100,000 customer reviews into short descriptions that surface key takeaways for each make, model and year of vehicle in its inventory.

# Contents

- Business Opportunity with Generative AI
- The value of Azure OpenAI
- **How IBM Consulting and Neudesic can help**

# We help from defining your Strategy, innovating your business processes through implementing and scaling across your enterprise

| | Strategize and Ideate | Hack and Innovate | Implement and Scale |
|---|---|---|---|
| **Objective** | Define an adoption strategy and an initial set of specific and value add Generative AI use cases. Assess the readiness of your data estate, your capabilities and your operating model and recommend a roadmap to execute the strategy | Raise awareness of Generative AI potential across your organization, enable your teams with the skills (tech and business) to ideate and select the appropriate use cases. Deliver a set of real working prototypes to help prioritizing your strategy, roadmap and investments. | Establish a joint Azure OpenAI Implementation Garage to iteratively build and deploy in production the use cases identified and prioritized. Start with an initial MVP (i.e. one use case) and then scale through a proper underlying Data Platform and required MLOps capabilities |
| **Activities** | 1. Azure OpenAI Jumstart Workshop<br>2. OneAI AI Readiness Assessment and Strategy definition | 1. Design and Execute an Azure OpenAI Hackathon<br>2. Learn and work alongside IBM OpenAI experts | 1. Implement MVP for one selected use case<br>2. Realize required improvements (e.g. Data Platform, MLOps, Ops Model) to scale |
| **Target Outcome and Value** | • Use case(s) definition (business case)<br>• Generative AI Strategy definition<br>• Generative AI Readiness Assessment | • Use case(s) definition (solution + business case)<br>• Working prototype (i.e. live demo) for each use case | • Use case live in production, i.e. benefits realized<br>• Organization ready to start scaling more use cases |
| **Duration** | 1-week (Azure OpenAI Jumpstart Workshop)<br>4 weeks (Readiness and Strategy) | 4 weeks (Accelerated)<br>7 weeks (Extended) | 12 weeks (MVP) |

# Strategize and Innovate Offering Overview

## Activities

1. **OpenAI Jumpstart Workshop**
   Led by Neudesic, the OpenAI jumpstart workshop brings together some of the brightest minds in the artificial intelligence (AI) industry to share best practices, explore key trends, and help you identify use cases that will deliver maximum impact.
2. **OpenAI AI Readiness**
   The OpenAI AI Readiness Assessment evaluates the readiness of your data estate, your capabilities and your operating model and recommend a roadmap to execute the strategy. Led by IBM Consulting Generative AI SMEs, the team develops an enterprise-level Generative AI Strategy by using the Generative AI Assessment results.

## Outcomes

- Use case(s) definition (business case)
- Generative AI – OpenAI Strategy definition
- Generative AI – OpenAI Readiness Assessment

## Timeline

- **Ideation Workshop**
  1-2 weeks
- **AI Readiness and Strategy**
  4-6 weeks

## Package and Commercial

- **OpenAI Jumpstart Workshop**
  $10’000 - $15’000
- **AI Readiness and Strategy**
  $50’000 - $75’000

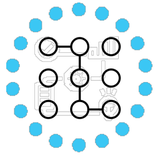
## IBM Consulting and Neudesic added Value

- **IBM Expertise in Enterprise Design Thinking**
  Co-create, co-execute, and co-operate with IBM Garage, our center for high-impact innovation, to apply Enterprise Design Thinking towards quick wins. Enterprise Design Thinking helps teams understand people’s needs, form intent, and deliver outcomes to satisfy those needs, at speed and scale.
- **Client Engagements on AI Readiness Assesment**
  Combining several years of AI strategy experience, quantitative benchmarks from the Institute for Business Value, and tightknit collaboration with key partners like IBM Research and Microsoft that allows us to stay abreast of the latest changes in the Generative AI industry, IBM Consulting is uniquely placed to provide an outside-in view to technological and organisational recommendations to start deploying Generative AI in your organisation quickly, effectively, and safely.

# Our OpenAI Jumpstart Workshop as your first step into your Generative AI Journey

Enhance understanding and knowledge of OpenAI

Explore and identify high-value use cases



Build an OpenAI roadmap with actionable next steps

## Half Day of Education, Ideation, and Use Case Road mapping

### OpenAI Education

Enhance your understanding of Azure OpenAI models & capabilities

### OpenAI Ideation Session

Identify potential OpenAI use cases and tactics that enhance competitive advantage and operational excellence

### Use Case Roadmap

Identify and dive deep into a single, high value use case and define the critical parameters and next steps

## Key Outcomes Include:

- Enhanced understanding of OpenAI capabilities
- Understanding of requirements needed to build impactful OpenAI solutions
- Exploration of use cases aligned to business goals
- Proof of Technology proposals focused on validating the value of the use cases.

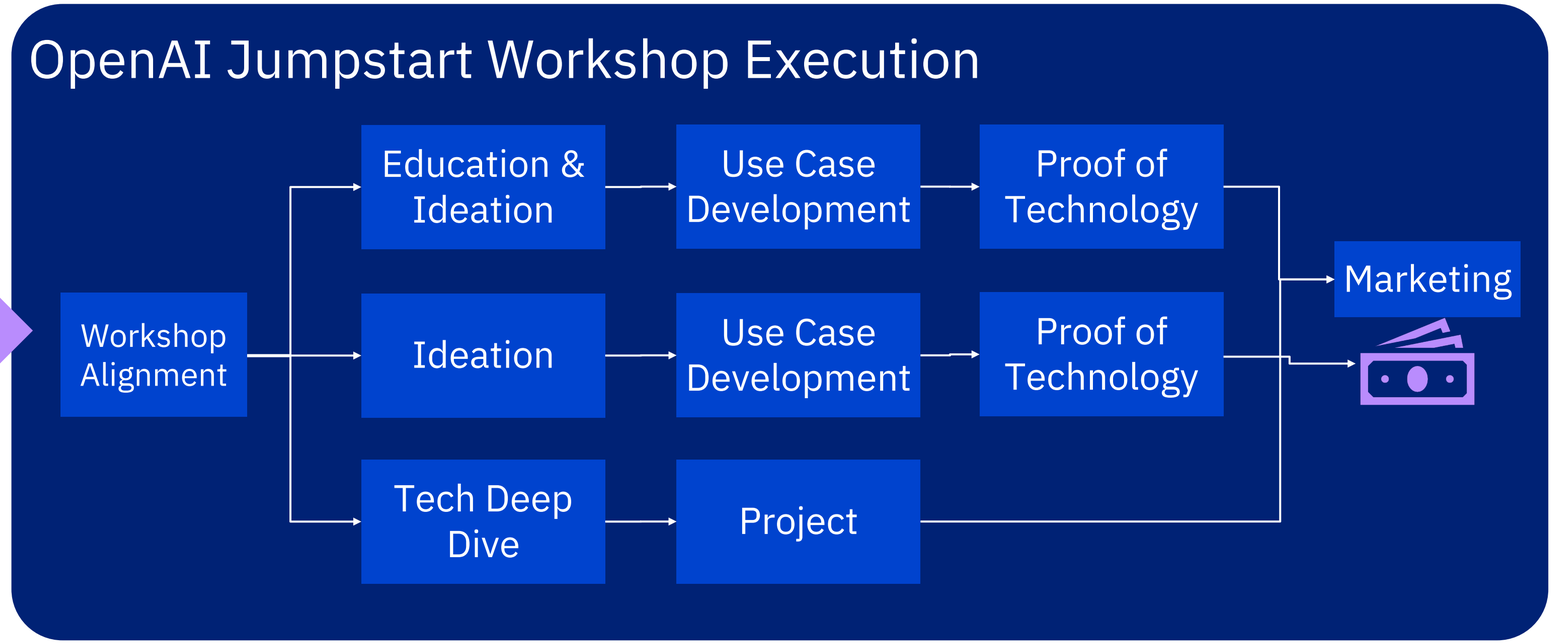
# We have a structured approach to take you from Idea to Plan

## Target Audience

- Executives (CIO, CFO, CPO)
- Business Stakeholders (VP and above)
  - Operations/Products
  - Digital
  - R&D
  - Sales
- IT Executives

## 3 possible starting points and journeys

- Clients who need both Education and Ideation
- OpenAI savvy clients who need Ideation
- Clients with defined use case who need Solutioning



# Our OpenAI Readiness Assessment is a proven approach and methodology to assess your enterprise readiness for Generative AI and get started quickly

## Objectives of IBM Clients

**Finding quick, yet scalable and secure ways to get started leveraging the power of Foundation Models in their own organisation, and creating their conditions for success.**

Understand how corporate Foundation Model efforts map against a comprehensive best practice framework for enterprise grade AI.

