



# BANKING OPERATIONS GENAI COPILOT

with Microsoft Copilot + DIP

July 2024



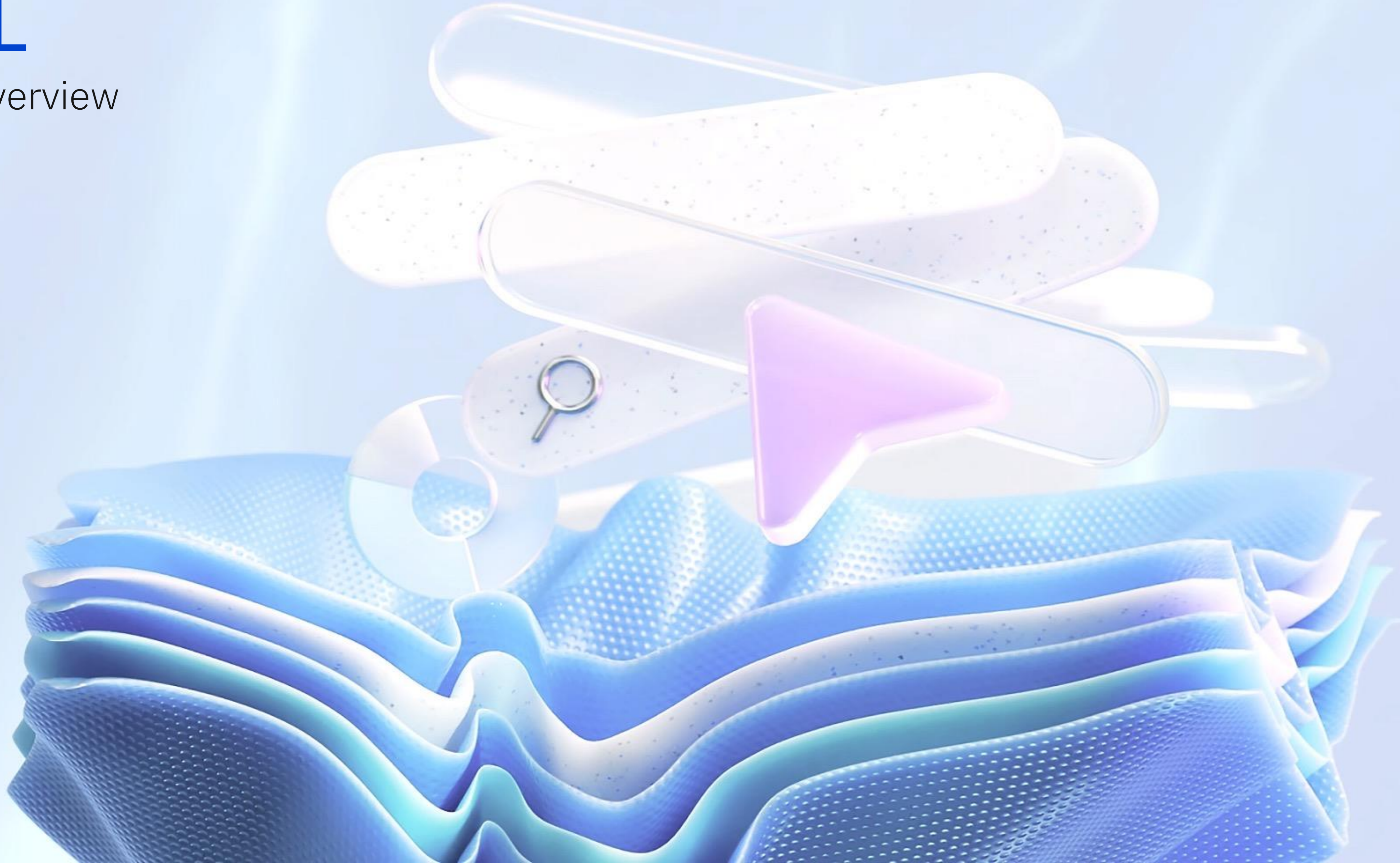
# Today's Agenda

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“**Microsoft is setting the stage** *for the next generation platform shift, driven by Chat GPT where Natural Language Processing (NLP) is driving the reasoning engine for AI.*”

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Overview



# Overview

## IBM Banking Operations GenAI Copilot

IBM, in partnership with Microsoft, introduces the Banking Operations GenAI Copilot that revolutionizes financial operations and document processing through intelligent automation and AI-driven insights. This process-agnostic GenAI intelligent workflow, supported by the Microsoft Copilot backbone, augments front-to-back office operations by analyzing documents and data received from clients against firm standards and processing guidelines.

## Client Value

The Copilot Workflow is designed to support front, middle, and back-office operations across various functional areas such as New Account Opening, Rollovers/Transfers, Anti-Money Laundering (AML), and Credit Acceptance.

### Decreases End-to-End Processing Time by 50%:

Streamlines operations, significantly reducing the time taken for processing financial documents.

### Enable Straight-Through Processing (STP):

Reduces rework by 20 - 30%, ensuring smoother and more efficient workflows.

### Intelligent Full Tech Stack:

Utilizes a robust tech stack including Microsoft Azure, Microsoft 365, AI/ML, DIP integrations and connections, and SQLite3 data storage to provide a comprehensive solution.

