The background features a futuristic, digital aesthetic with glowing blue and orange light trails. A magnifying glass is positioned on the right side, its lens focused on a complex data visualization that includes a line graph and various data points. The overall scene conveys a sense of deep analysis and technological advancement.

Supercharge Your Search with Azure AI Search + OpenAI

October 30, 2024

11 – 11:45 AM EDT

Peter Carson



- President, Extranet User Manager and Envision IT
- 14-time Microsoft M365 MVP
- pcarson@envisionit.com
- blog.petercarson.ca
- President, Toronto Microsoft 365 User Group



About Us

- Established in 2008 in Toronto, Canada area
- Brand of software products owned by Envision IT Inc.
- Leader in the Microsoft 365 space and a Microsoft Partner for 10+ years



Extranet User Manager

We Make Microsoft Simple

- We make Microsoft simple for organizations to connect with their external stakeholders
- An exceptional user experience lets businesses collaborate with external stakeholders and maintain Microsoft security.
- IT is involved at the beginning, ensuring a seamless integration, while the business can focus on what really matters – **getting the job done.**

Imagine this...

You're a hotel guest and you want restaurant recommendations for dinner tonight, so you walk up to the hotel concierge to ask for their restaurant recommendations.



Agenda

- Introductions
- Copilot for Microsoft 365
- Build Your Own Chat
- Azure Open AI and AI Search
- Real World Demonstration
- Summary, Q&A and Closing



Search bar with microphone and image search icons

Google Search


I'm Feeling Lucky


Google offered in: [Français](#)

Canada




What can I help with?

 Create image

 Analyze data

 Code

 Brainstorm

More

 Message ChatGPT

ChatGPT can make mistakes. Check important info.



Copilot



Copilot

For Microsoft 365

Follow up strong!

Write a follow up email to meeting to drive continued progress.

Get calendar info

When's my next meeting with person ?

Understand quickly

Provide a comprehensive summary of my emails about [the FY24 Sales Report]

Decode acronyms

What does [LLM] stand for?

Help me write

Write an email to my team about our top priorities for next quarter from file

Prep for that meeting

Help me prepare for meeting

View prompts

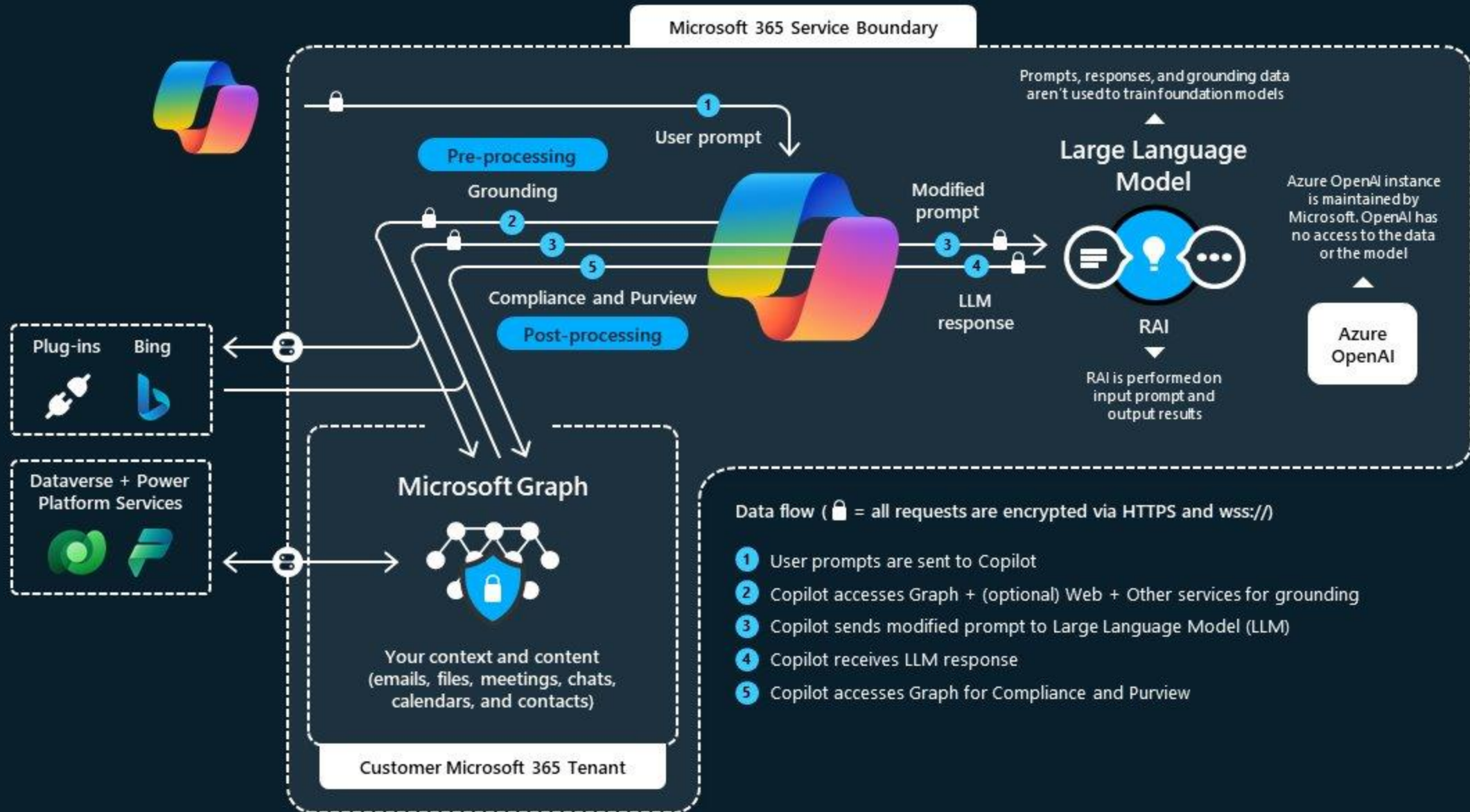
Use / to insert people, files and more

Add people, files, and more for better results

0 / 2000



Microsoft Copilot for Microsoft 365 architecture



Azure OpenAI



- [Azure OpenAI Service – Large Language Models for Generative AI \(microsoft.com\)](https://microsoft.com)
- Azure OpenAI service features offers REST API to a wide variety of models
- Different language models co-develop their APIs to help ensure compatibility and easy transitions
- Azure OpenAI ensures the same security standards as Microsoft Azure
- Azure OpenAI offers private networking, regional availability, and responsible AI content filtering

[Home](#) > [Resources](#) > [Events](#)

Events

Filters

- Upcoming
- All



[Microsoft AI Tour in Toronto](#)

Dec 3, 2024 7:15 a.m. - 6:15 p.m.

We are looking forward to demonstrating how AI can be used to provide simplified and streamlined access to data for guest users. Stay tuned for more details about our participation.



