#### Case study

# Knowledge base Al Assistant for Raiffeisenbank CZ

<b>~</b> —	4
<b>~</b> —	1,
<b>~</b> —	Ч

1,200+ documents made queryable using natural language



75% time savings on back-office support expected



3,000+ pages of texts referenced

in Al answers

Raiffeisen

The AI Assistant solution enhances employee productivity by accessing the knowledge base through natural language queries and delivering referenced answers in real-time.

#### **Business needs**

The solution needed to meet the following requirements:

- Reduce back-office support time spent on calls and tickets
- Improve employee satisfaction by simplifying access to the knowledge base
- Enable real-time questioning by users in natural language
- Ensure the relevancy of the answers by providing references to the source texts

#### **Project background**

Raiffeisenbank CZ launched an Al initiative to enhance operational efficiency within its digital strategy. As a key component, the bank aimed to streamline employee workflows by addressing challenges in navigating the intricate bank knowledge base.

Teaming up with Profinit for AI expertise, the bank gained seasoned consultants and deep insights into AI and Machine Learning. The collaboration resulted in the **successful design, implementation, and launch of an AI Assistant**. Over 100 employees are piloting the solution, marking a significant step towards optimising daily operations.



## Challenge

The essential component was to comply with strict banking regulations and data protection. The challenge was manoeuvring through a labyrinth of over a thousand interconnected documents, characterised by jumbled business terms, while ensuring a user-friendly environment for employees to leverage the AI assistant effortlessly.

It was necessary to enable cross-verification of AI responses with relevant references and document links to secure users' trust. Additionally, crafting an iterative, testable, and scalable solution became imperative to accommodate evolving requirements while maintaining operational simplicity and efficiency.

### Solution & results

Our project approach centred on cloud infrastructure, leveraging MS Azure Services and the OpenAl API for GPT pre-trained models. A robust data pipeline facilitated the guick processing of thousands of texts, ensuring swift user interactions. The scalable solution is poised for knowledge base expansion and mass user adoption.

The crucial part of the solution is the text preprocessing module, tailored for the GPT model context and enhanced answer accuracy. Employing various techniques and an AI validator tool in the background ensures continuous system improvement by validating each response for increased accuracy.

#### Tech stack





OpenAI ChatGPT

"In our efforts to enhance operational efficiency, the collaboration with Profinit has helped us tremendously. Profinit's expertise in AI and machine learning, combined with their strategic approach to data processing and security, has not only met but exceeded our expectations."

Lukáš Mazánek Chief Data Officer, Raiffeisenbank CZ

