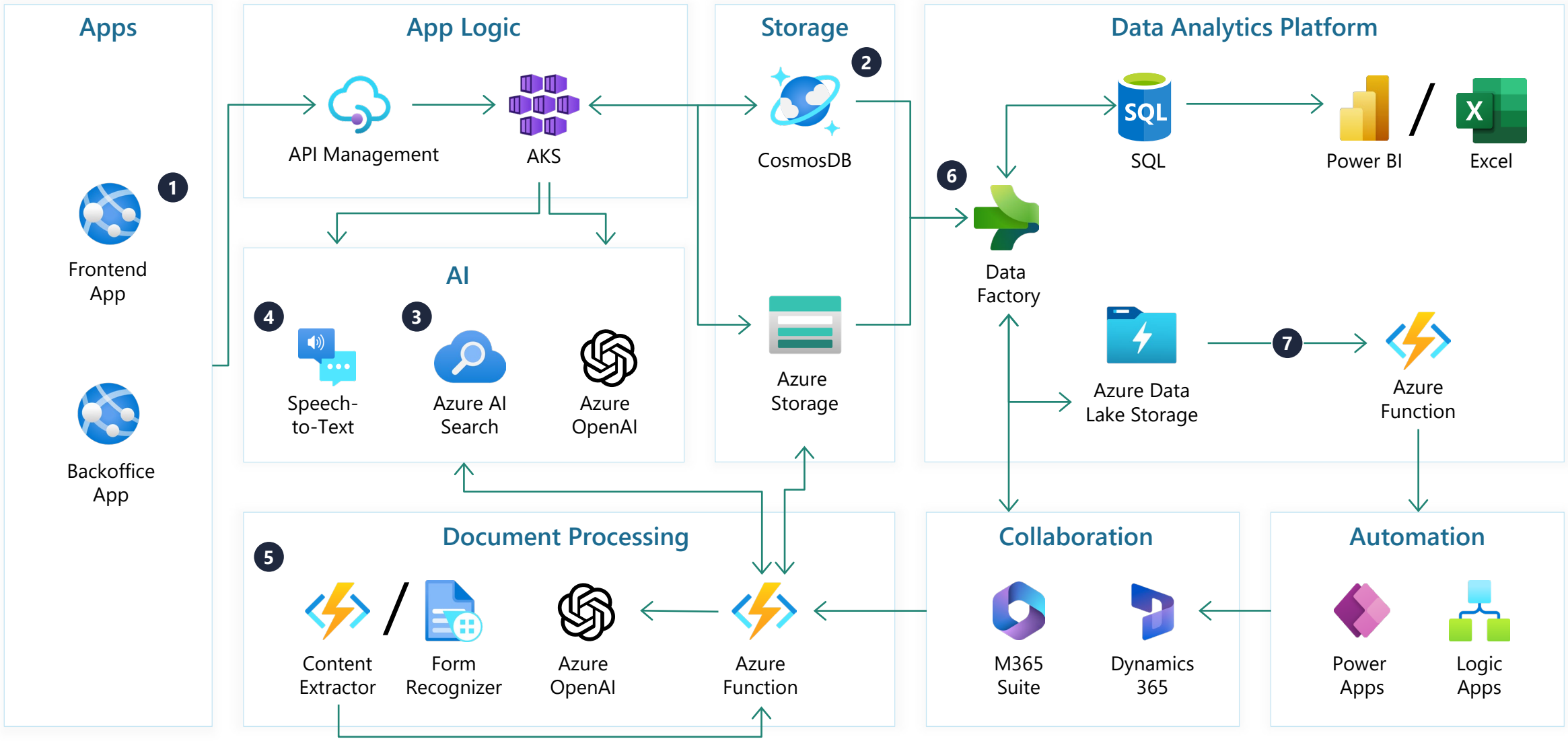
Microsoft

Simplify case management

Simplify Case Management with Generative AI



Summarization Workflow

1. AppServices handles user requests and hosts the web or mobile interface. It's the primary hosting platform for the application, where User inputs his queries. API Management Manages the interaction between the user's queries and backend services. It ensures security, analytics, and usage limits for API calls.

2. CosmosDB is used for storing conversation history and user settings. It provides a scalable, responsive database service that enhances the application's ability to recall previous interactions and maintain consistent configuration settings.

3. Azure AI Search when integrated into a Retrieval Augmented Generation (RAG) application, plays a crucial role in enhancing the information retrieval process.

   System retrieves relevant documents or data snippets based on a user's query. The retrieved information is then passed back to Azure OpenAI. Here, the models synthesize this information, generating coherent, comprehensive, and contextually relevant responses or content based on the user's initial query.