Identify potential quick wins around Foundation Model applications, as well as success factors and risks that will influence the transformative opportunity ahead.

Complement quantitative findings with qualitative analysis and recommendations. Get out-side in coaching and inspiration on how to advance on short term in key improvement areas.

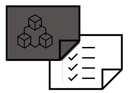
Build a roadmap of key initiatives to further leverage and embed Foundation Models.

## IBM Consulting Engagement Approach

**The engagement builds on a proven project approach, access to a strong and diverse network of expert consultants and leveraging of high-quality assets.**

Proven engagement model with short timeline of 6 weeks to get to tangible insights and recommendations fast.

Leveraging multi-year experience in building the AI@Scale framework for enterprise AI best practices along with IBM IBV benchmark database built on 2,100 organizations surveyed.

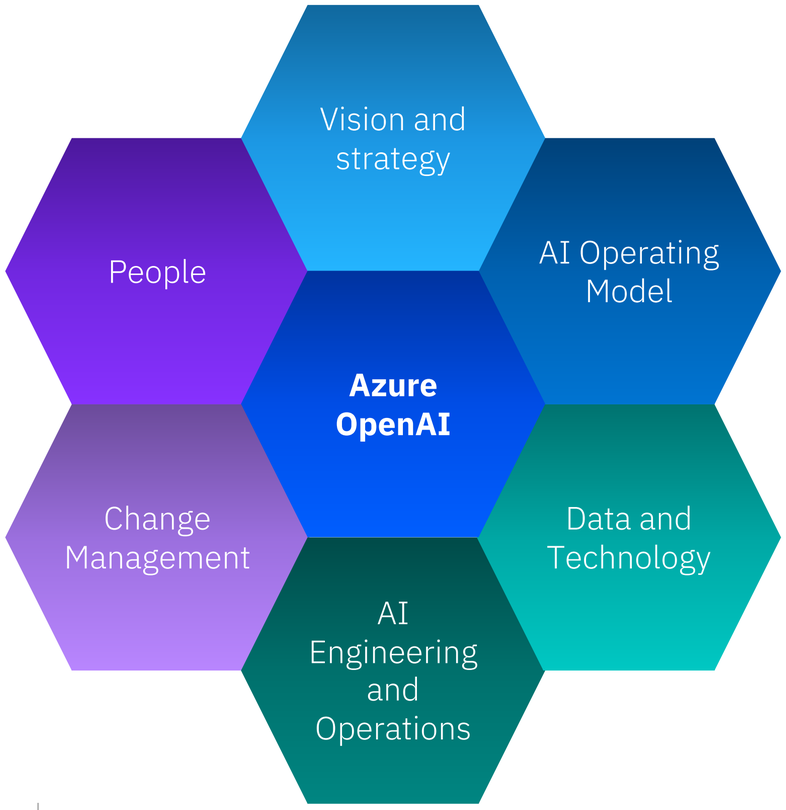


Leveraging high quality assets and accelerators (e.g. maturity model, Foundation Model use case library, FM reference architecture for Azure OpenAI, LLMOps handbooks).

Working with a team of AI consultants that combine organizational and technical expertise and are willing to work in an open and collaborative attitude.

# We apply our “AI Maturity Framework” to holistically assess organizational development for enterprise grade Generative AI

IBM **Consulting**: 24 areas of best practices organized along six pillars.




**People**
*Do we have the skills in-house to optimally leverage the changing requirements and technology stacks of Foundation Models? Do we understand how our current job roles will get impacted?*
- Technical Training
- Talent Recruitment & Attraction
- Business User Training
- Knowledge Management

**Change Management**
*How do we embed FM capabilities into our workflows throughout the organization?*
- Value
- Organizational Readiness
- Roll-Out Support
- Behaviors and Adoption

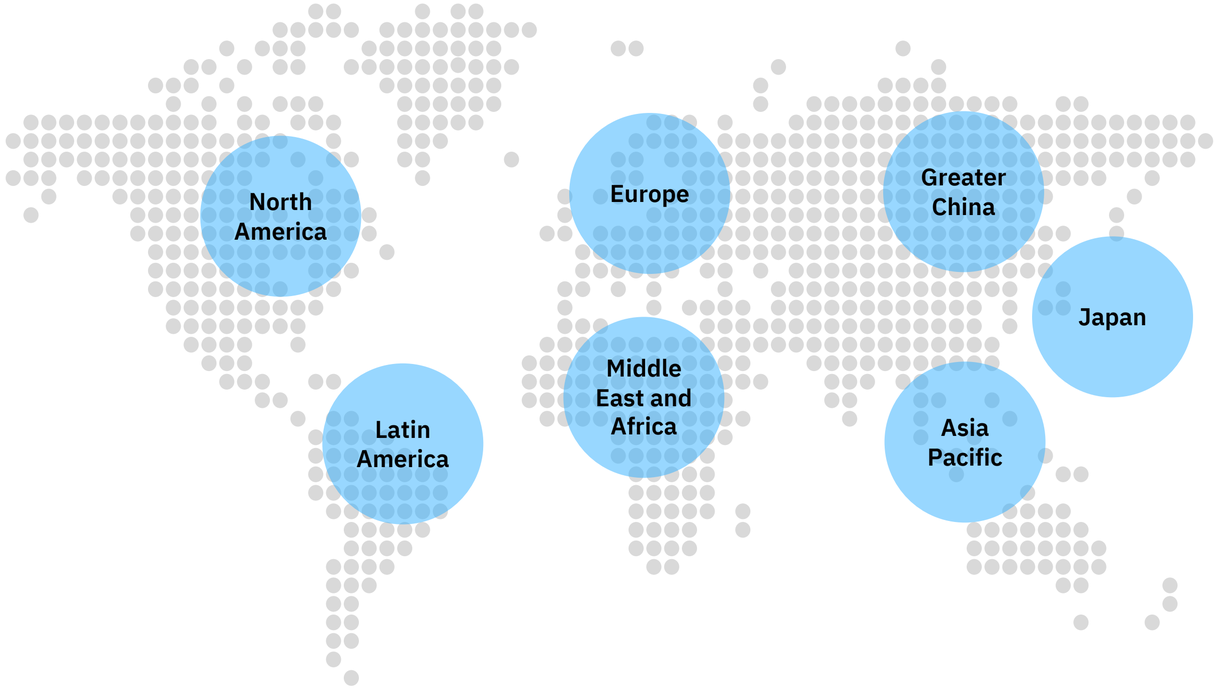
**Vision & Strategy**
*Does my organization have a shared vision across all business lines about Foundation Models? Have we identified the downstream opportunities of deploying FMs?*
- Vision
- Roadmap
- Performance Management
- Transformation Management

**AI Operating Model**
*How are we using and applying AI&FM? Which units are best placed to make use of this shift?*
- Governance
- Demand Management
- Innovation
- Operations

**Data & Technology**
*Different types of Foundation Models, with different underlying architectures and usage patterns, are appearing left and right. What is best for our organisation, and do we have the data to leverage them?*
- Information Architecture
- Data Integration
- Information Management
- Data Advocacy

**FM Engineering and Operations**
What tools for FM are being used? What are cost-effective ways to leverage and maintain these models?
- FM Orchestration
- FM Testing
- FM Deployment & Scaling
- FM Monitoring

# AI Benchmarking Database
## IBM Institute of Business Value



**During 2022 the IBM Institute of Business Value (IBV) surveyed 2,100 organizations globally with respect to our AI maturity model – forming a comprehensive benchmarking dataset that is unique in the industry.**

- The respondents from these organizations were from C-level business and technical roles + AI leadership roles.
- Capability scores for all responding organizations are available as part of the IBM IBV benchmarking database.
- This unique dataset allows to benchmark IBM Consulting clients across 16 roles, 17 industries, and 16 countries.