[ESPC 2024](#)

Dec 2, 2024 - Dec 5, 2024 9:00 a.m. - 5:00 p.m.

The Extranet User Manager team is excited to be returning to ESPC 2024 as a Silver Sponsor. Join us for three days of insightful sessions, workshops, and networking with IT professionals and M365 enthusiasts.



[TechCon 365](#)

Nov 11, 2024 - Nov 15, 2024 9:00 a.m. - 5:00 p.m.



Home > Demo > Chat

Chat

Ask anything or try an example

What is TLP?

What are the labels?

What about strict labels?



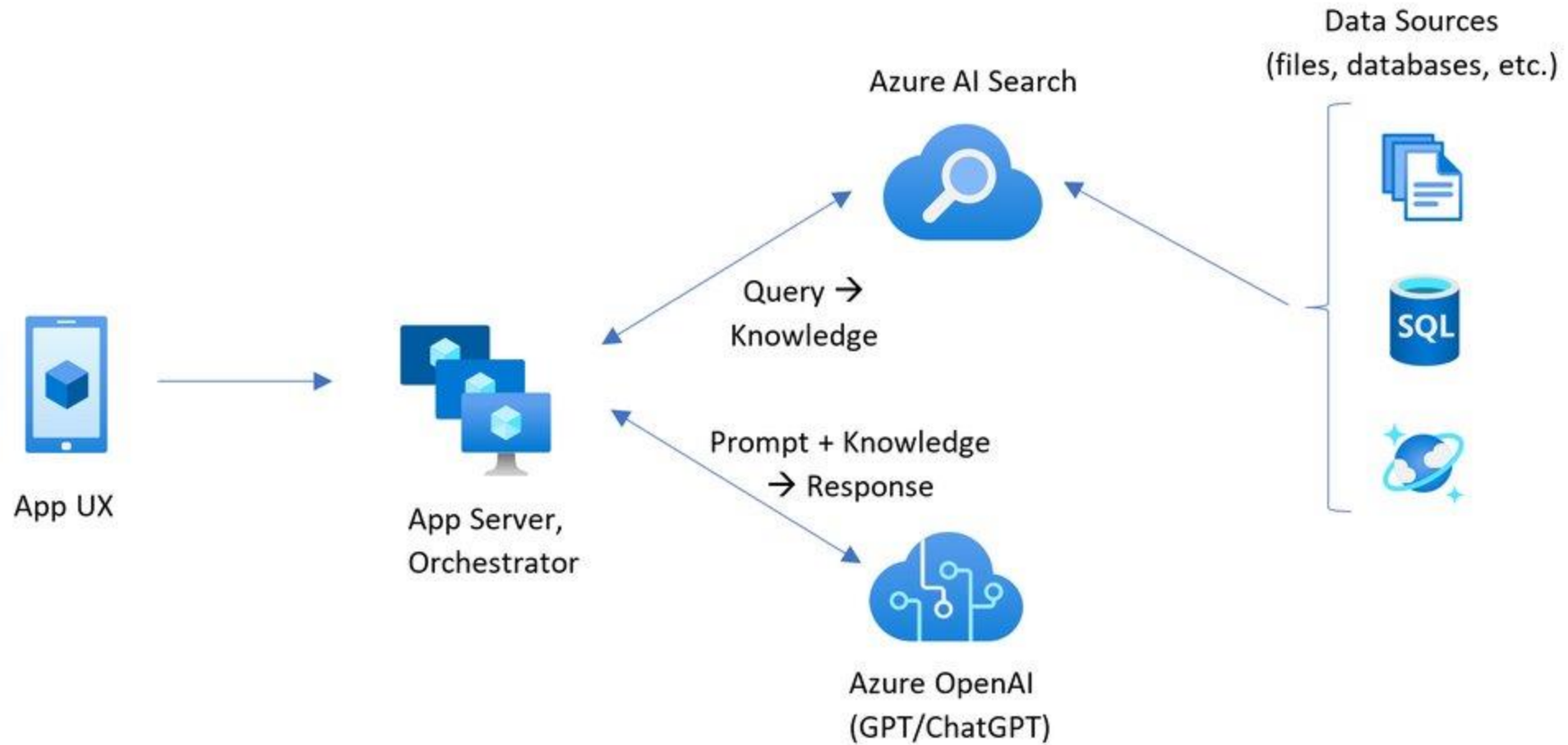
Ask me anything...