   This step might involve summarizing information, answering questions directly, or even generating new content that aligns with the user's request.

Spoken Notes Workflow

4 For spoken notes, the Speech to Text service transcribes the audio. This service can be customized with a specific AI model tailored to understand domain-specific terminology that User uses, enhancing the accuracy of the transcription.

Once the notes are transcribed, embeddings for the text are generated. Embeddings are vector representations of text that capture the semantic meaning of words and phrases.

The generated embeddings are stored in Azure AI Search which can index the embeddings for efficient retrieval.

User can input a search query, and Azure AI Search will use the embeddings to quickly find relevant information written and transcribed spoken notes.

Document Processing Workflow

5

The workflow begins with the extraction of data from both structured and unstructured documents using Azure Form Recognizer. Depending on availability, a custom component is used to process and extract content from these documents. This service identifies and extracts text, keys, tables, and other relevant data from the documents.

The documentation is stored across various Microsoft services, each offering unique features suited to different needs:

- **Azure Storage** is ideal for storing large volumes of documentation, offering both blob storage for unstructured data like PDFs and text files, and file storage for structured data akin to traditional file systems.
- **SharePoint** is a collaborative platform that integrates with Microsoft Office. It's designed for storing, organizing, and sharing information easily and efficiently across an organization.
- **Dynamics 365** encompasses a range of ERP and CRM applications and is used for storing documentation related to business processes, customer management, product information, and service guidelines.

Azure Functions can perform tasks such as data cleansing, text normalization, segmenting documents into smaller chunks, and preparing these chunks for further processing.

The processed data chunks are then passed to Azure OpenAI for embedding generation.

Once generated, the embeddings are stored in Azure AI Search. Azure AI Search indexes these embeddings along with the original text and any associated metadata.

Data Analytics Workflow

6

Data Ingestion: Azure Data Factory (ADF) is primarily used for data ingestion. It allows you to create data-driven workflows for orchestrating and automating data movement and data transformation. ADF connects to various data sources (CosmosDB, Azure Storage), ingests the raw data, and can perform initial preprocessing. It then moves the data to a centralized data storage solution, like Azure Data Lake Storage.

Data Storage Azure Data Lake Storage is designed for big data analytics. It provides a scalable and secure data lake for businesses. Once the data is ingested by ADF, it's stored in Azure Data Lake Storage. The lake provides a vast repository to store large volumes of data in its native format.

Data Processing and Analytics: Azure Synapse Analytics combines big data and data warehousing. It provides capabilities for data exploration, preparation, management, and serving. Data from Azure Data Lake Storage is processed and transformed in Synapse Analytics. This might involve aggregating data, cleaning it, transforming it into a suitable format, or running analytics operations.

Data Visualization: Power BI and Excel are used for data visualization and reporting. They allow users to create interactive dashboards and reports. Once the data is processed and ready for analysis in Synapse Analytics, it is connected to Power BI or Excel. Power BI provides more advanced visualization tools, interactive dashboards, and the ability to handle large datasets efficiently. It's more suitable for complex analytics and real-time data visualization. Excel is often used for more straightforward data analysis and can be a good tool for creating custom reports, especially if you're dealing with smaller datasets or need to perform detailed, row-level data analysis.

Automation Workflow

7

Data Monitoring and Triggering with Azure Function

An Azure Function is set up to trigger when specific monitoring data streams in from various sources, including Power BI and other event streams. This function continuously monitors these streams to detect specific conditions or patterns in the data. When a predefined condition or pattern is recognized, it triggers the next step in the workflow.

Automated Actions and Logic Apps

These are Azure's cloud-based services that enable you to automate workflows and integrate apps, data, services, and systems. Once an Azure Function is triggered, it activates a Logic App to carry out predefined automated actions. These actions could include sending notifications, initiating other processes, or integrating with other services. In terms of flexibility and scalability: Logic Apps provide a scalable way to integrate and automate various business processes, allowing for complex workflows.

Integration with M365 Suite and Dynamics 365

Automated tasks and reminders triggered by the Azure Function or Logic Apps can be directly synced with a user's Outlook calendar. Dynamics 365 offers advanced workflow automation capabilities. It can manage complex scenarios, such as a sequence of tasks, dependencies, and customer relationship management activities. The integration of generative AI components adds an extra layer of intelligence, enabling the system to understand and predict the user's needs based on their prompts and previous interactions, thereby enhancing decision-making and automation effectiveness.

Collaboration Enhancement

By integrating with Dynamics 365 and the Microsoft 365 Suite, the system ensures that relevant information and reminders are shared across the user's team. This integration enhances team coordination and efficiency, as everyone is informed and aligned with the automated workflows and scheduled tasks.