© IBM Corporation 2023

# 6-week consulting engagement to create a holistic maturity assessment, gap audit and roadmap recommendations for your Azure OpenAI Journey

## Engage & Envision

1 Week

Stakeholder Mobilization

Strategy & Vision Review

Target State Envisioning

Kick-Off Workshop

The phase serves to mobilize the IBM and client teams and understand the organizational ambitions with respect to Foundation Models.

## Assess & Evaluate

2 Weeks

Foundation Models Maturity Survey

Stakeholder Interviews

Consolidation of Findings and Benchmarking

Interim Review Workshop

In this phase the quantitative (survey) and qualitative (interviews) Foundation Models maturity assessment will be conducted. Findings will be consolidated, benchmarked and discussed with stakeholders.

**Key Result:**
**Foundation Models usecase Identification & prios**
**AI@Scale Maturity Assessment Report**

## Enable

2 Weeks

Action Area Prioritization

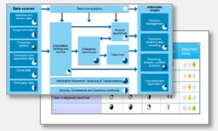
Best Practice Deep Dives (per Action Area) *

* Can include hands-on tech sessions (where applicable)

Initiative Shaping per Action Area

In this phase, 3 improvement areas will be prioritized. For each area, the IBM team will provide an outside-in perspective on best practices and jointly with the client team shape an initiative for maturity growth.

**Key Result:**
**Identified technology blockers & key success factors**
**Customized Best Practice Recommendations**



## Plan

1 Week

Roadmap Execution Planning

Final Presentation, Playback & Retrospective

In this phase the identified improvement initiatives will be aggregated on a joint roadmap along with identification of owners, key milestones and immediate next steps.

**Key Result:**
**AI@Scale Initiative Descriptions & Roadmap**

# Hack and Innovate Offering Overview

## Activities

1. **Teaming**
   Attract participants and form hackathon teams integrating client's experts with IBM Consulting and Neudesic SMEs
2. **Ideate and Train**
   Led by IBM Consulting and Neudesic SMEs, teams define their use case and high-level implementation plan. Participants can attend a series of technical and business training sessions
3. **Develop**
   Led by IBM Consulting and Neudesic SMEs, teams work on developing a use case prototype on an Azure OpenAI environment along with a pitch deck
4. **Evaluate**
   IBM Consulting and Neudesic SMEs review all submitted prototypes and pitch decks to shortlist finalists
5. **Present**
   Short-listed teams present their solutions to a client's selected executives, IBM Consulting , Nedesic, Microsoft judging panel. Winning solution is awarded

## Outcomes

- Use case(s) definition (solution + business case)
- Working prototype (i.e. live demo) for each use case

## Timeline

- **Accelerated**
  3-4 weeks when Hackathon teams are fully focusing on the development acivities during one week.
- **Extended**
  7 weeks when Hackathon teams are working part-time on the development activities during a period of 3 weeks.

## Package and Commercial

- **Small** < 5 teams
- **Medium** < 10 teams
- **Large** < 15 teams
- **Custom** > 15 teams

- **Accelerated =** 4 weeks
- **Extended =** 7 weeks

| | Small | Medium | Large |
|---|---|---|---|
| Accelerated | $70'000 | $115'000 | $165'000 |
| Extended | $95'000 | $170'000 | $240'000 |

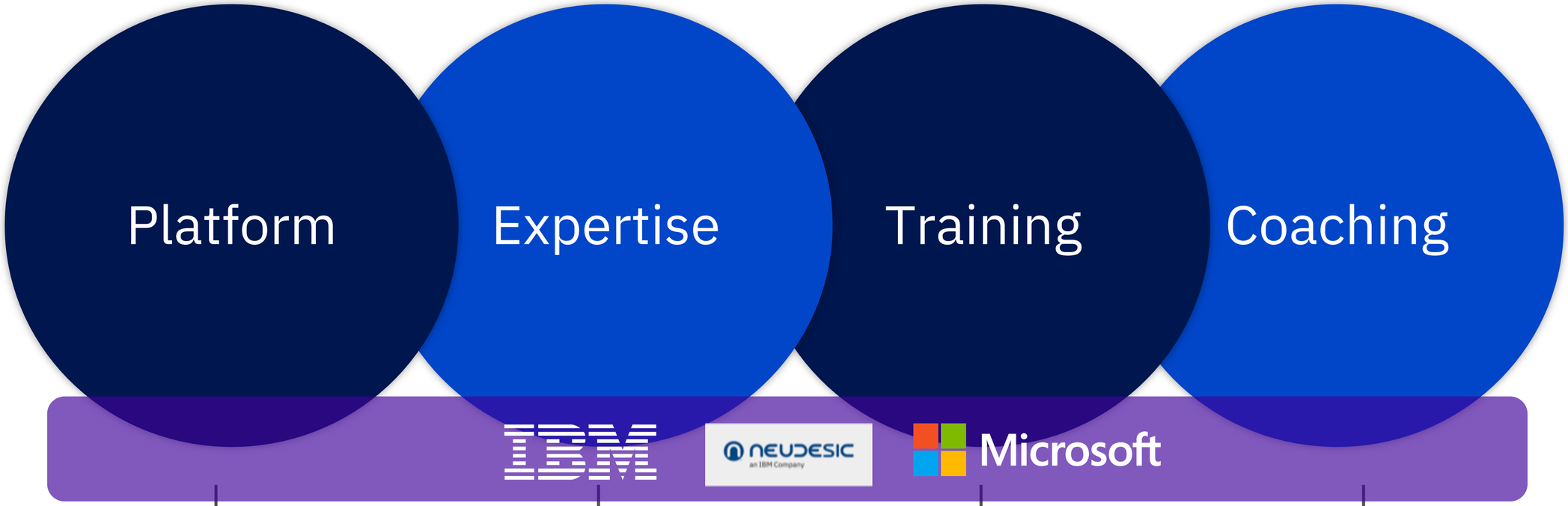
## IBM Consulting and Neudesic added Value

- **Proven Hackathon approach**
  Our approach has been successfully appled to several Azure AI Hackathons. We organize and moderate the Hackathon end to end.
- **Join your teams with SMEs**
  We assign 2 of our experts to every team to lead and support throughout the hackathon
- **Training sessions and Coaching**
  We provide a set of sel-placed Azure OpenAI technical training sessions. We execute 2 live sessions focusing on Azure OpenAI as well as real-life best practices, use cases and solutions examples. We provide a group of senior SMEs that will coach all teams throughout the Hackathon
- **Azure OpenAI Environment**
  We provide a ready to use and pre-configured Azure OpenAI environment to all teams
  **(Optionally if required by client, we can run this on their own Azure OpenAI tenant)**

# Your Azure OpenAI Hackathon as catalyst for driving innovation

- Engage multidisciplinary teams from your organization into an event that encourages **rapid ideation and prototyping of breakthrough solutions** leveraging Azure OpenAI capabilities
- Have IBM Consulting and Neudesic experts joining your teams **empowering participants with best practices and accelerators** to push the boundaries of AI and explore novel approaches
- **Drive awareness and upskill your people** on the latest and greatest about Generative AI and ist potential for your business through a series of learning events

