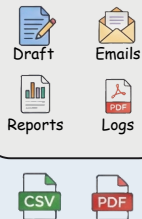


Stage 1: Profile Extraction

Heterogeneous User Data



Personalized Understanding Agent
(LLM Agent, Auxiliary Tools)

Structured User Profile

Demographics
(Name, Age)

Traits
(Interests)

Preference
(Style)

Stage 2: Personalized Question Development

User Query

Personalized Question Development Module
(LLM Agent)

Sub Query q1

Sub Query q2

Sub Query q3

...

Sub Query q4

Personalized Sub-queries

Stage 3: Dynamic Dual-stage Retrieval

Retrieval System

Private Search Agent
(Private Sources)

Public Search Agent
(Public Sources)

Chunk Filter & Decision Agent

Retrieved Evidence



Gap Queries & Refinement

Stage 4: Personalized Report Generator

Evidence

User Query

Personalized Report Generator
(LLM Agent)



Tailored Personalized Report