



The Fundamentals of Generative AI

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Agenda

- Machine learning & generative AI: the basics
- Large language models: how they work
- Microsoft's Generative AI Services
- Key legal considerations for generative AI
- How legal departments are using generative AI
- Q&A



AI & ML

- **Artificial Intelligence** or AI solves tasks that require human intelligence
- **Machine Learning** or ML is a subset of artificial intelligence that solves specific tasks by learning from data and making predictions

AI experiences over the years

Microsoft has released AI-powered features for *decades*. You use AI 100s or 1000s of times per day:

- Bing search
- Artificial background, echo cancellation, "lower your hand" in Teams
- Translation services
- "Did you forget an attachment" in Outlook
- Autocomplete: Predictive text
- Speech to text
- Your LinkedIn feed



AI and ML through the years

Artificial Intelligence

Machine Learning

Deep Learning

Generative AI

1950s

Artificial Intelligence

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

1997

Machine Learning

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

2017

Deep Learning

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

2021

Generative AI

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

What is Generative AI

(As told by Copilot for M365)

Generative AI is a type of artificial intelligence that can **create new things**, like pictures, text, or speech, that are similar to examples it has seen before.

It does this by learning from a set of examples, figuring out the **patterns and rules that make them similar**, and then using those patterns and rules to **make new examples** that are similar to the ones it learned from.

It's different from other types of AI because **it can create new things**, instead of just recognizing or classifying things it has seen before.

AI in a Minute: Large Language Models

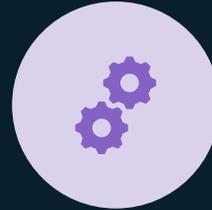
[Watch here](#)



Common Generative AI terms



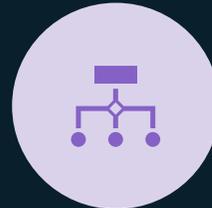
Prompt (or “input”): the question or instruction the user provides the model



Response (or “completion” or “output”): the generated content with which the model responds to the prompt



Grounding: data provided with a prompt to provide it context for responding to that prompt



Fine-tuning: a process of using data to **further train** a model so that it provides more specific responses in a given domain



Metaprompt: an instruction to the model intended to apply to all prompts/responses



Red-teaming: An adversarial system of rigorously testing a model prior to deployment

A word on OpenAI's Large Language Models

- Microsoft makes the LLMs that OpenAI trained available in its products as a **licensee**.
- Microsoft and OpenAI are both free to commercialize those models as they wish.
- Microsoft does not share *any* Customer Data with OpenAI.



How enterprises use Generative AI with Microsoft



Develop or enhance their own applications using GenAI models

Azure OpenAI Service
Azure AI Studio (preview)



Reinvent everyday experiences with their cloud applications

Copilot applications like:
Copilot for M365, Copilot for Sales, Copilot for Service, GitHub Copilot, Copilot for Security (preview), and
Copilot features for Dynamics 365, Microsoft Fabric, and the Power Platform.



Unlock the full power of Web search

Copilot (formerly Bing Chat Enterprise)



Azure OpenAI Service

GPT-3.5 Turbo

GPT-4

DALL·E

Whisper



Deployed in your Azure subscription, secured by you, and tied to your datasets and applications



Large, pretrained AI models to unlock new scenarios



AI models custom-tunable with your data and hyperparameters



Built-in responsible AI to detect and mitigate harmful use



Enterprise-grade security with role-based access control (RBAC) and private networks

A copilot for every Microsoft Cloud experience

Copilot for M365

Empower everyone with a copilot that works alongside you

Copilot in Power Platform

Imagine it, describe it, and Power Platform builds it

Windows Copilot

The first centralized AI assistance on a platform

Dynamics 365 Copilot

Specialized copilots for every role and function

Copilot for Security

Defend at machine speed

GitHub Copilot

Increase developer productivity to accelerate innovation

Generative AI: key legal considerations



Privacy and Data Confidentiality

Using Generative AI without compromising your commitments to, and obligations concerning, personal and sensitive data.



Intellectual Property

Leveraging Generative AI to create new and more efficient content without violating the rights of authors.



Responsible AI

Deploying Generative AI in a safe, fair, secure, inclusive, transparent, and **accountable** manner.



Overview: Privacy and Data Confidentiality

- Our generally available Generative AI Services are built on Microsoft Azure and therefore meet our industry-standard privacy and security commitments.
- Copilot for M365 and Azure OpenAI Service are **Core Online Services** and **EU Data Boundary Services**.
- Copilot for M365 leverages your existing data access controls to leverage only the data each user already has access to (with additional controls available).

Overview: Intellectual Property

- Microsoft always stands behind the IP in its services, including how our models were trained.
- But with our **Customer Copyright Commitment**, Microsoft will also defend against 3rd-party claims based on the Output Content that our Copilots and Azure OpenAI Service generate (with reasonable conditions).
- Our Copilot and Azure OpenAI Webinars will go deep into this new commitment.

Overview: Responsible AI

- Microsoft is committed to ensuring AI is built and used responsibly and ethically, behind our six core principles:
 - Fairness
 - Reliability and Safety
 - Privacy and Security
 - Inclusiveness
 - Transparency
 - Accountability
- Much more in next month's webinar!

Our AI Customer Commitments

- Sharing our learnings about developing and deploying AI responsibly
- Creating an AI Assurance Program
- Supporting our customers as they implement their own AI systems responsibly

The EU AI Act

- A new regulation for “AI systems” that has not yet gone into force
- Classifies AI systems according to risk:
 - “Unacceptable” → Prohibited
 - “High risk” → Regulated
 - “Limited risk” → Transparency
 - “Minimal risk” → Unregulated
- After entry into force, regulations will apply between 6 months (prohibited AI systems) and 24-36 months (high-risk AI systems)

How Legal Departments Are Using Generative AI



Knowledge Sharing

Using Generative AI to access knowledge from a wide variety of resources that already exist in the legal department



Contracting

Generating contracts from templates and adjusting terms through prompts to Generative AI models



Regulatory Compliance

Monitor and understand regulations and public policy with Generative AI to better understand key global or regional trends

Resources

- [Microsoft's "AI in a Minute" series](#)
- [Microsoft: Empowering responsible AI practices](#)
- [Microsoft's AI Customer Commitments](#)
- [The Customer Copyright Commitment](#)
- [Azure OpenAI Service: data, privacy, and security](#)
- [Copilot for Microsoft 365: data, privacy, and security](#)





Q&A



Microsoft Legal AI Webinars: the series continues

Microsoft's Responsible AI Journey: March 20-21

Unpacking Copilot for Microsoft 365: April 24-25

Exploring the Power of the Intelligent Cloud – Azure OpenAI: May 22-23

[Register here!](https://ai-legalcounselwebinar.com) - ai-legalcounselwebinar.com