## Key Benefits:

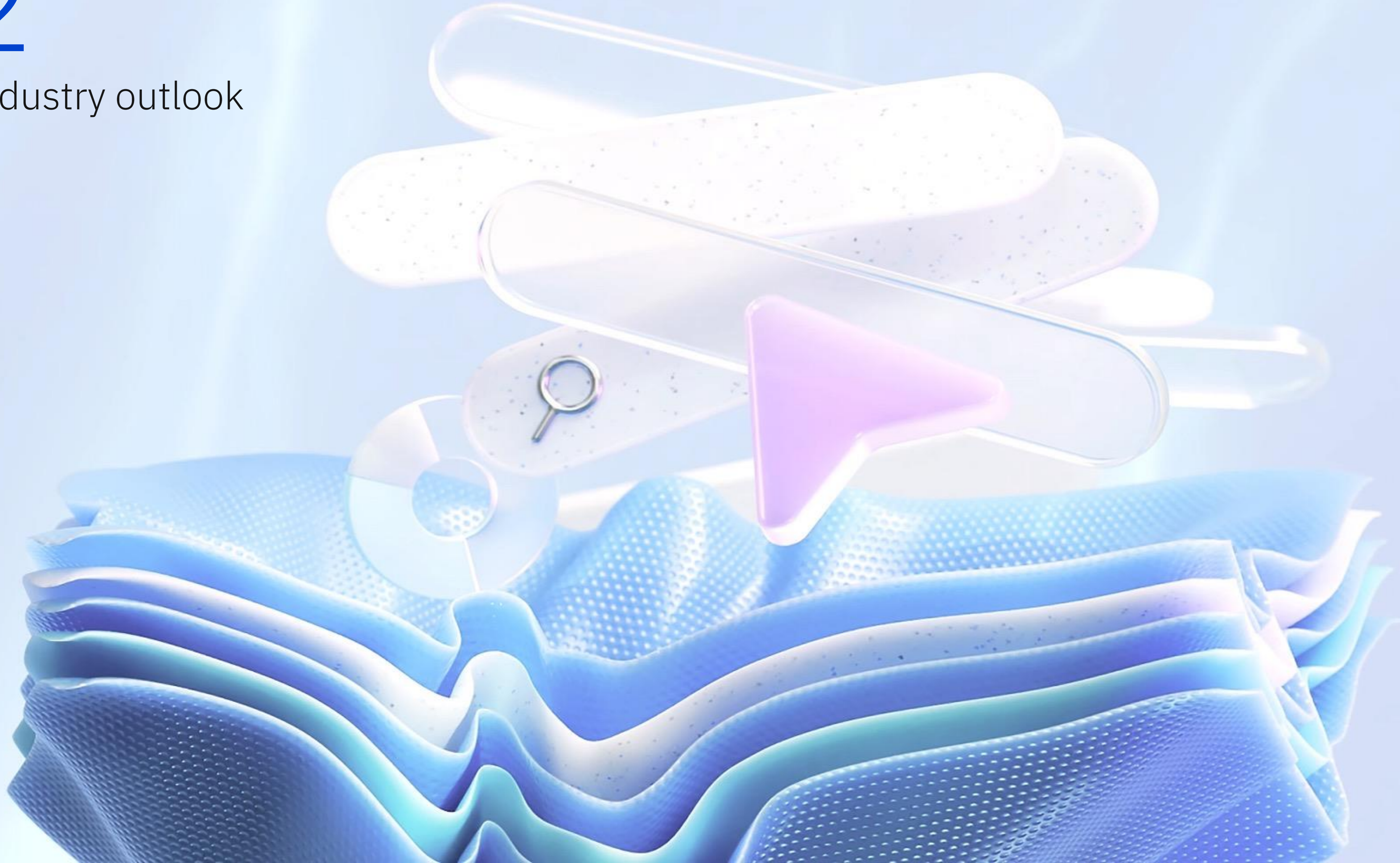
**Efficiency:** Automates complex processes, reducing manual effort and accelerating document processing.

**Compliance:** Ensures adherence to firm standards and regulatory guidelines through intelligent data analysis.

**Flexibility:** Configurable to meet the specific needs of different operational areas, providing a tailored solution for various financial functions.

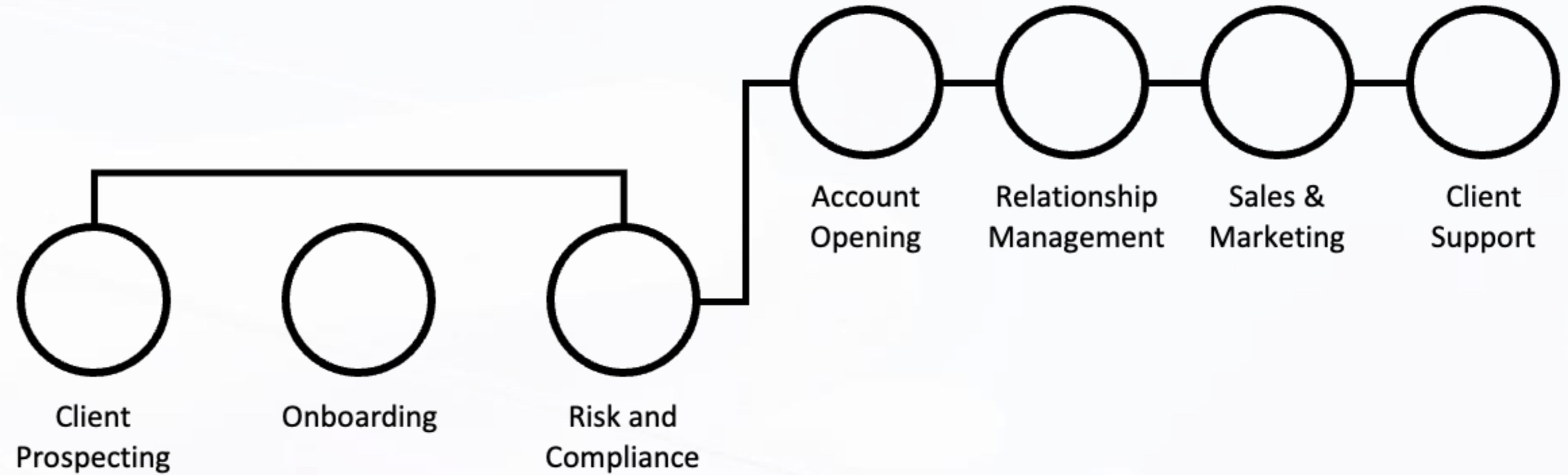
# 2

## Industry outlook



# Industry Outlook

**Siloed functions and manual processes** in corporate and commercial onboarding lead to costly **friction - long cycle times**, high **drop off rates, expense,** and **risk** failures