# We provide a proven framework and set of capabilities to deliver a unique experience throughout your Hackathon



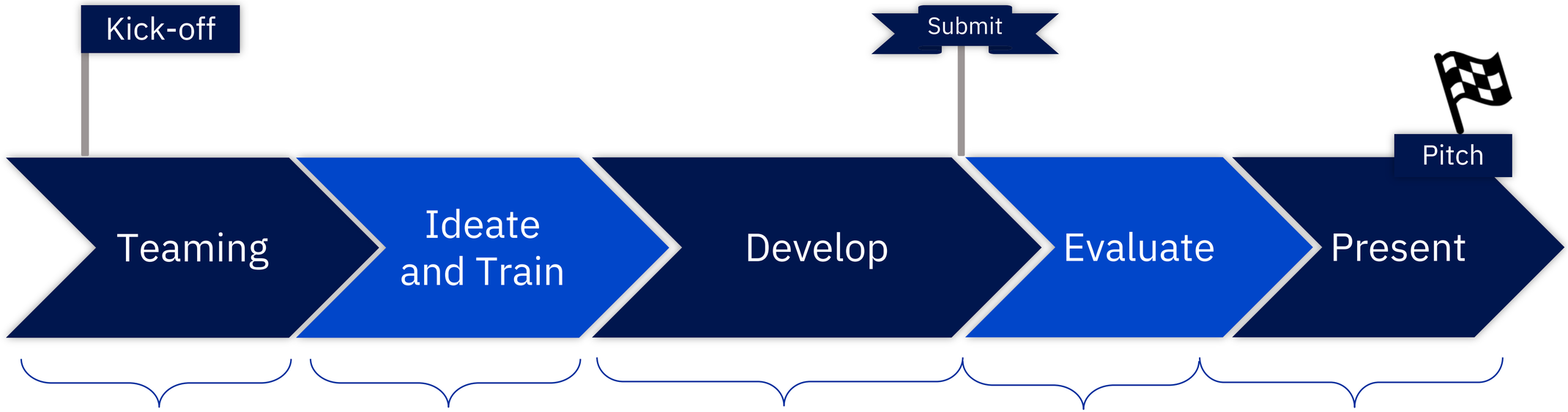

- IBM Azure OpenAI subscription ready to use
- Set of use case models and data sets to accelerate ideation and development

- IBM and Neudesic AI experts to join your Hackathon teams (2 per team)

- Series of technical training sessions on Azure OpenAI
- Series of training & inspiration sessions on the art of the possible with Generative AI

- A panel of senior IBM and Neudesic AI experts to coach your Hackathon teams
- Daily “ask me anything” sessions for your Hackathon teams

# The Hackathon is structured in five distinct phases and can be executed in an accelerated (i.e., 4 weeks) or extended (i.e., 7 weeks) mode




- Attract participants
- Form teams and assign IBM team members

- Finalize use case
- Execute training

- Develop solution (coding)
- Prepare pitch

- Assess solutions and shortlist teams

- Top teams to present their solution
- Select Winning solution

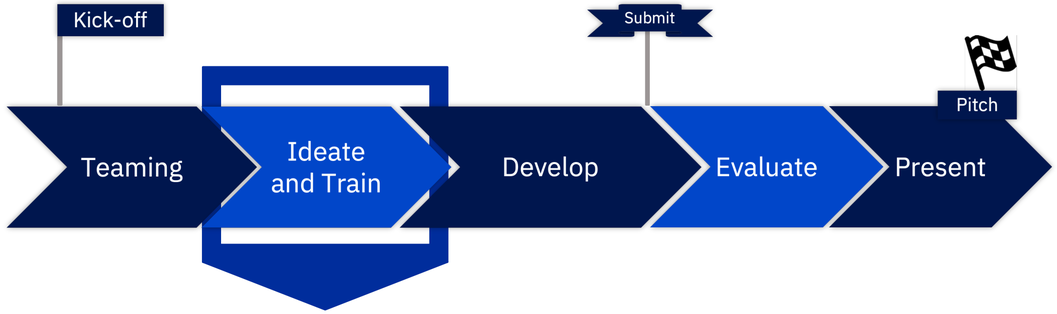
**Accelerated**

Week 1 | Week 2 | Week 3 | Week 4

**Extended**

Week 1 | Week 2 | Week 6 | Week 7

# Prepare your team for the challenge!




- **Team Ideate Session:** Design thinking session led by IBM expert to ideate the use case,  define high-level plan and prepare solution overview (business and technical)

- **Self-Place Training:** Provide series of curated online Azure OpenAI online training sessions (multiple virtual sessions available)

- **Deep Dive Training Sessions:**  Deliver 2 dedicated training sessions

  **Overview of Azure OpenAI platform**
  - Latest on Product Strategy & Roadmap, Products demo, Technical discussion and Q&A

  **The art of the possible with Azure OpenAI**
  - How to best leverage the Azure OpenAI API's, latest use cases, accelerators, best practices and lessons learned from real-life implementation projects

# Overview of Self-Placed Azure OpenAI Training

**Start Here!**

- Have an Azure subscription
- Access granted to the Azure OpenAI service (currently only by application at https://aka.ms/oai/access )
- Get documented on available Azure OpenAI models announced in January 2023
- Watch the video: An Introduction to Azure OpenAI
- Get Familiarized with this content: Azure OpenAI Page

*Depends on models approved in your subscription
Updated on March 8th, 2023

**Basic**

- What's Azure OpenAI: comparing Azure OpenAI and OpenAI and Key concepts
- The training is offline and starts at Introduction to Azure OpenAI Service
- Watch video and demos: OpenAI Studio in Microsoft Azure and Unlock new scenarios with AOAI.
- Reading: quickstarts, API reference - Azure Cognitive Services AOAI
- Solution Accelerators AOAI Solution Accelerators

**Intermediate**

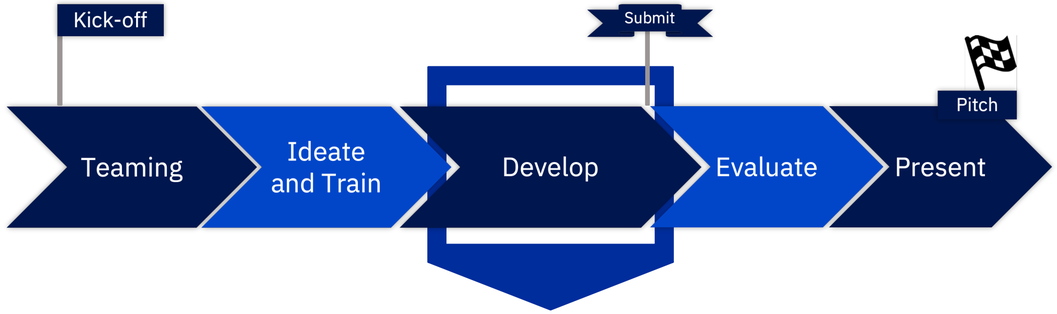
- How-to guides: Generate embeddings and Fine-tune your model
- Complete this tutorial: Embeddings and document Search.
- Azure OpenAI Technical walkthrough video and can find notebooks here
- Use your model for humanity wellbeing. Responsible AI
- How your/your customer data is processed, used and stored in Azure OpenAI: Data, privacy and security
- Watch Document Analysis video.
- Models to try out: GPT, DALL-E and Codex*

**Advanced**

- Learn more in the Azure OpenAI Workshop in GitHub
- Open AI Cookbook
- Compare models and use cases.
- Start experimenting and developing you MVP.
- Get support and help