RAG Retrieval-Augmented Generation

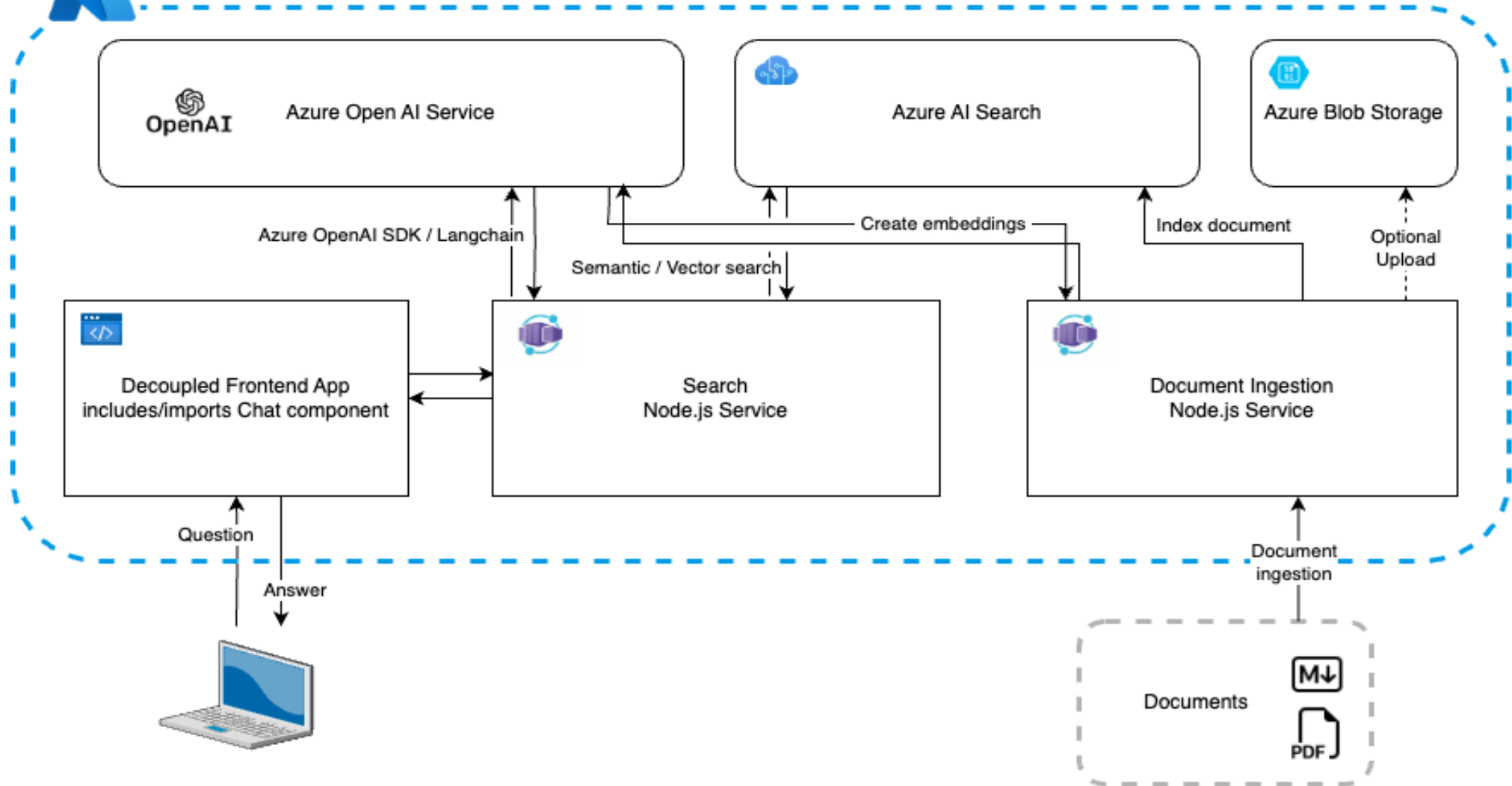


Architectural Overview

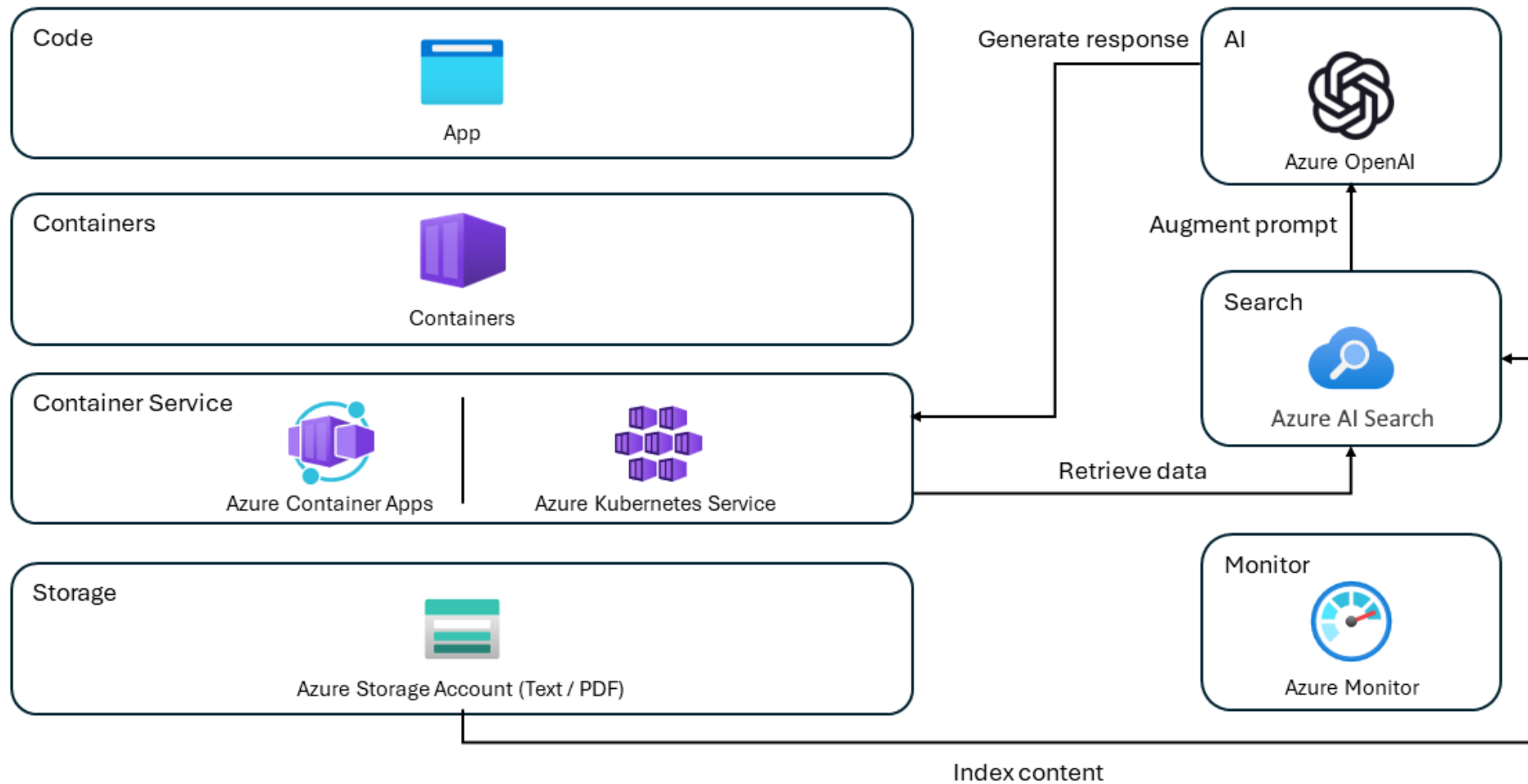




ARCHITECTURE DIAGRAM



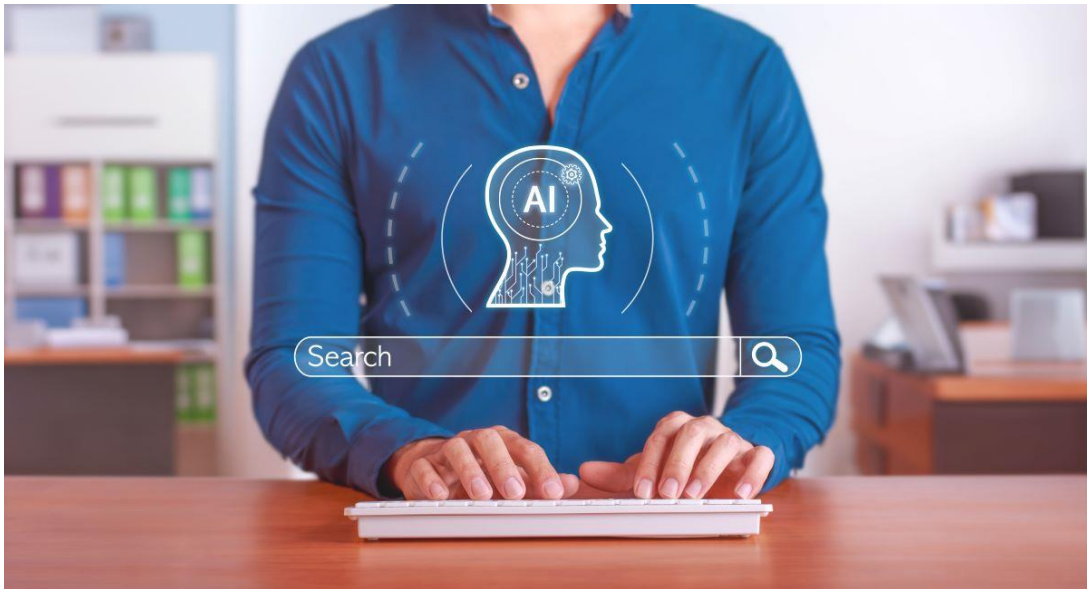
[Get started with the chat using your own data sample for JavaScript - JavaScript on Azure | Microsoft Learn](https://learn.microsoft.com/en-us/javascript/azure/javascript-on-azure)



[Get started with the chat using your own data sample for .NET - .NET | Microsoft Learn](#)

Search 

Transitioning from Keyword to Semantic and Vector Search



- **Keyword Search:** Direct matching of query terms to terms in documents or databases.