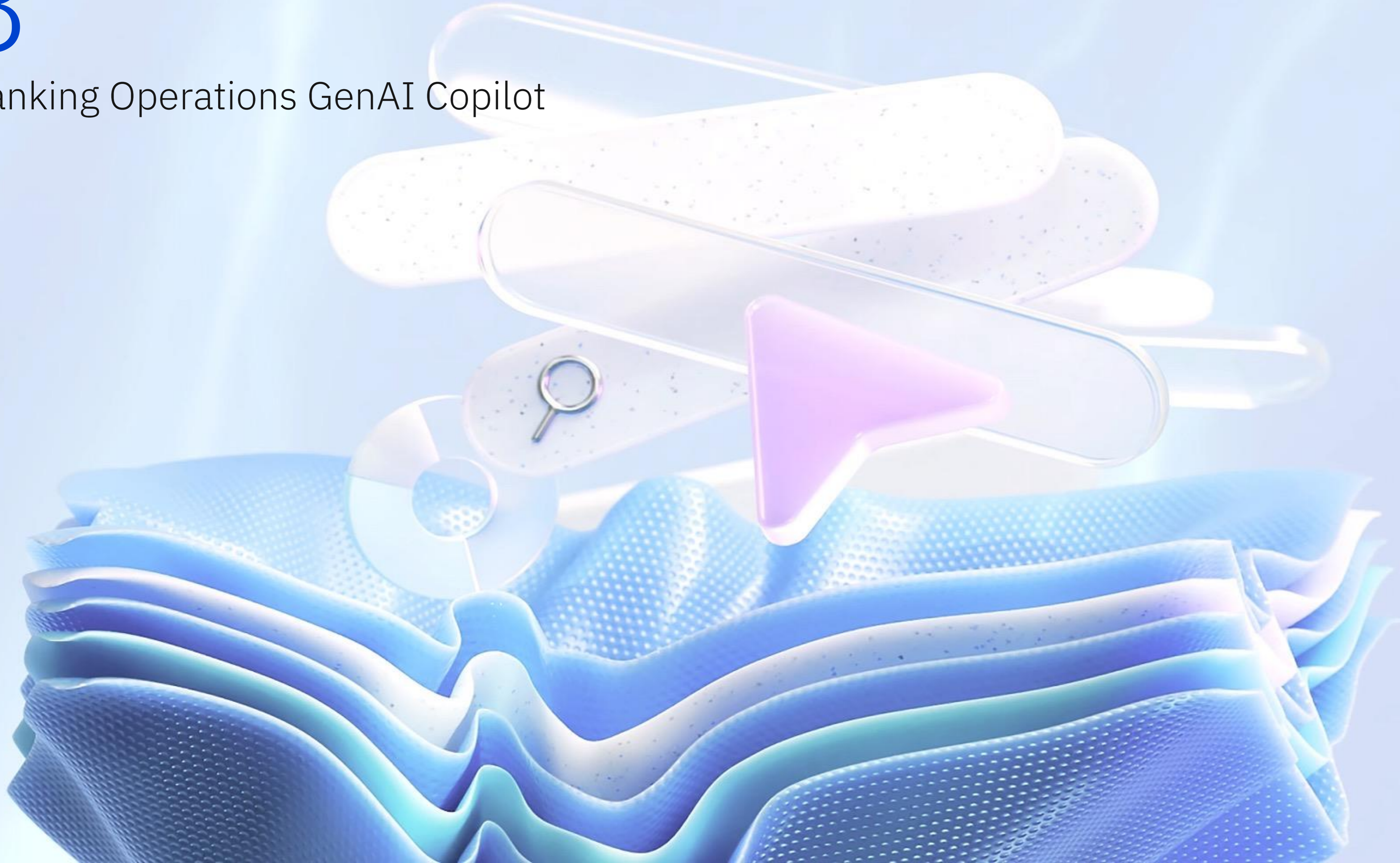


We have developed a **process-agnostic**, intelligent workflow framework via **Microsoft Copilot** which leverages **OCR** and **Generative AI** to perform complex operational analysis within the **Banking Operations** space.

Our Banking Operations GenAI Copilot, which is also applicable across several other related industries such as Insurance and Asset Management, **supports a wide range of operational workflows by leveraging the underlying policies and procedures** (i.e. uploading new versions within the RAG database). Many of these operational workflows leverage the exact same input data, so our Copilot Workflow can be configured to support additional middle and back-office operations across these industries, such as new account opening, rollovers, transfers, and much more with only a few minor configurations!

# 3

## Banking Operations GenAI Copilot





# AI Front Office Assistant Validation

When onboarding is delayed by incomplete data and missing documentation – it impacts everyone in the process

The AI Front-Office Assistant Validation does a preliminary check of the account information

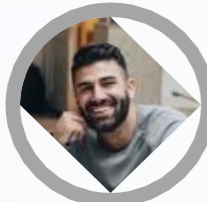
The FA gets real-time insights on what to address with the customer prior to submittal