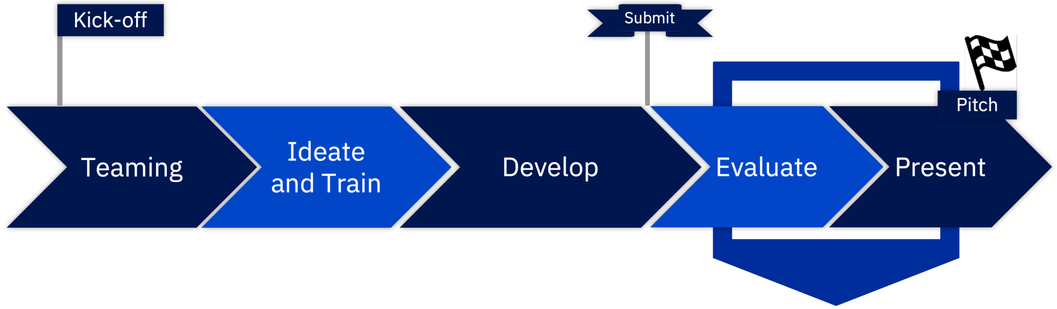
Azure OpenAI ChatGPT GA Announcement and Tech blog

# Develop your breakthrough OpenAI solution!




- **Coding on Azure OpenAI:** Leverage IBM Azure OpenAI subscription as well as code accelerators (i.e. existing models, use case templates, data sets, other IBM and Neudesic Azure AI assets) to build your solution.
- **IBM and Nedesic experts:** 1 or 2 senior OpenAI experts are assigned to your team to lead the technical implementation.
- **Deliver daily (45 minutes) Virtual “ask me anything” sessions:** Connect with IBM Consulting and Neudesic SMEs to get help with any potential questions or request advice for your solution.
- **Collaboration and communication:** Provide Mural, Teams and/or Slack environments to collaborate within the teams as well as connect with IBM Consulting and Neudesic SMEs

# Pitch your breakthrough OpenAI solution!




- **Evaluation of all solutions:** After submission, IBM Consulting and Neudesic SMEs evaluate every solution across a set of predefined business and technical criteria and create short-list of finalists.

- **Judging Panel**: Finalist teams (numbers to be jointly agreed) will present their solution to a judging panel in a virtual and/or physical session. Every team will have **5 minutes** to present their **Live Demo + 3 minutes for Q&A.** Judging panel consists of **senior IBM Consulting, Neudesic and Microsoft executives** working in the Data & AI domain (assignment usually based on client' industry, market and other criteria)

- **Award Winning Solution:** Winning team's solution taken forward for PoC or MVP implementation (possibly leveraging Microsoft ECIF funding)

- **Public communication and marketing:** Optionally execute joint marketing plan (e.g. public press release, social media campaign) to raise public awareness of the Hackathon

# Example of a Judging Panel established for a large Azure OpenAI Hackathons

## IBM Consulting & Neudesic

**Glenn Finch**
Global Managing Partner, Data & AI

**Francesco Brenna**
Senior Partner, Global Azure Data & AI Leader

**Lisa Schnitzius**
Healthcare Data & AI Leader

**Chetna Thakur**
Industrial Sector Leader

**Manish Goyal**
Senior Partner – Global AI & Analytics Leader

**Nithya Ramkumar**
CTO - IBM BPO

**Tyler Suss**
Director, Global Services, IBM-Neudesic

**Shobhit Varshney**
AI Leader, Americas

**Avdyl Haxhaj**
AI Leader, EMEA

**Wouter Oosterbosch**
Azure AI Leader

**Sandeep Chanda**
CEO, Global Services, IBM-Neudesic

**Michael Conway**
AI Leader, UK

**Eniko Rozsa**
Distinguished Engineer, Data & AI

## Microsoft

**Matt Sinclair**
Global Director, Microsoft AI/ML Leader

**Sudha Kumar**
Director, Customer Success Data & AI, Microsoft

**Srini Venkatarajan**
Global Partner, Azure Data & AI , Microsoft

**Jhoanna C Machado**
Principal Program Manager, AI Engineering, Microsoft

**Sunita Kannan**
AI Sales Strategy Lead, Microsoft

# Implement and Scale Offering Overview

## Activities

1. **Co-Create Use Case**

   Deconstruct problem statements (e.g. identified use case through Jumpstart Workshop) by combining Strategy and Enterprise Design Thinking to identity and prioritize potential Azure OpenAI solutions. Develop a high-level solution architecture and use stories backlog for the MVP

2. **Co-Execute Use Case MVP**

   Build an MVP for the identified use case iteratively over a period of 12 weeks to deploy the solution in production and start delivering the expected business benefits

3. **Prepare to scale**

   Define and setup the required Data & AI Platform on Azure along with the required MLOps and Responsible AI capabilities to deliver new MVPs at scale

## Outcomes

- Use case live in production, i.e. benefits realized
- Organization ready to start scaling more use cases

## Timeline

- 2 weeks Design
- 8 weeks Development
- 2 weeks Production Deployment

## Package and Commercial

- **Implementation of 1 MVP use case**

## IBM Consulting and Neudesic added Value

- **IBM Garage Methodology**

  The Garage is a proven methodology and delivery approach that enables transformation, intended to accelerate how Enterprises identify and capture value

- **Neudesic ONE Data & AI Platform**

  The Neudesic ONE Data & AI Platform Accelerator for Azure Synapse or Databricks automates the deployment of your Azure data management platform with fully integrated Data, Analytic, AI and Reporting solutions in 4 weeks

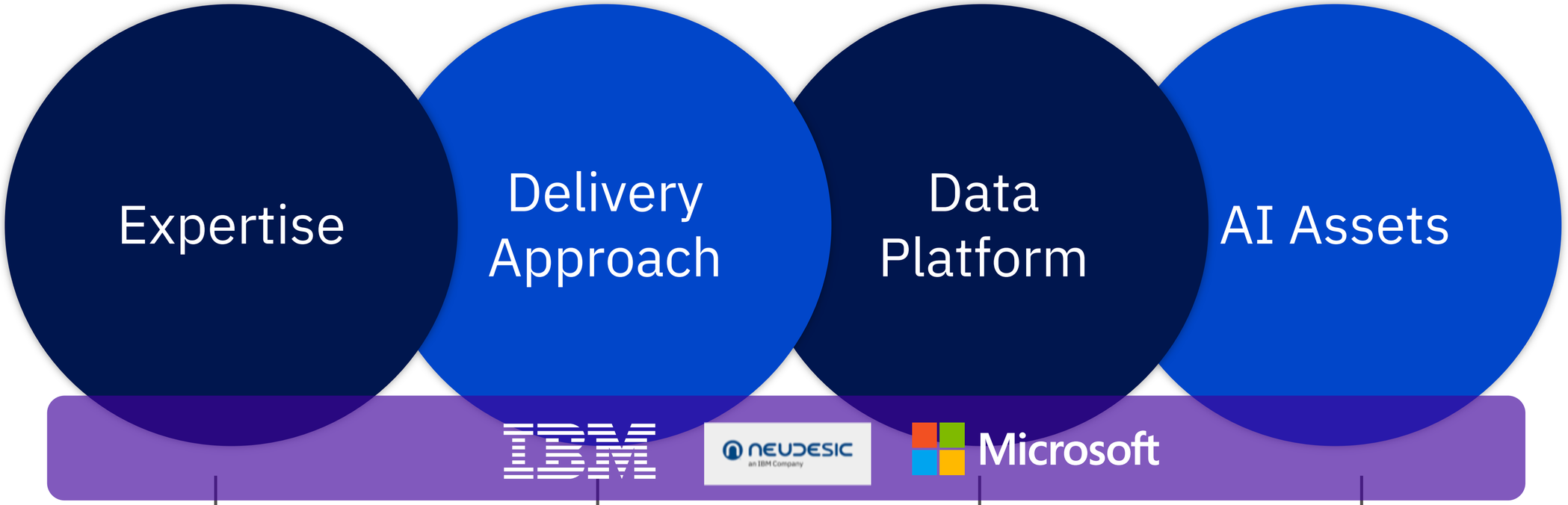
- **IBM Consulting AI@Scale for Azure**

  Comprehensive framework of assets and accelerators to setup the required MLOps pipeline including Responsible AI governance and tooling to securely and reliably scale the MVPs in production with up to 4x faster time-to-value