Use Cases: Early search engines, basic database queries.

Advantages: Simple, quick, easy to implement.

Limitations:

- Requires exact term matches
- Can yield irrelevant results if terms are out of context
- Can miss relevant documents if they don't use the exact terms

Semantic Search

Understands the meaning and intent behind user queries, rather than just matching keywords.

Use Cases: modern search engines, CMS, e-commerce recommendations.

Advantages:

- Relevant results
- Can answer queries instead of just returning files
- User-friendly with natural language queries

Limitations:

- Requires more sophisticated algorithms
- Potential for ambiguity in interpretation

Vector Search

Finds items in a dataset based on their similarity in meaning or context, rather than exact keyword matches.

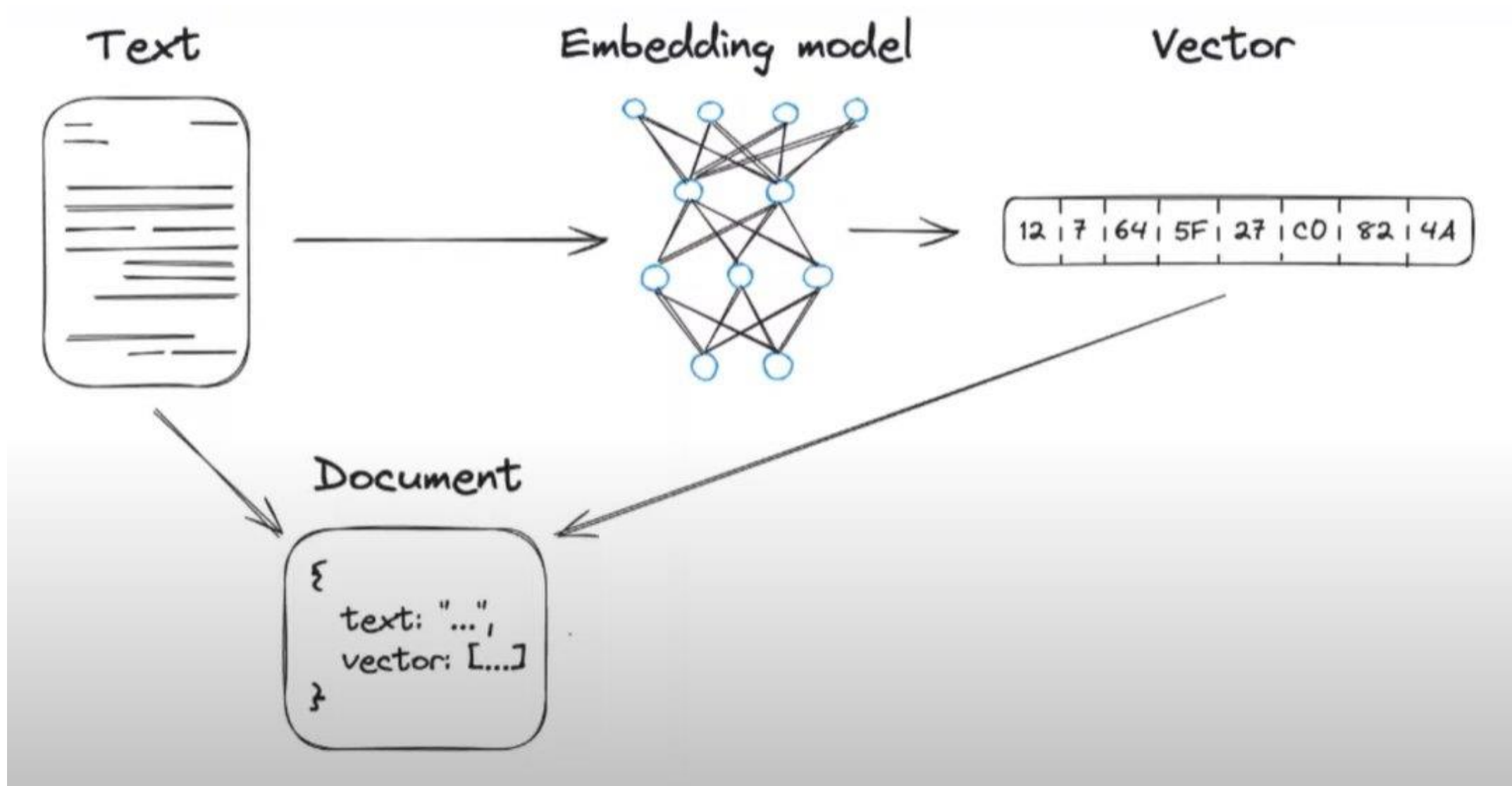
Use Cases: advanced data retrieval systems, document clustering, and topic modelling.

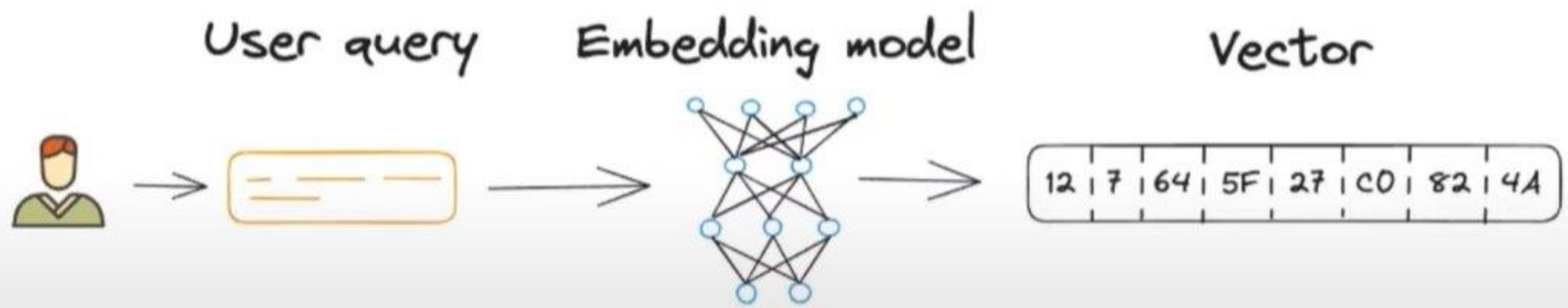
Advantages:

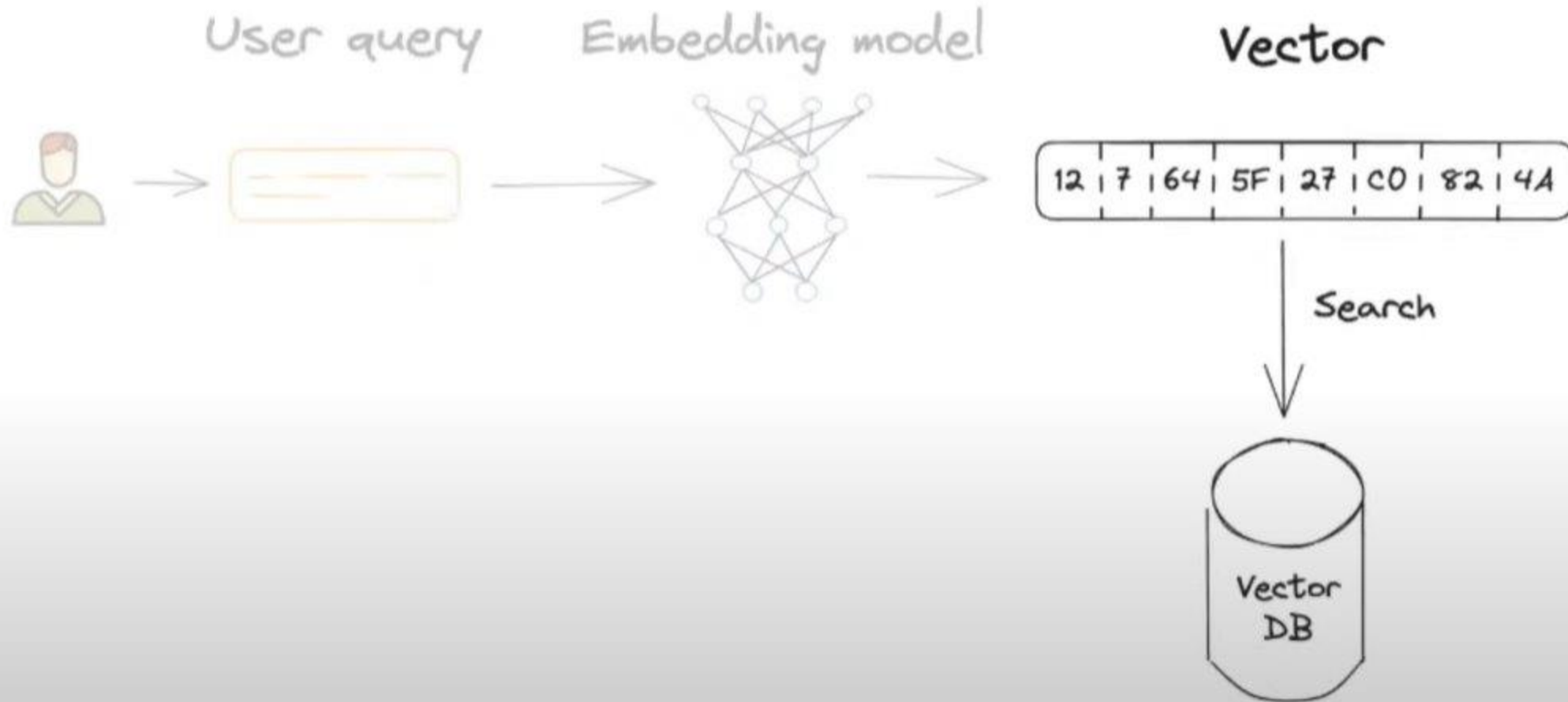
- Relevant results
- Understands context, relationships between words
- Supports languages and terms with sparse data

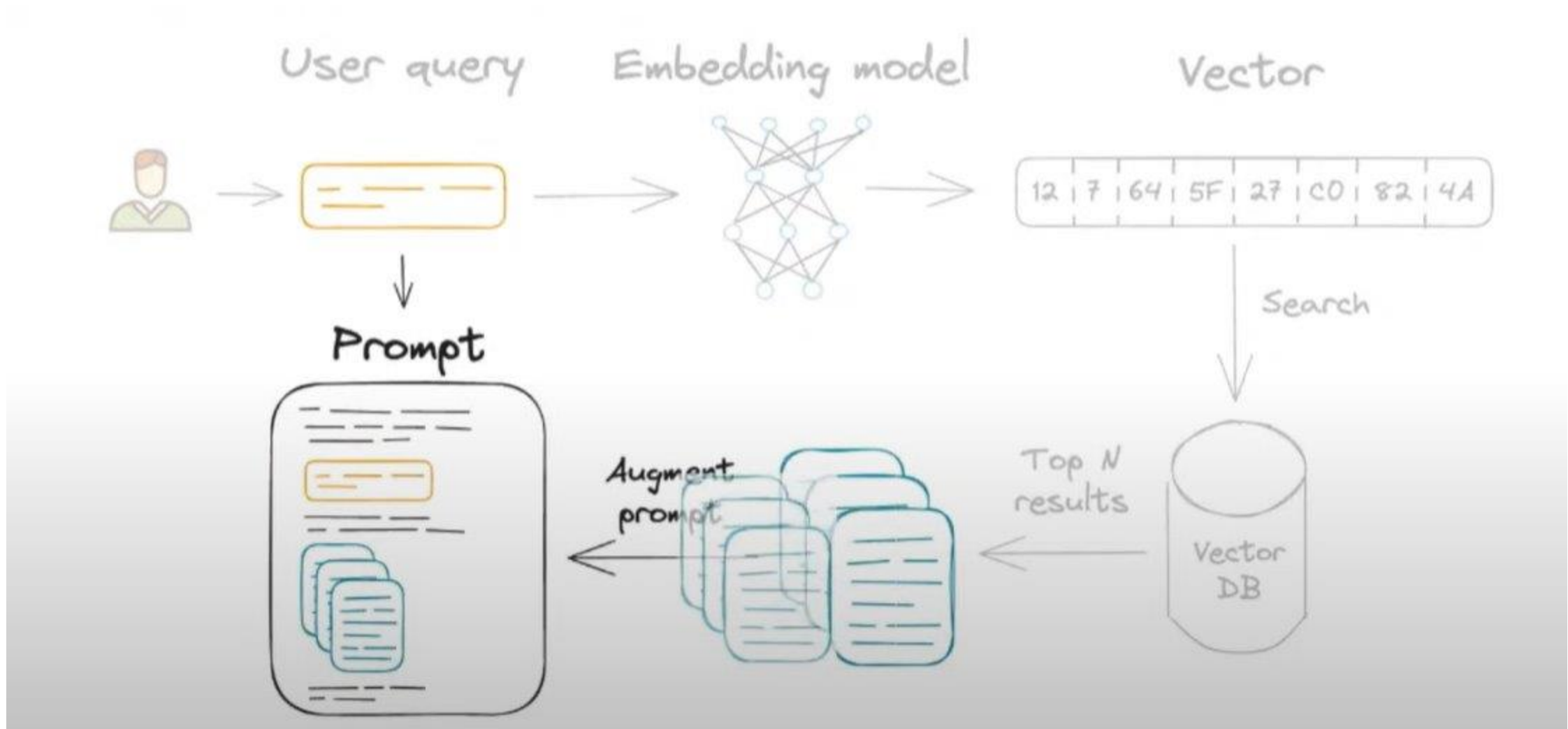
Limitations:

- Requires substantial computational power
- Vector models need training and refining



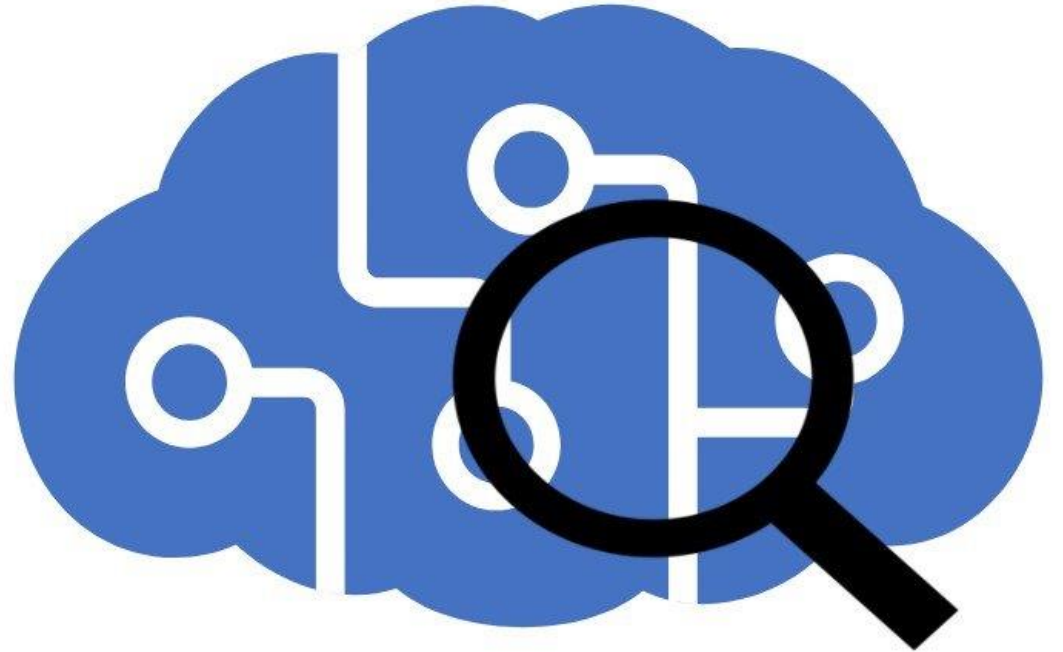






Azure AI Search

- Cloud service providing a full-text search engine, offering semantic and vector search capabilities
- Intended for developers needing application/based search experiences
- Benefits from vast data sources and AI-enhanced indexing



Azure OpenAI Pricing

[Azure OpenAI Service - Pricing | Microsoft Azure](#)

Priced and scaled by tokens and context

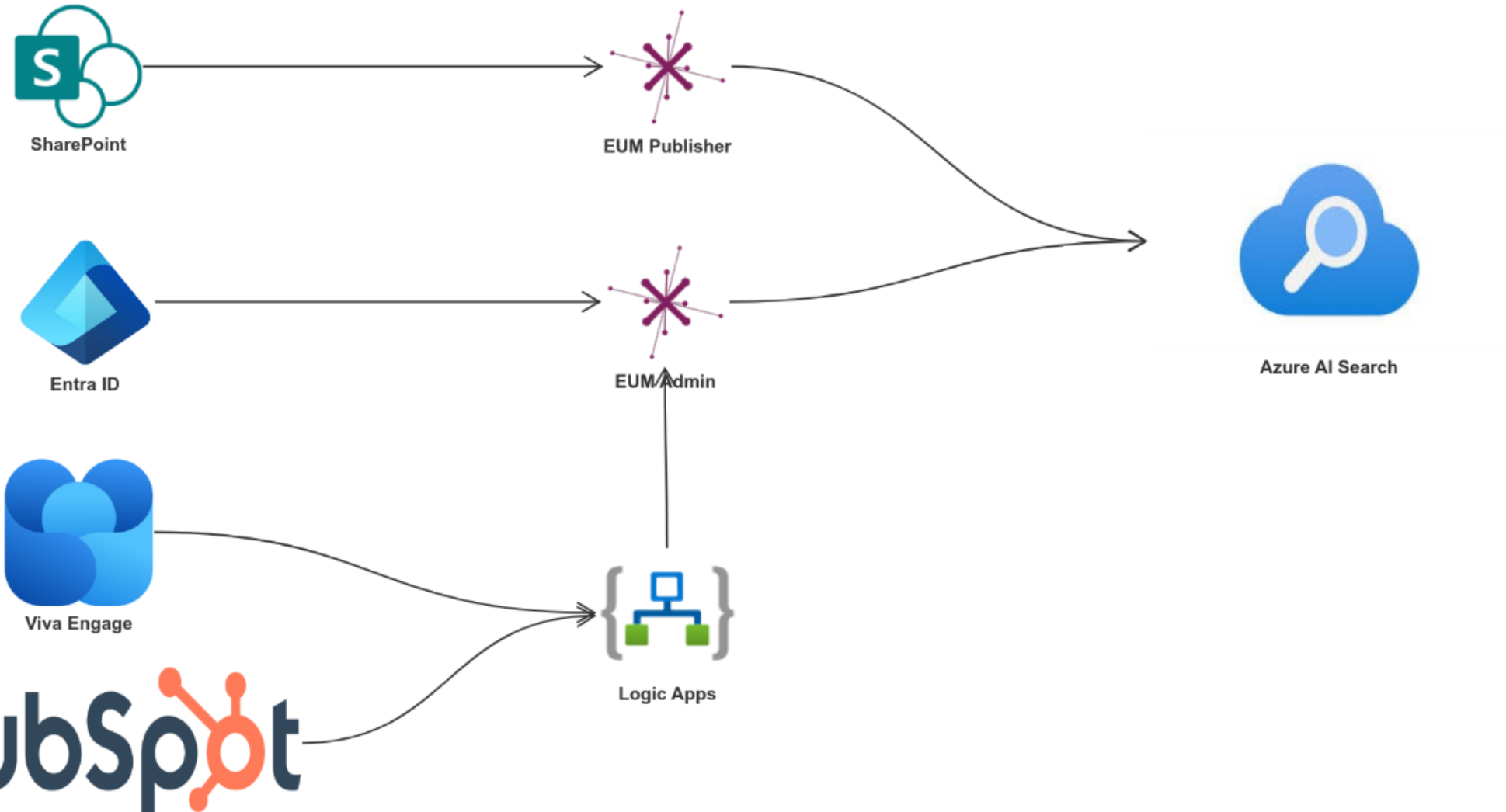
- 1 token \approx 4 chars in English
- 1 token \approx $\frac{3}{4}$ words
- 100 tokens \approx 75 words