Tina is the FA impacted by **↑ time to revenue**



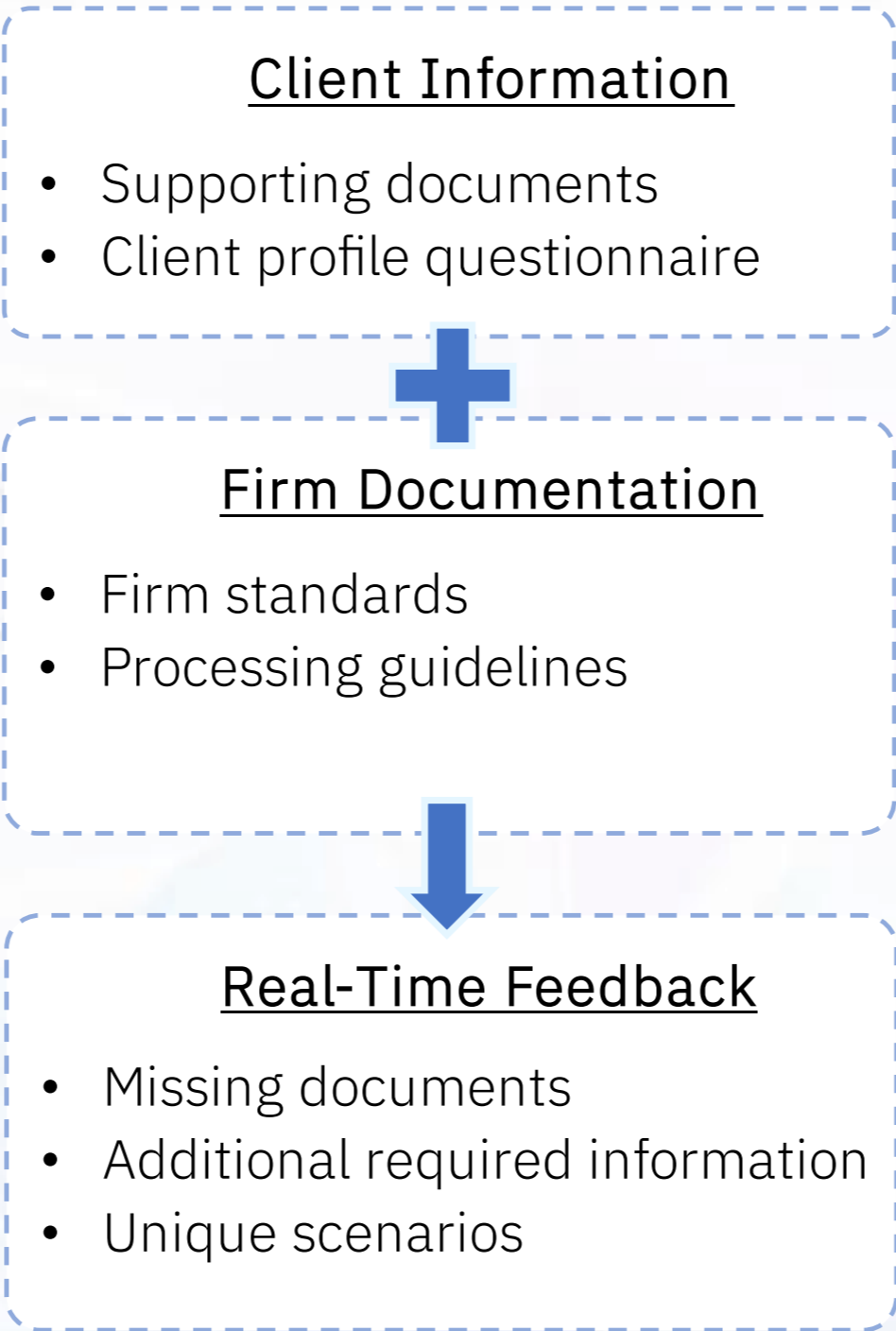
Grace is the customer impacted by **↓ experience**



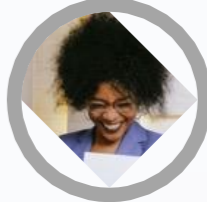
Sam is the analyst impacted by **↓ experience**



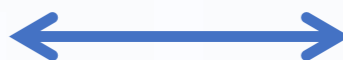
Jennifer is the team lead impacted with **↓ quality**



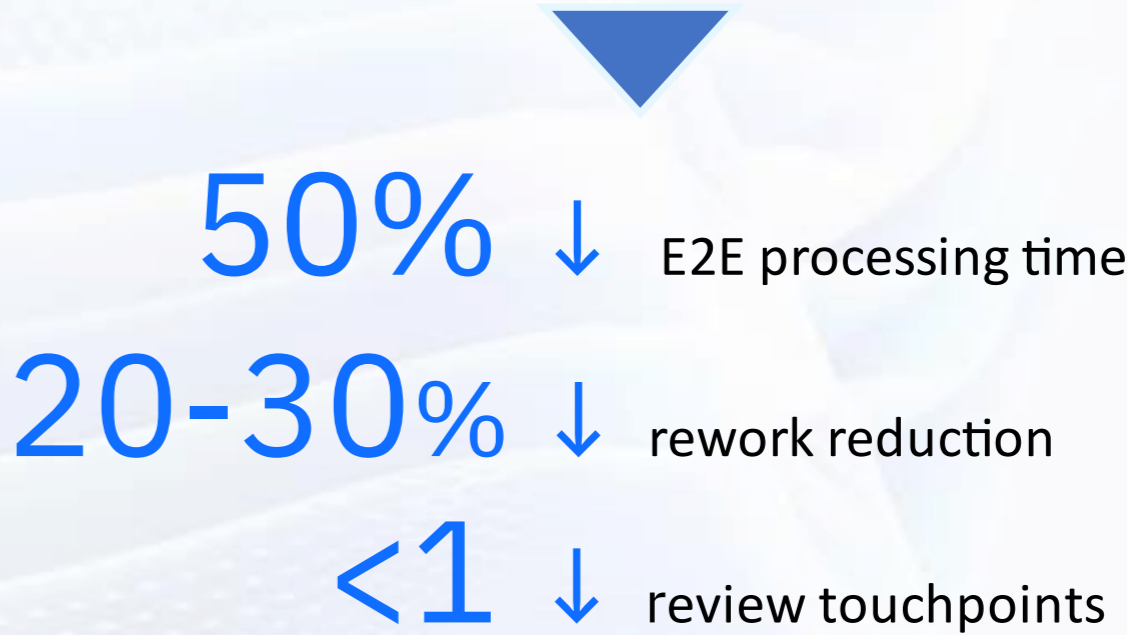
Grace is the customer who wants to open an account with the financial institution



Tina is the FA working with Grace to open the account



If approximately half of the 'return-to-front office' files are avoided



- ~4 months of E2E processing time
- ~2.6 to 3 front-office returns
- ~2 review touchpoints

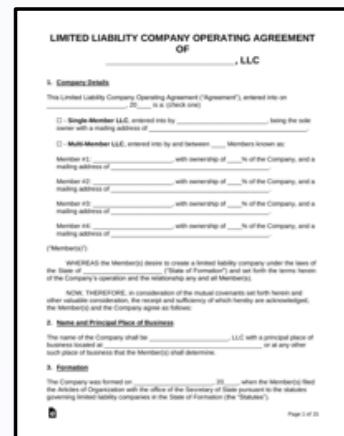
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# User experience