# Quickly realize the value of Azure OpenAI through an MVP implementation

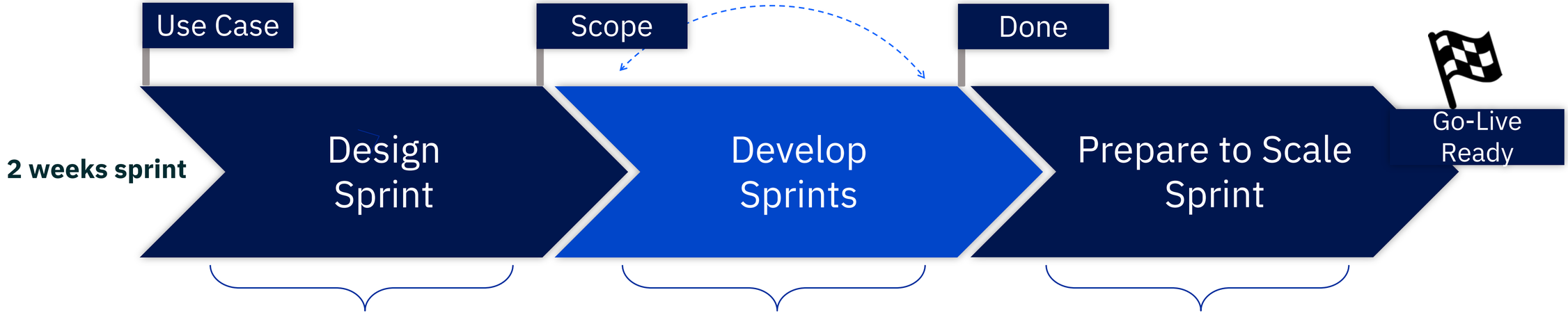
- **Co-Create a production ready** MVP to take your prioritozed Azure OpenAI use case to production in **12 weeks**
- Leverage «IBM Garage» proven and tailored to AI agile delivery methodology along with OpenAI enabled Assets and Accelerators to **deliver value quickly and iteratively**
- Define and setup the required Data & AI Platform on Azure along with the required MLOps and Responsible AI capabilities to prepare your organization to **deliver new MVPs at scale**

# We provide a proven framework and set of capabilities to deliver your Azure OpenAI MVPs at scale




- IBM and Neudesic AI experts Azure OpenAI experts both onsite as well as offshore from our India delivery center to deliver the MVPs at scale
- IBM Garage is a proven and tailored to AI agile delivery methodology and approach which is focused on delivering and measuring value quickly and iteratively
- Comprehensive set of configurations and templates for building the Azure Data & AI platform by eliminating the need for advanced cloud infrastructure, security, and data services expertise.
- A predefined MLOps pipeline built on Azure. A set of Responsible AI services integrated in the MLOps pipeline to ensure AI Governance is fully integrated and enforced

# Within 12 weeks we deliver the first use case MVP in production and set you ready to scale




- Finalize Use Case definition
- Develop MVP Technical Design
- Setup and configure “One Data & AI” Platform

- Data gathering, ingestion and preparation
- Develop AI models
- Develop UI
- System Integration
- System Testing

- Configuration of DevOps and MLOps pipeline
- MVP Go-live planning
- Define Delivery Model for new MVPs

