

# AI Assistant for the Digital Library

A solution designed for libraries, archives, and information institutions — focused on the practical use of artificial intelligence in library and information services, for librarians, cataloguers, and users alike.



# What Is the AI Library Assistant?

## Purpose-Built for Libraries

Unlike general-purpose chatbots, this assistant is optimized for professional tasks involving documents, metadata, research, and information services.

## Powered by Internal Knowledge

The assistant works over the institution's own **internal knowledge base** — its catalogues, documents, and rules — not just general internet knowledge. This ensures relevance and trustworthiness of every answer.

- ① Designed to be deployable in real library environments without deep technical expertise from staff.

# Key Pillars of the Project

## Internal Knowledge Base

Works exclusively with the institution's own data, catalogues, and rules.

## Transparency & Limits

Actively informs users about confidence levels and potential AI inaccuracies.

## Staff & User Support

Designed to assist both librarians and end users in their daily tasks.

## System Integration

Integrates seamlessly into existing library and archival systems.

# What Can the AI Assistant Do?

The assistant covers a wide range of everyday professional tasks – from direct user communication to technical work with metadata and cataloguing.



# Core Capabilities



## Answering Questions

Provides accurate answers based on the library's internal knowledge base and general sources.



## Research Assistance

Finds relevant documents, suggests sources, and compiles literature reviews on any given topic.



## Text Summarization

Automatically creates clear summaries of long documents, reports, or scientific articles.



## Annotations & Keywords

Suggests content annotations and recommends keywords for cataloguing in line with professional standards.



## Metadata Management

Assists in creating, checking, and enriching metadata according to current library and archival standards.



## Hallucination Alerts

Actively notifies users about the confidence level of each answer and flags potential AI-generated inaccuracies.

# Who Is the Assistant For?

## **Public Libraries**

Support for librarians with daily reader queries, catalogue searches, and user communication.

## **Academic Libraries**

Assistance with expert research, bibliography creation, and processing scientific literature for research teams.

## **Digital Libraries**

Automation of digital collection processing, metadata enrichment, and online information services.

## **Archives**

Help with describing archival funds, creating inventories, and searching large archival collections.

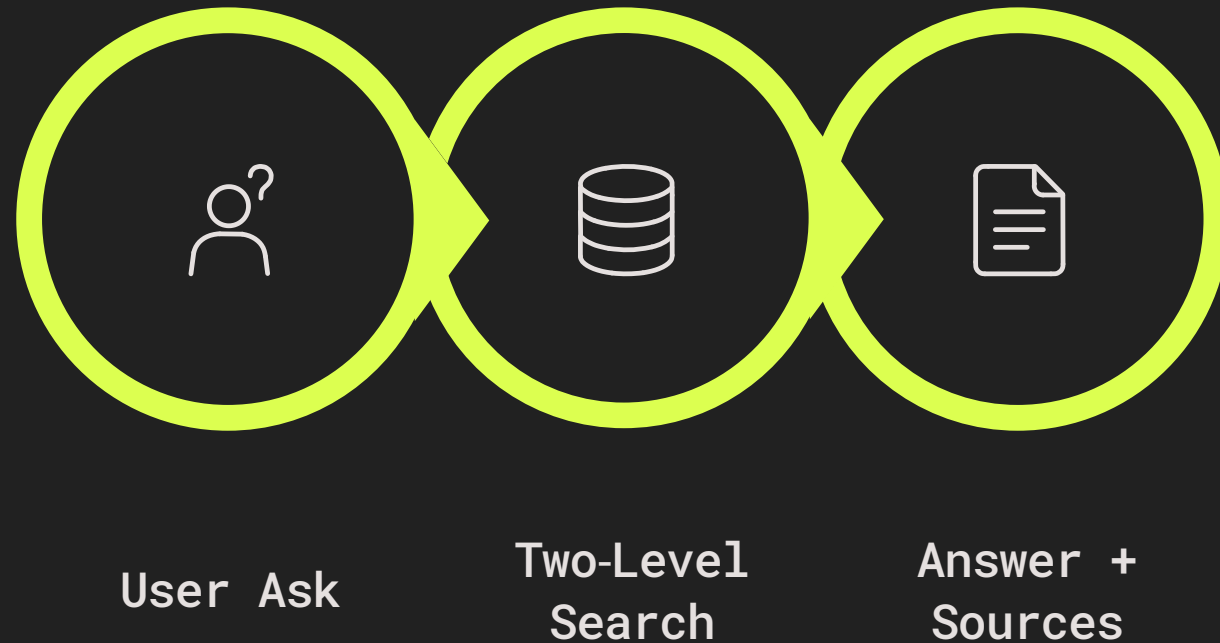
## **Cataloguers**

Keyword suggestions, subject headings, and formal descriptions aligned with international standards.

## **Service Staff**

Drafting reader responses, processing research requests, and supporting reference services.

# How Does the Assistant Work?



The assistant is built on a language intelligence model connected to the institution's **internal knowledge base**. It uses **two-level verification**: first searching the internal base, then supplementing with general sources. Every answer includes a reliability indicator and source reference.

⚠ The assistant always alerts users when an answer is based on uncertain sources or when there is a risk of AI hallucination — transparency is a core design principle.



## Why Now?

Libraries and archives face a growing volume of digital documents and demands for fast information services. The AI assistant is a practical solution that **increases efficiency without replacing human expertise.**

Staff remain the key element — AI takes over routine tasks and frees up time for expert and creative work.

# Implementation Roadmap

1

## 01 – Needs Analysis

Map existing processes, identify priorities, and define the scope of implementation with key users.

2

## 02 – Knowledge Base Preparation

Process internal documents, catalogues, and institutional rules into a format suitable for the AI system.

3

## 03 – Pilot Deployment & Testing

Launch the assistant in a selected department, collect staff feedback, and gradually fine-tune responses.

4

## 04 – Full Rollout & Training

Expand to the entire institution, train staff, and set up regular knowledge base updates.

# Ready to Transform Your Library?

The AI Assistant for the Digital Library is a practical, transparent, and institution-ready solution — built to empower librarians, cataloguers, and users with the power of intelligent information services.

## Practical

Deployable without deep technical expertise.

## Transparent

Always honest about confidence and sources.

## Human-Centered

Supports staff — never replaces them.