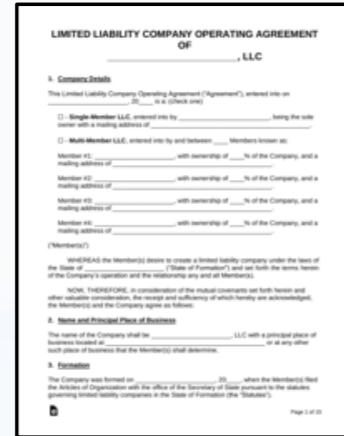


**Grace** is the customer who wants to open an account with our financial institution, and has submitted key account documentation via **email**

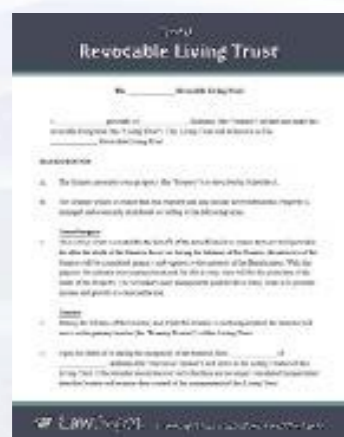
Client Information Form



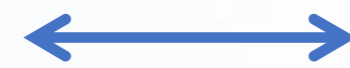
Operating Agreement



Product / Service Selection Form



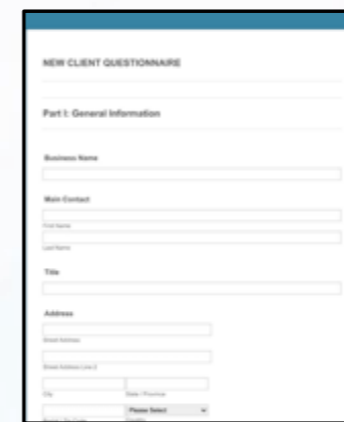
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**Tina** is the FA completing the Client Profile Questionnaire based on information collected from Grace.

Upon receipt of the email, **Copilot** automatically detects and extracts the documents for OCR and analysis

Client Profile Questionnaire



Firm Standards

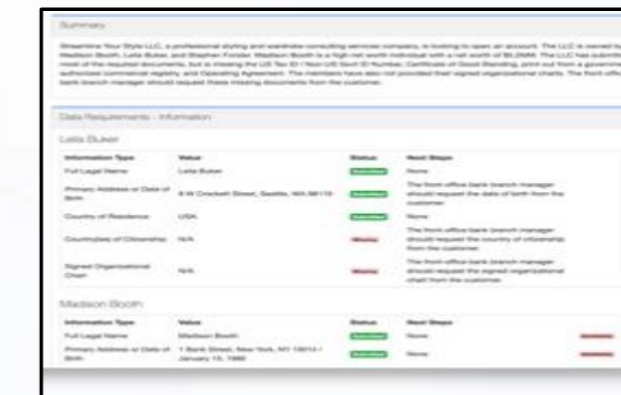


Processing Guidelines



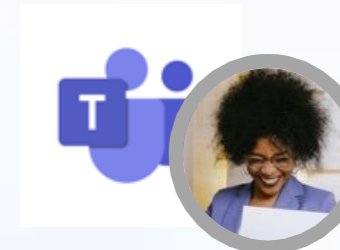
The **GenAI** provides real-time feedback on details which might need to be addressed prior to formal submittal of the Client Profile Questionnaire.

GenAI Analysis

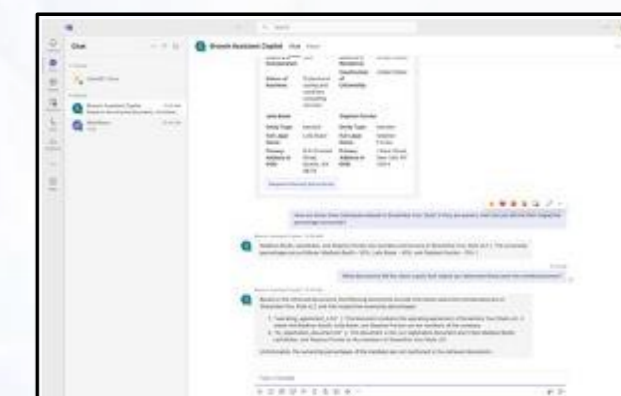


**Tina** interacts with the **GenAI** analysis via a chatbot embedded in Microsoft Teams.

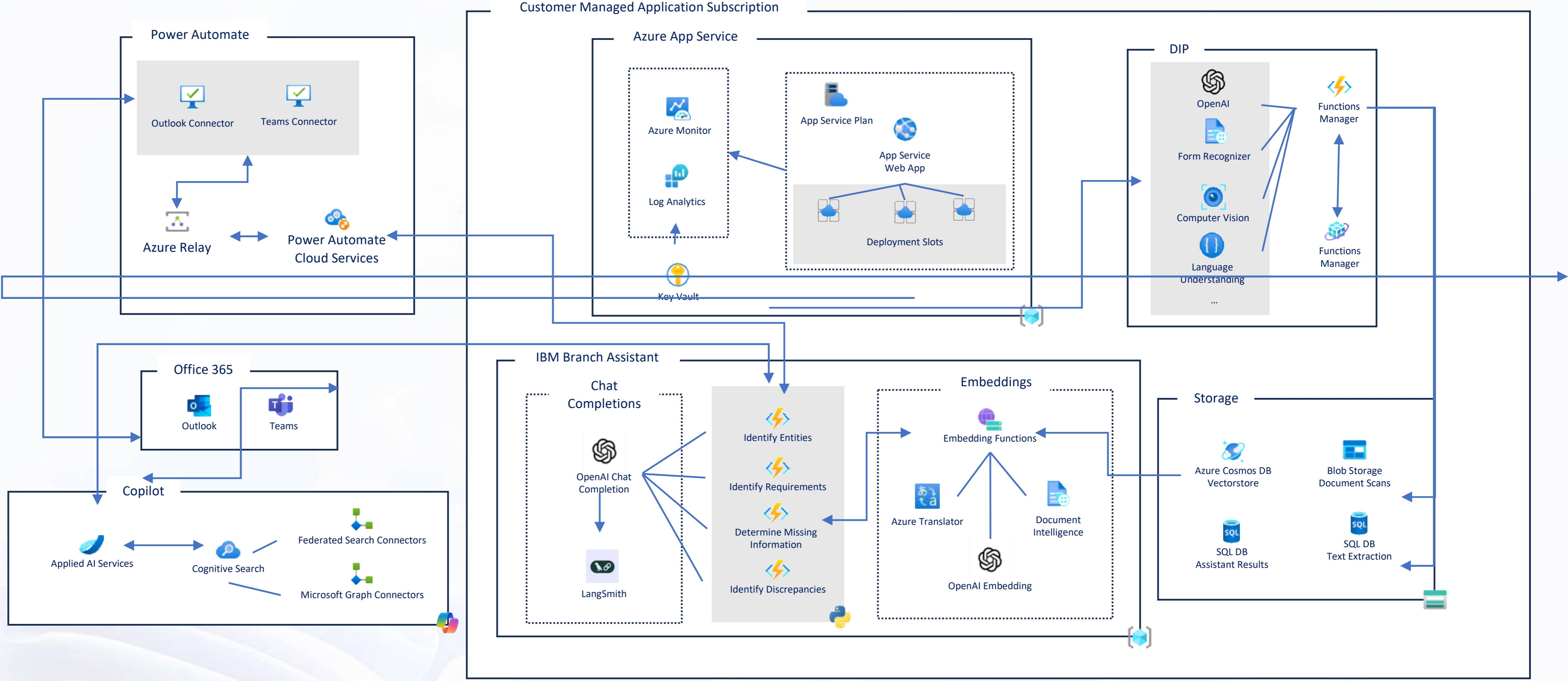
**Copilot** answers Tina's questions about the firm's policies and **Grace's account documentation**, which allows her to quickly submit.