Accelerated through ***AI Assets & Accelerators***

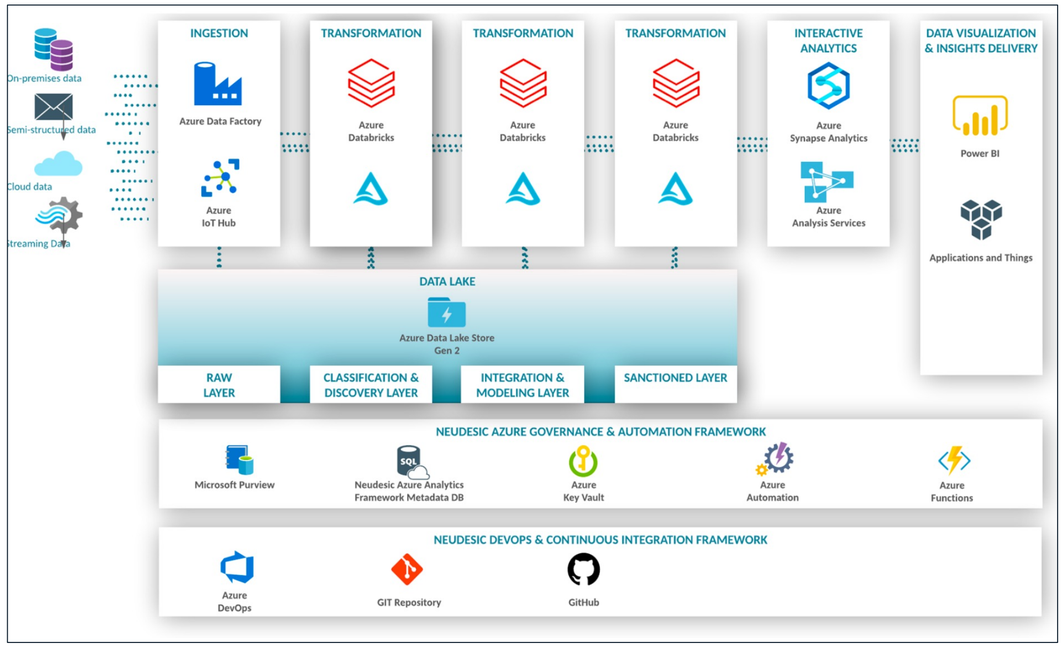
Enabled by ***One Data & AI*** Platform

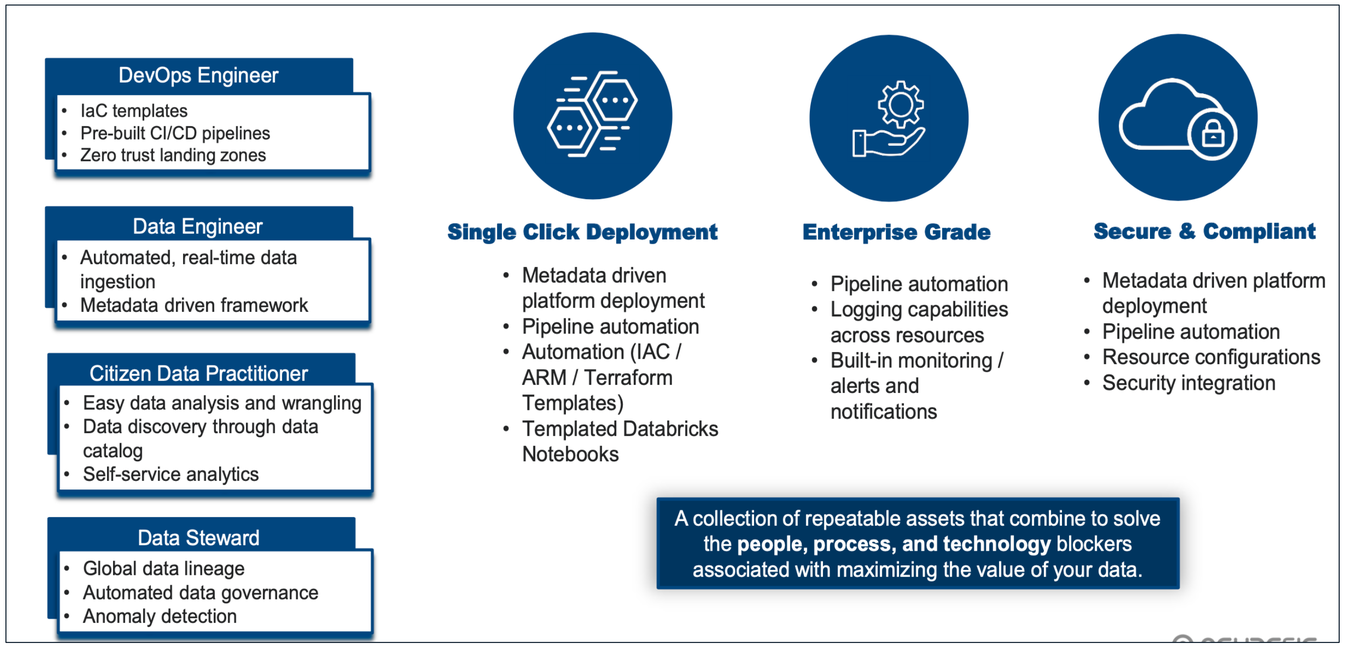
Week 0 - 2

Week 3 - 10

Week 11 - 12

# We enable the development and deployment of the MVP through Neudesic “One Data & AI Platform”

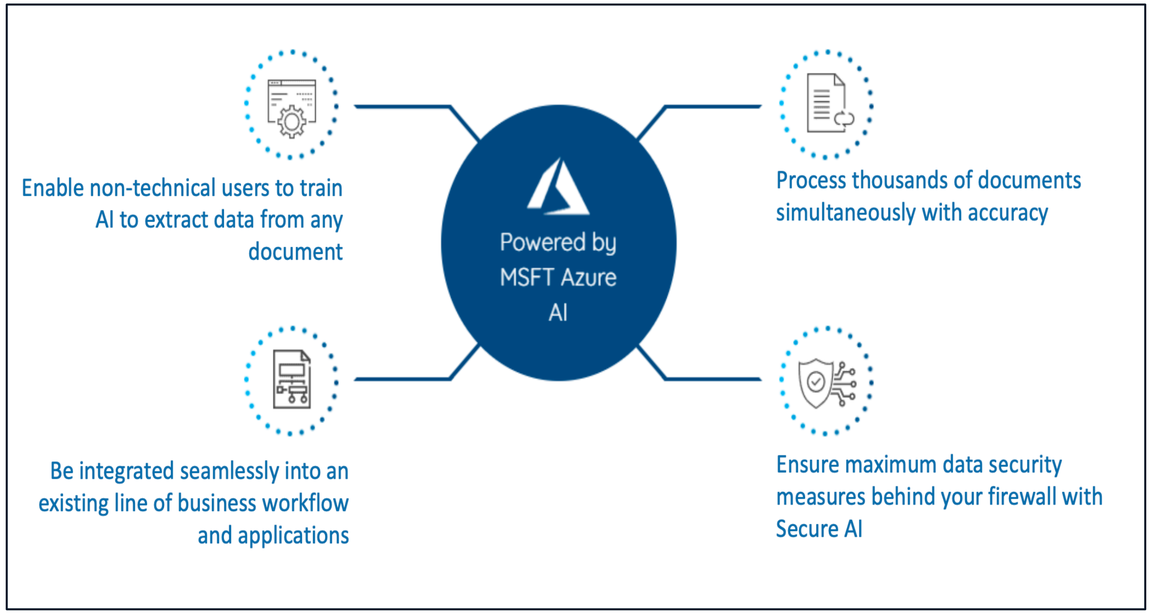



- End to end Data & AI platform built natively on Azure
- Based on 90,000+ engineering hours, lessons learned, and best practices
- Deploying 90% faster than standard implementations
- Enforcing cloud security at every access point to create impenetrable data protection

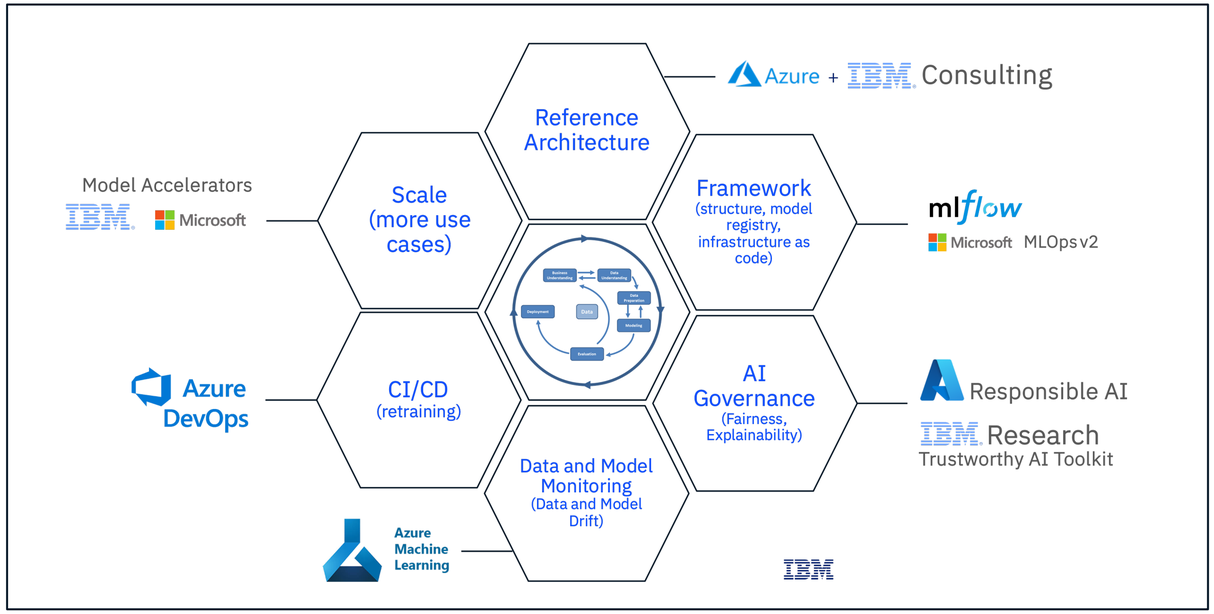
# We accelerate the development and deployment of Azure OpenAI MVPs through a set of AI Assets and Accelerators

## Document Intelligent Processing




- OpenAI enabled platform to accelerate the development of automation of complex document and unstructured data processing
- Pre-trained models for processes across Financial Services, Healthcare and Procurement

## MLOps Pipeline and Responsible AI accelerators




- Pre-built end to end MLOps pipeline implemented natively on Azure
- Integrated AI Governance tools to ensure explainability, fairness and reliability of the AI models developed and deployed

