### **Generative AI**

## Ispirazione e applicazione pratica per le imprese

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### Microsoft and OpenAl partnership



Ensure that artificial general intelligence (AGI) benefits humanity



Empower every person and organization on the planet to achieve more

### **Azure OpenAl Service**

GPT-4 & GPT-3.5-Turbo	Chat Completions	DALL·E 3	Whisper
Text	Conversation	Image	Transcription & Translation

### Microsoft is powered by Azure Al



### Microsoft's Responsible AI principles



### Microsoft Azure Cloud

### Runs on trust

#### Your data is your data

Your data is not used to train underlying foundation models in the model catalog, without your permission

Your data is protected by the most comprehensive enterprise compliance and security controls • Data is stored encrypted in your Azure subscription

- Azure OpenAl Service provisioned in your Azure subscription
- Model fine tuning stays in your Azure subscription
- Encrypted with Customer Managed Keys
- Private Virtual Networks, Role Based Access Control
- Soc2, ISO, HIPPA, CSA STAR Compliant

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## Models

### **Azure OpenAl Service**



## Key Concepts in LLMs

## Tokens

You can think of tokens as pieces of words used for natural language processing. For English text, 1 token is approximately 4 characters or 0.75 words.

As a point of reference, the collected works of Shakespeare are about 900,000 words or 1.2M tokens.

### Azure OpenAI | GPT-3 Prompt Design

Extract the mailing address from this email:

Hi John Doe,

It was great to meet up at Build earlier this week. I thought the AI platform talk was great and I really enjoyed it.

I appreciate the offer for the book. If you are OK, you can mail it to me at home, or 123 Microsoft Way, Bellevue WA 92004.

Regards,

**Chris Hoder** 

**Prompt**—Text input that provides **some context** to the engine on what is expecting.

**Completion**—Output that GPT-3 generates based on the prompt.

## Few Shot Reasoning – Example 1

### 1st prompt

Roger has 5 tennis balls. He buys 2 more cans of tennis balls. Each can has 3 tennis balls. How many tennis balls does he have now?

#### Answer: The answer is 11.

The cafeteria has 23 apples. If they used 20 to make lunch and bought 6 more, how many do they have?

#### The answer is 27.

### 2nd prompt—provide reasoning

Roger has 5 tennis balls. He buys 2 more cans of tennis balls. Each can has 3 tennis balls. How many tennis balls does he have now?

### Answer: Roger started with 5 balls. 2 cans of 3 tennis balls each is 6 tennis balls. 5+6 = 11. The answer is 11.

The cafeteria has 23 apples. If they used 20 to make lunch and bought 6 more, how many do they have?

The cafeteria had 23 apples originally. They used 20 to make lunch. So they had 23-20 = 3. They bought 6 more apples, so they have 3 + 6 = 9. The answer is 9.





### Use Cases

### Principali scenari

#### Ricerca e Sviluppo

**Document intelligence**: analisi automatica mole di documenti, la ricerca ed estrazione di informazioni chiave **Content Generation**: creazione automatica di report e paper **Inverse design**: supporto alla simulazione e prototipazione

#### Progettazione e creatività

Design personalizzato: personalizzare prodotti Prototipazione virtuale: creazione automatica di prototipi virtuali per testare nuovi prodotti o soluzioni Creazione collezioni/cataloghi prodotti: supporto creativo

#### Produzione e supply chain

**Procurement/Legal Assistant**: semplificare attività di legali **Predictive Maintenance**: previsione della manutenzione **Demand planning**: pianificazione automatica della domanda **Controllo di qualità** automatizzato

#### **Customer Service**

**Bot per il servizio clienti:** rispondere automaticamente alle richieste dei clienti **Avatar/assistente virtuale** (TTS, STT): migliorare l'interazione con i clienti con la componente audio

#### Marketing e Vendite

Profilazione e segmentazione dei clienti: profilare per preferenze
Marketing campaign: creazione contenuti multilingue
Schede prodotto: creazione schede prodotto personalizzate
Forecasting e churn prediction: previsione delle vendite e churn

#### Organizzazione e processi & Compliance

Bot per supporto processi interni: supporto su IT, richieste, documentazione aziendale per dipendenti Ticketing: gestione automatica tickets dei dipendenti Compliance Check: verificare la conformità alle normative

#### Finance

**Cost Optimization**: analisi dei processi per ottimizzazione dei costi **Forecasting**: prevedere le vendite e altre metriche finanziarie **Pricing dei prodotti**: determinazione automatica dei prezzi **Automazione del reporting**: generazione dei report finanziari

#### **Risorse Umane**

**Recruitment (analisi cv):** analisi cv per semplificare la selezione **Onboarding pack new hire**: creazione pacchetti di onboarding strutturati per i nuovi assunti **Formazione**: pianificazione ed erogazione della formazione

### Demo



### **Copilot for Microsoft 365 Your Al assistant at work**

Giada Carlassara Channel Sales – Small & Medium Business



### Microsoft 365 copilot basic architecture



## Copilot for Microsoft 365 is transforming work

### 60%

of leaders say a lack of innovation or breakthrough ideas is a concern

64%

of people have struggled with finding time and energy to get their work done

70%

of people indicated they would delegate as much as possible to Al to lessen their workloads





said Copilot improved the quality of their work

### 70%

said Copilot made them more productive

77%

said they didn't want to give Copilot up

### **Copilot users are more productive**



Source: Survey of Copilot for Microsoft 365 Early Access Program users, October 2023; The missed meeting' study; 'Email effectiveness' study; The strain of searching' study.

### Is Copilot worth more than a free lunch?



Source: Survey of Copilot for Microsoft 365 Early Access Program users, October 2023.

### See how the apps work – Click on the icon for a demo



### Demo

# Thank you