Teams Chatbot



# Architecture



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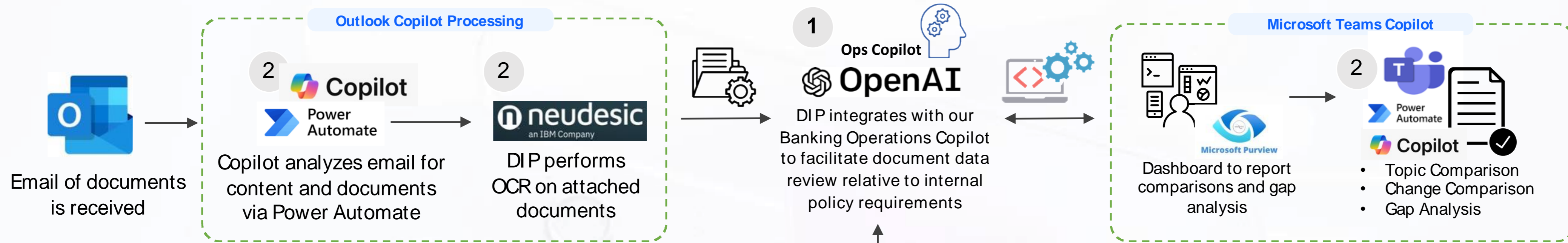


# Intelligent E2E Workflow with Copilot and DIP

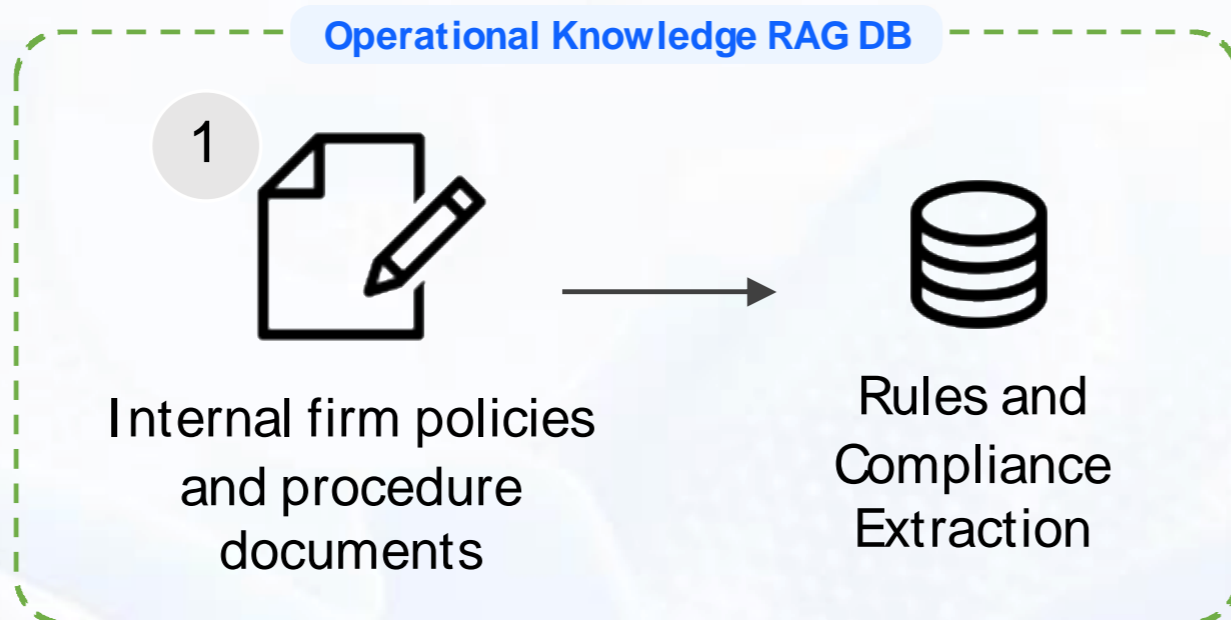


Copilot operates as the **backbone** of the **Intelligent Workflow**

Both **Front Office** and **Downstream Operational Teams** may interact with the the extracted & analyzed information via **Microsoft Teams**



- 1 Denotes **process-specific** components; swapping these out lets you easily distinguish from 1 process specialty to the next
- 2 Denotes **process-agnostic** components; These components require minimal tweaks/configurations to align with the process-specific components