Models	Context	Input (Per 1,000 tokens)	Output (Per 1,000 tokens)
GPT-3.5-Turbo-0125	16K	\$0.0007	\$0.0021
GPT-3.5-Turbo-Instruct	4K	\$0.0021	\$0.003
GPT-4	8K	\$0.042	\$0.083
GPT-4	32K	\$0.083	\$0.165

Azure AI Search Pricing

	Free	Basic	Standard S1	Standard S2	Standard S3	Storage Optimised L1	Storage Optimised L2
Storage ¹	50 MB	15 GB (max 45 GB per service)	160 GB (max 1.9 TB per service)	512 GB (max 6 TB per service)	1 TB (max 12 TB per service)	2 TB (max 24 TB per service)	4 TB (max 48 TB per service)
Max indexes per service	3	15	50	200	200 or 1,000/partition in high density mode	10	10
Scale out limits	N/A	Up to 9 units per service ² (max 3 partition; max 3 replicas)	Up to 36 units per service (max 12 partition; max 12 replicas)	Up to 36 units per service (max 12 partition; max 12 replicas)	Up to 36 units per service (max 12 partition; max 12 replicas) up to 3 partitions in high density ³ mode	Up to 36 units per service (max 12 partition; max 12 replicas)	Up to 36 units per service (max 12 partition; max 12 replicas)
Price per SU (Scale Unit)	\$0/hour	\$0.14/hour	\$0.47/hour	\$1.85/hour	\$3.69/hour	\$5.26/hour	\$10.52/hour

EUM AI Search Architecture



Azure AI Search Demo

Home > Search > Search Snippet Builder

Search Snippet Builder

Snippet

Articles List Search Snippet

Query Template Search

SearchText

Filter

EUMSearchSource eq 'Publisher Pages' and ContentType eq 'EUM Article' and search.in(SiteURL, '{currentSite}')

Select

Title, RelativeURL, RollupContent, RollupImage, PublishedDate1, SiteURL

OrderBy

PublishedDate1 desc

Size

JSON Data Table Preview Fullscreen Snippet



Best Practices in Secure File Sharing for Government

June 27, 2024

In 2023, private data exposure incidents reached a record high, with 100 reported cases impacting a ...



EUM Sponsored Mercedes-Benz World Driving Experience

June 26, 2024

EUM is giving away a half hour driving experience at Mercedes-Benz World in Weybridge, UK. The draw ...



What's Going on with Microsoft Delve?

June 25, 2024

Microsoft will be retiring the Delve web app as of December 2024. Read to find out why, how this may...

Configuring Power Pages Entra ID B2B Authentication

EUM Admin Search Explorer Search ⌵

Home
Reports
Users
Groups
Admin
Email Templates

SearchText

Request Body

```
{
  "searchOptions": {
    "filter": "EUMSearchSource eq 'Publisher Pages'",
    "size": "10"
  },
  "select": [],
  "orderBy": []
}
```

JSON Data Table

```
{
  "totalCount": 899,
  "facets": {},
  "value": [
    {
      "score": 1,
      "highlights": null,
      "semanticSearch": {
        "rerankerScore": null,
        "captions": null
      },
      "document": {
        "id": "14626fa4-5c33-4a19-a3d6-5a647ca5205d-portaldev",
        "Company": null,
        "CompanyID": null,
        "Partner": null,
        "PartnerID": null,
        "Status": null,
        "EstimatedCloseDate": null,
        "GuestCount": null,
        "InstallationPackage": null,
        "LicenseTerm": null,
        "Notes": null,
        "WaitingOn": null,
        ...
      }
    }
  ]
}
```

Support User Guide License valid until 2024-12-31 © 2024 Extranet User Manager - v7.1.1654.1





















Home > About Us > Directory > Envision IT Staff Directory

Envision IT Staff Directory

Enter a search term



















Found 24 results in 0.56 seconds

-  **Aaron Silver**
Developer
-  **Alina Raza**
UI / UX Developer
-  **Amanda Da Costa**
Executive Assistant
-  **Anish Birju**
Developer
-  **Artur Pinheiro**
Developer
-  **Denesh Sohan**
Director of Engineering
-  **Devraj Banerjee**
Customer Success Specialist
-  **Don Harkness**
Chief Financial Officer
-  **Eman Abdeen**
Quality Assurance and Support
-  **Faye Yuan**
Senior Accountant
-  **Gurinderpal Dhillon**
Senior Developer
-  **Jeff Clement**
Senior UI/UX Developer
-  **Joel Stickland**
Sales Development Representative
-  **Kate Carson**
Developer
-  **Kevin Smith**
Chief Marketing Officer
-  **Logan Guest**
VP Sales and Customer Success
-  **Maha Elkoshairi**
Senior Consultant
-  **Mark Campbell**
Senior Consultant
-  **Niki Patel**
Quality Assurance Specialist
-  **Peter Carson**
President & CEO



Service Areas

 Accounts Payable	 Building Permits and Inspections	 By-Law Enforcement	 Child Care
 Clerks	 Culture	 Customer Service	 Emergency Medical Services (EMS)
 Emergency Shelters	 Facilities	 Fire and Rescue Services	 Fleet
 General Government	 General Revenues	 Human Resources	 Information Technology

<https://mbncanada.ca>

Home > Search

Search

Filters

- All
- PDF
- Webpages

parking

✕

Found 353 results in 0.33 seconds

 [Parking App](#)

No coins?

