

# Crafting an AI-Powered HR Assistant: A Use Case for Nestlé's HR Policy Documents

## Overview

Artificial Intelligence (AI) plays an important role in Digital transformation. As part of its ongoing digital transformation initiatives, Nestlé explored the integration of generative AI to improve employee access to Human Resources (HR) policy information. A key challenge was the complexity and volume of HR documentation, which often led to delays in information retrieval and inconsistent employee experiences. To address this, I developed an **AI-powered HR Assistant** trained specifically on Nestlé's internal HR policy documents.

## Problem Statement

Employees frequently struggled to find accurate answers to HR-related questions—ranging from hiring processes to performance appraisals to career growth, people management, trade unions, international policy—despite the existence of comprehensive internal documentation. Traditional search systems were limited in natural language understanding and required exact keyword matches, leading to inefficiencies and repeated queries to HR personnel.

## Solution Design

I built a conversational HR assistant leveraging a **large language model (LLM)** and contextually grounded using Nestlé's policy documents. Key components of the solution included:

- **Document Parsing and Embedding:** HR policy PDFs and Word documents were parsed and transformed into vector embeddings using a semantic search framework FAISS.
- **Prompt Engineering:** Prompts were carefully crafted to ensure accurate, grounded responses aligned with corporate policy language and tone.
- **Deployment:** The assistant was deployed by leveraging the UI Gradio.

## Technology Stack

- **LLM Framework:** OpenAI GPT-4
- **Vector Database:** FAISS
- **Backend:** Python
- **Frontend:** Gradio

## **Conclusion**

This use case illustrates the power of applied generative AI in transforming internal business processes. By creating an intelligent HR assistant trained on policy documents, Nestlé shall not only improve operational efficiency but shall also enhance employee empowerment and transparency across the organization.