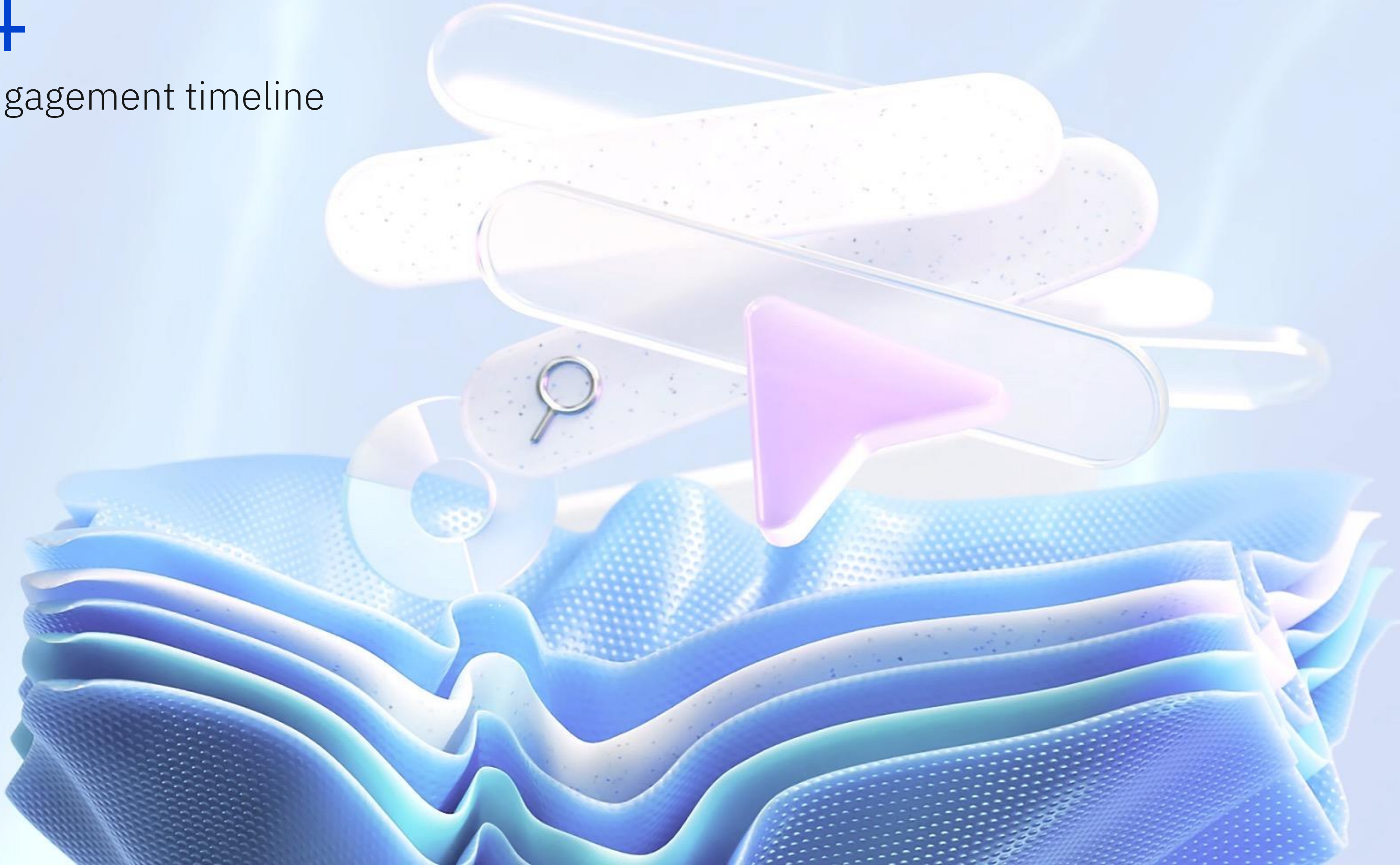


**Microsoft Copilot** integrates with a RAG database to ensure **Microsoft Teams** and **Banking Operational Copilot** knowledge bases are **in sync**

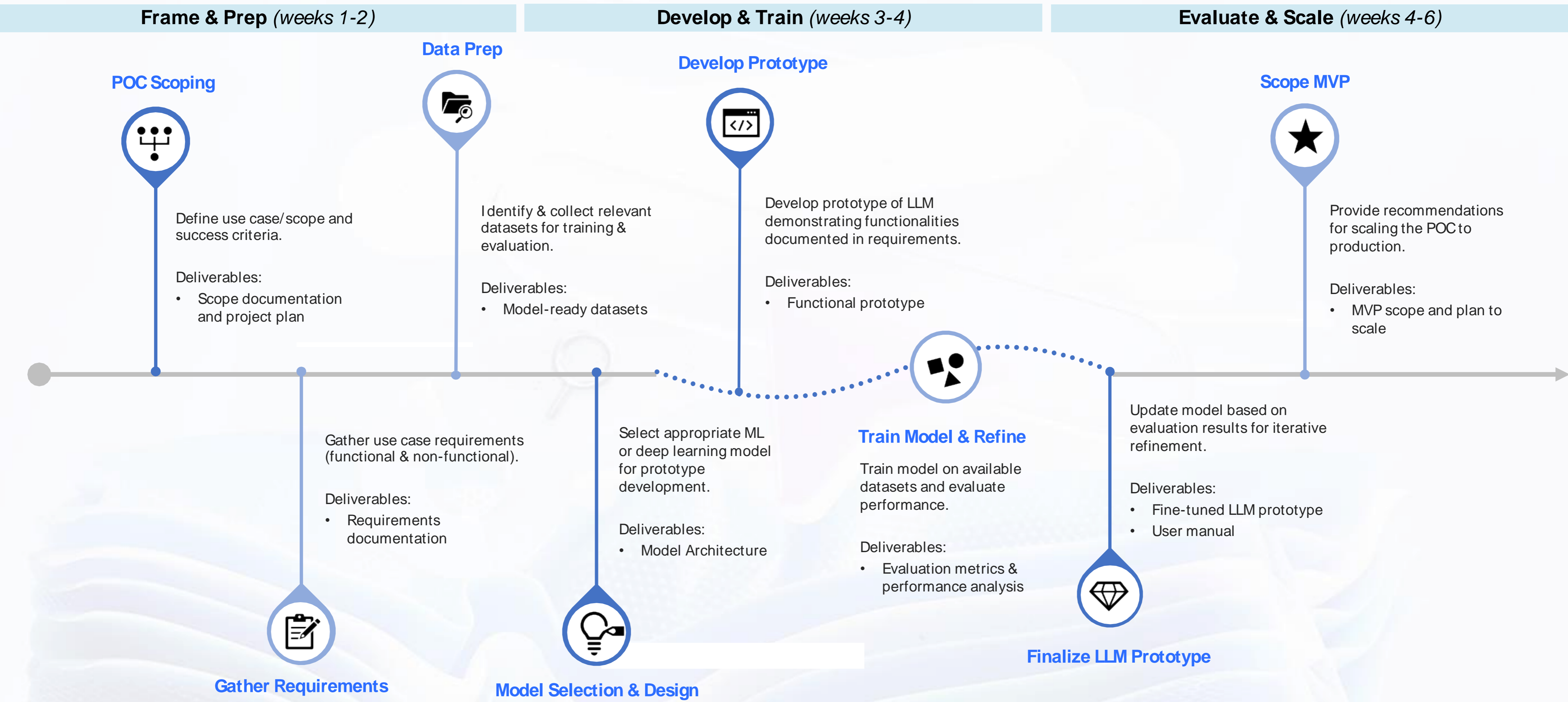
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# 4