 [Disputing a Parking Ticket](#)Quick Link for Dispute Forms: Request for Screening Officer Review Form Request for Hearing Officer Review Form Why are **Parking** Tickets issued? [JMCC Parking Lot](#)JMCC **Parking** Lot at Malden Park Why was the **Parking** Lot Closed? [Accessible Parking Permits and Veteran Plates](#)**Parking** privileges are available to those with a valid accessible **parking** permit or a veteran plate (Ontario poppy plate or other demarcation). [Parking Officers Misconceptions](#)There are a lot of common misconceptions regarding the **Parking** Enforcement outside contractor, the Commissionaires of Ottawa - Windsor Division. [3-Day Parking Infraction and Trailers](#)What is a 3-day **parking** infraction?<https://www.citywindsor.ca>



Home > Directory > Speakers

Speakers

Enter a search term



Found 41 results in 2.27 seconds



Amit Vasu



Brad Orluk



Brian Lalancette



Craig Lussier



Dave Healey



David Drever



Denis Molodtsov



Denzil Fernandes



Doug Davis



Doug Ferrier

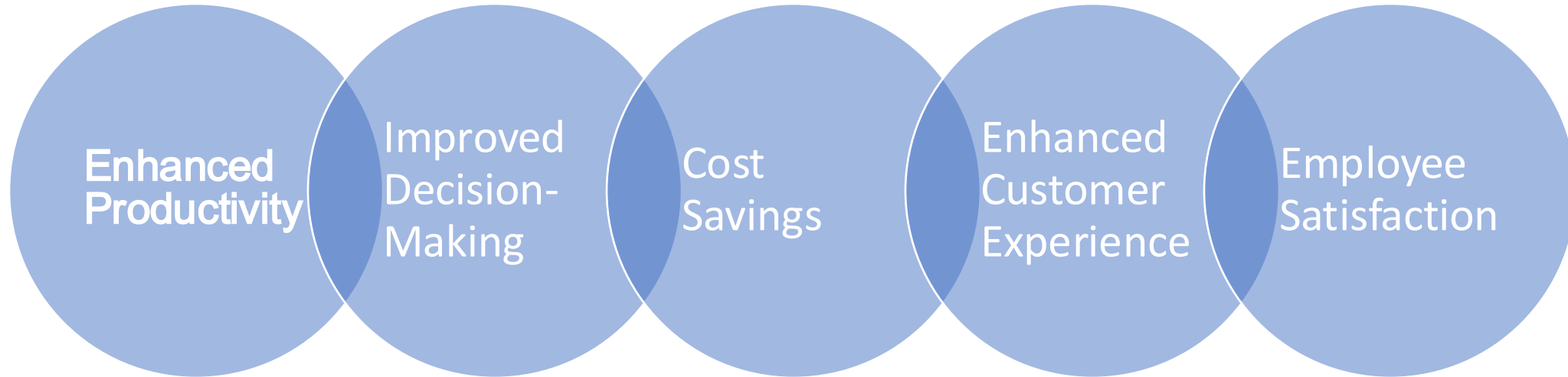


<https://tm365.org>

Key Points

- Search is a key component of a chat experience
- Think about grounding and security
- There are many ways to do this within Microsoft
 - Copilot
 - Copilot Studio
 - Custom dev and Azure
- Azure AI Search is incredibly powerful

Summary of Key Benefits



Resources

- [AI Community Conference - Vancouver 2024 | Extranet User Manager](#)
- [Azure AI Search and Open AI Webinar | Extranet User Manager](#)
- [Get started with the chat using your own data sample for JavaScript - JavaScript on Azure | Microsoft Learn](#)
- [Azure AI Search documentation | Microsoft Learn](#)
- [Simple query syntax - Azure AI Search | Microsoft Learn](#)
- [Pricing - Azure AI Search | Microsoft Azure](#)
- [Azure OpenAI Service - Pricing | Microsoft Azure](#)
- [GitHub - Azure-Samples/serverless-chat-langchainjs: Build your own serverless AI Chat with Retrieval-Augmented-Generation using LangChain.js, TypeScript and Azure](#)
- [Building RAG apps with LangchainJS - YouTube](#)

Upcoming Events



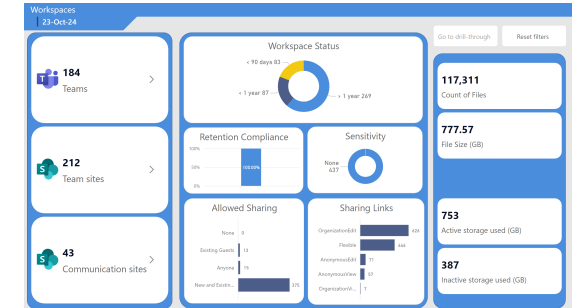
TechCon 365 2024

Dallas, TX
Nov 11-15



ESPC 2024

Stockholm, Sweden
Dec 2-5




**Announcing our Self-Serve Freemium
M365 Tenant Dashboard**


Online
November – Stay tuned!

[Events](#) | [Extranet User Manager](#)

[Go to drill-through](#) [Reset filters](#)

 **184**
Teams



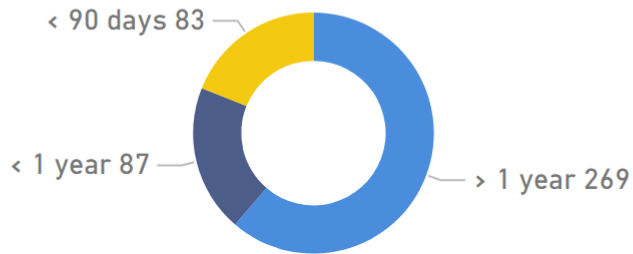
 **212**
Team sites



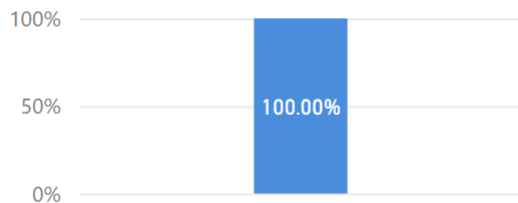
 **43**
Communication sites



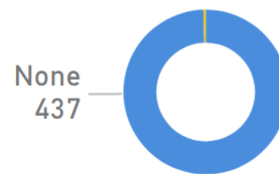
Workspace Status



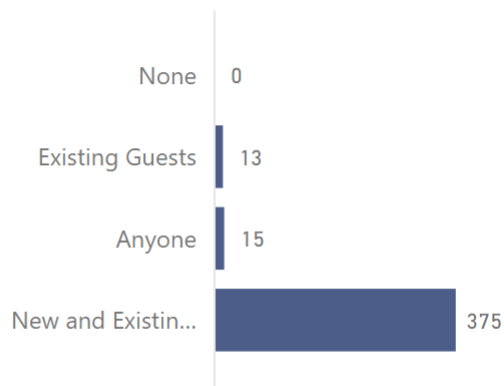
Retention Compliance



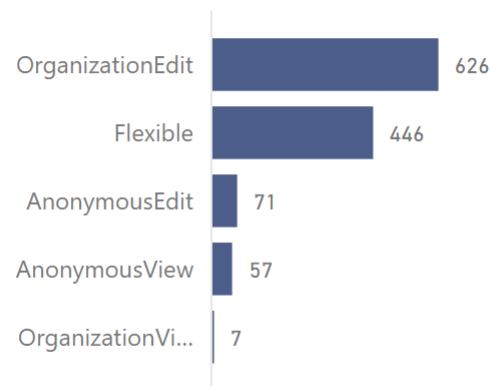
Sensitivity



Allowed Sharing



Sharing Links



117,311
Count of Files

777.57
File Size (GB)

753
Active storage used (GB)

387
Inactive storage used (GB)

Thank you!

Any Questions?