# Consumer Products Client – USA
# End to End Automated Flow on Azure for Contract Intelligence

## Challenges :

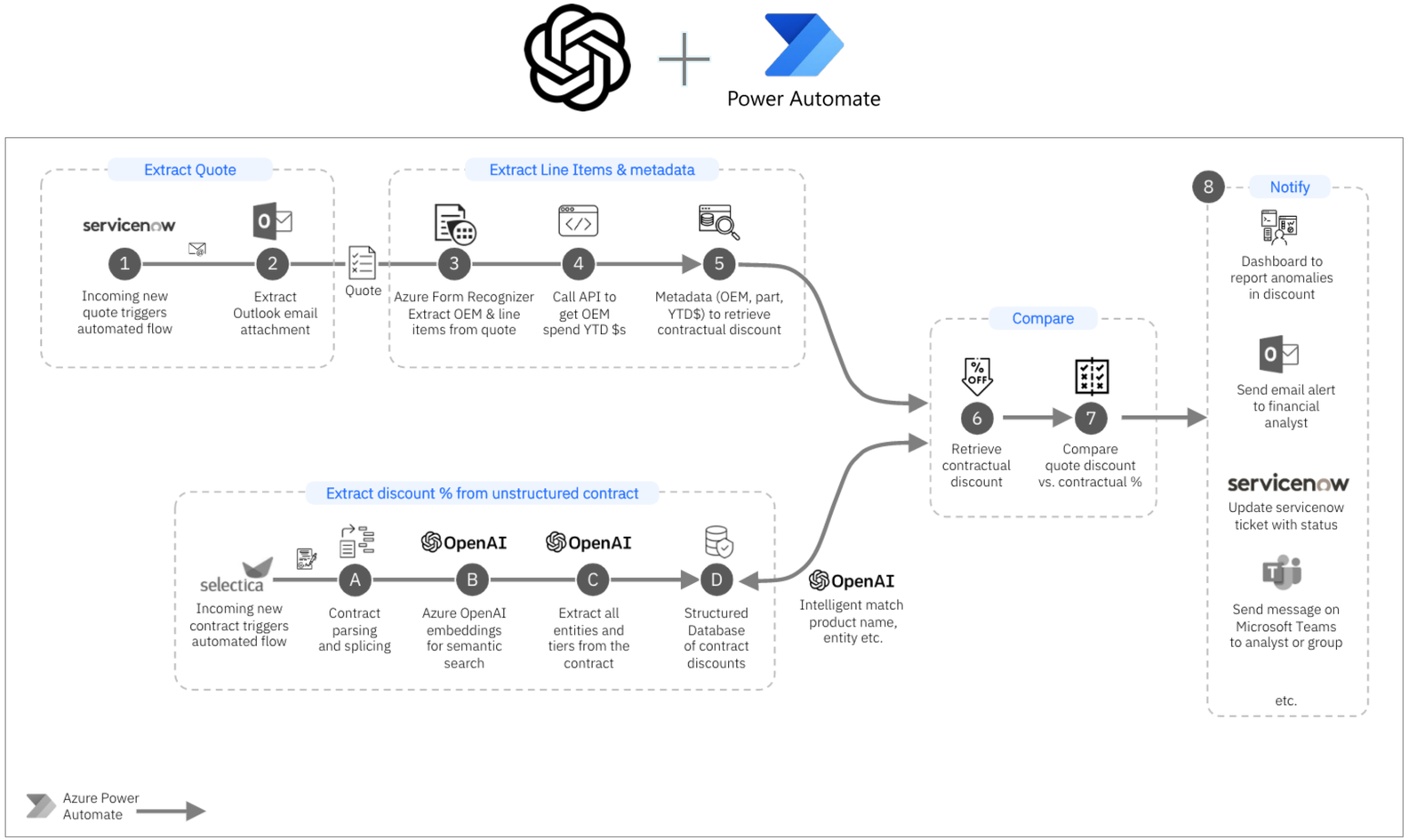
Contract management activities are **time-consuming** and require **manual effort** by vendors and financial analyst. For example, it takes **few days** to get a response from vendors and financial analyst take **an hour** to validate discounted line items.

## Proposed Solution :

- Use Azure OpenAI embeddings for **semantic search** and **intelligent matching** based on product name, entity etc.
- Use Azure OpenAI GPT models for **entity extraction** – line items and tiers from the contract

## Results :

- **Automated** workflow enabled by OpenAI and **instant comparison** of quote discount vs. contractual discount %
- Eliminated dependency on manual effort traditionally required from vendors and financial analysts



# Market Research Client – USA
# ChatGPT-powered Q&A Knowledge Assistant

## Challenges :

Research analysts are sifting through countless amounts of data to glean insights and provide in-depth reports to their clients. On top of that, this data is coming in many forms, such as PDF, PowerPoint, Word, and in some cases financial documents. These challenges make it difficult to quickly and reliably address research questions and deliver actionable insights in their reports.

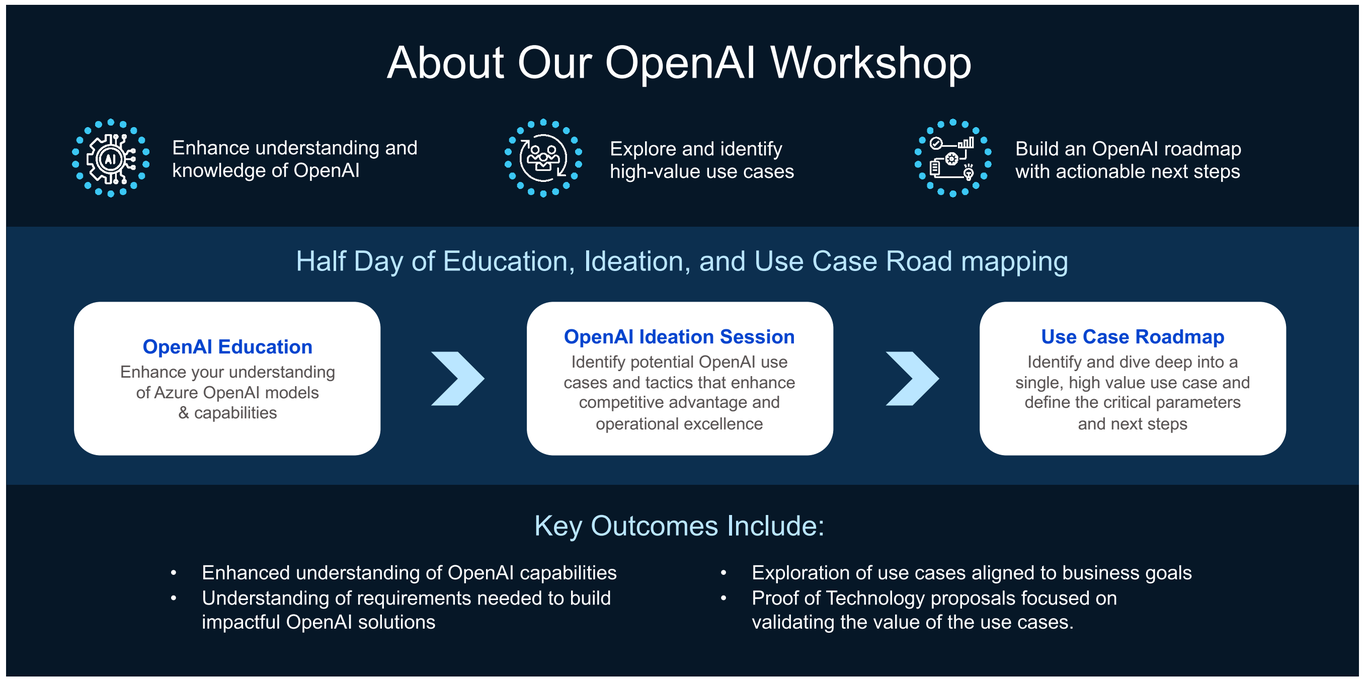
## Proposed Solution :

- Use of OpenAI ChatGPT to query research information across various resources such as Microsoft SharePoint and PDF document collection
- Use of OpenAI ChatGPT to extract answers to researcher's questions as well as source citations

## Results :

- **80% reduction in time spent** finding relevant questions for their reports
- Greater throughput and **30% accuracy improvement**
- **60% reduction in time to production** – allowing researchers to create more reports annually

**Neudesic's OpenAI Jumpstart Workshop** led the way to identify the highest-value use case for the research firm. The end result was a Q&A knowledge assistant that can interpret commonly asked questions that pertain to research and respond with answers and assets.



# Our experts have extensive hands-on experience on implementing solutions based on Generative AI

*Non-exhaustive list of already implemented solutions*

| | |
|---|---|
| **Generative AI Use-Cases** | Summarizing Telco call center conversations and extracting entities in real-time |
| | Enhancing the mobile app search performance to improve the customer experience |
| | Summarizing GitHub code repositories and explaining programming code in natural language |
| | Extracting entities from customer quotes and contracts, and enhancing search to find information more accurately |
| | Generating answers to user's questions and extracting relevant information from FAQs |
| | Augmenting FAQ items by generating relevant question answer pairs from given documents |
| | Clustering and categorizing of utterances in voice recordings |
| | Analyzing UI interfaces and generating code and templated modern UI technology stack to reduce UI modernization time |