## Engagement timeline



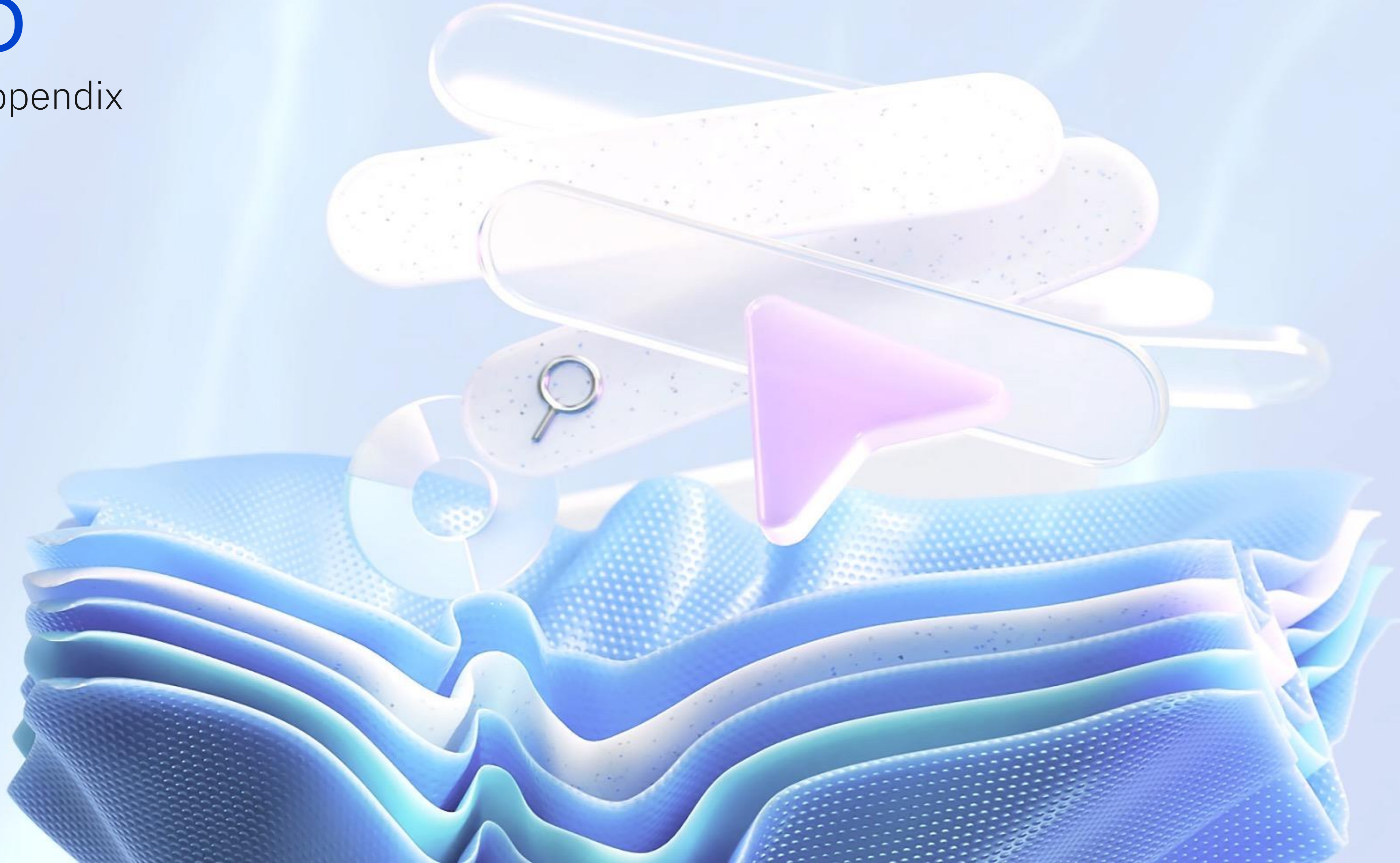
# Engagement timeline



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# 5

## Appendix



# Front-Office Assistant – Full Tech Stack

## Microsoft Azure

- None listed (but could include Azure services such as Azure Functions, Azure Storage, Azure Cognitive Services, Azure Blob and/or File Storage, etc. if applicable when deployed in production)

## Microsoft 365 (M365)

- Microsoft Teams
- Outlook 365 (with Teams included)
- Power Automate (formerly Microsoft Flow)

## AI and Machine Learning

- Langchain
- Tiktoken
- OpenAI – GPT4
- Copilot (library and enabled feature)
- Copilot Studio

## Libraries and Frameworks

- Python
- JSON

## Data Storage

- SQLite3

## Integrations and Connections

- Microsoft Teams
- Outlook
- Box (a storage solution like MS SharePoint)
- Document Ingestion Platform (DIP) (for OCR capabilities, requires API key and endpoint to POST files for transcription)



THANK YOU

