



GAIK Toolkit Webinar: New Features and Capabilities June 12, 2026



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Agenda

- Toolkit general overview
- Use case 1: Incident reporting and knowledge capture solutions
- Use case 2: Transcription, Captioning & Translation
- Use case 3: Building inspection report preparation and knowledge synthesis solutions
- Use case 4: FAIR AI Help Desk and knowledge access solutions
- New components and new use cases
- Plans for toolkit development and application
- How can you utilize the Toolkit in practice
- Q&A



Toolkit Overview



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Project motivation

Generative AI has significant potential to increase the productivity of knowledge work.

- **Example experiments:** consultants using AI were significantly more productive – they **completed 12.2% more tasks on average**, and completed tasks **25.1% more quickly** (Dell'Acqua, 2023)
- **Example cases from practice:** Customer-support agents at a large firm selling business-process software demonstrated a **15% increase in productivity when assisted by generative AI** (Brynjolfsson, 2025).

However, tangible business value from Generative AI implementation projects is still limited.

- “**only 26% of companies** have advanced beyond the proof-of-concept stage to generate value” Source: BCG’s report (de Bellefonds et al, 2024).
- “Despite \$30–40 billion in enterprise investment into GenAI, **95% of organizations are getting zero return.**” Source: MIT report (Challapally et al, 2025).

Application of the approach:

GAIK project (Generative AI-enhanced Knowledge Management)

The primary project goal:

Creation of the **open toolkit** for knowledge-focused GenAI solution development and implementation

Target audience:

Small and Medium-sized companies (SMEs)
Service providers for SMEs (e.g. consultancies)

University-Industry cooperation

Timeline: 01.02.2025 – 31.01.2027

Co-funded

by the European Union (ERDF),
universities, and companies



Project consortium:



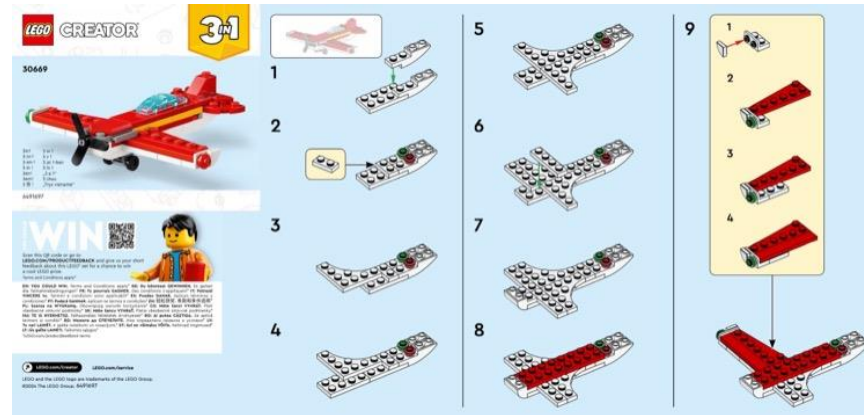
University-Industry cooperation

Problem solving approach

Building blocks



Guidelines



Real results



Benefits:

Quicker implementation, Less resources, Higher solution quality, Less risks



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The GAIK project value aimed for you

Similar AI adoption steps as the companies involved in our GAIK project

- Explore use of AI
- Add assistive & business-integrated AI automation
- Get onto the road to wide-spread AI-adoption

We are compiling GAIK research results and developed assets into GAIK Toolkit

- Free
- Open
- Specially support the use of AI with Finnish language - but not limited to that
- Helps you save time & money
- Support available
- Ecosystem being built

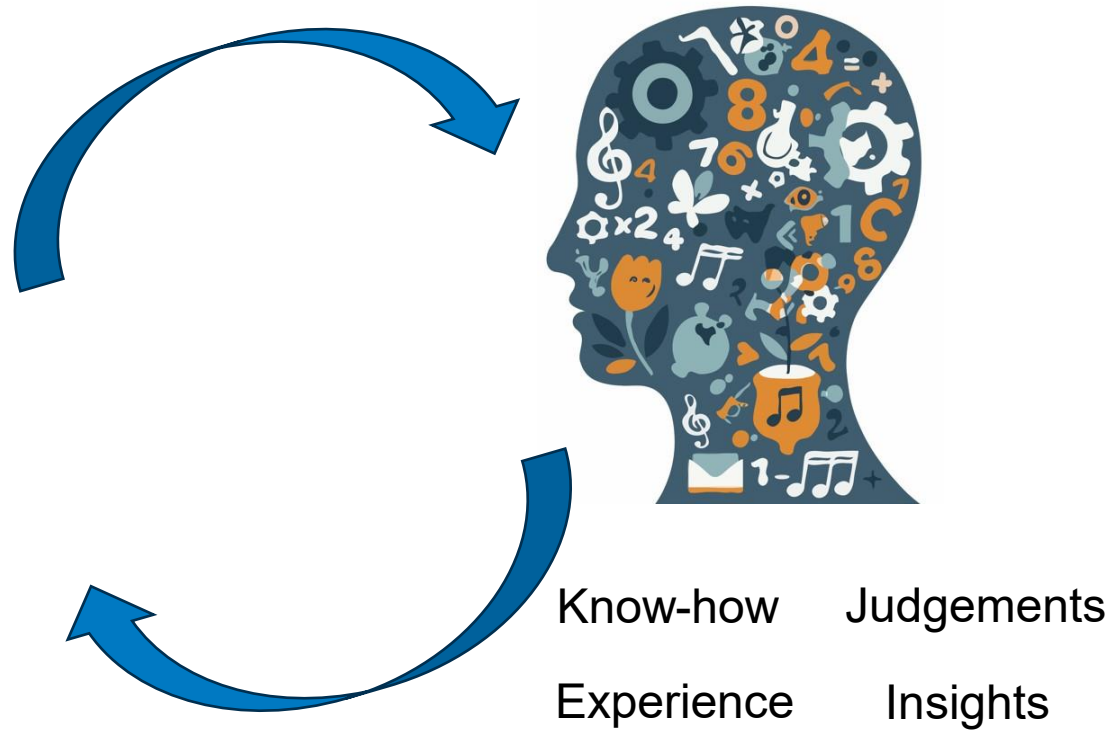
Knowledge

Documented knowledge




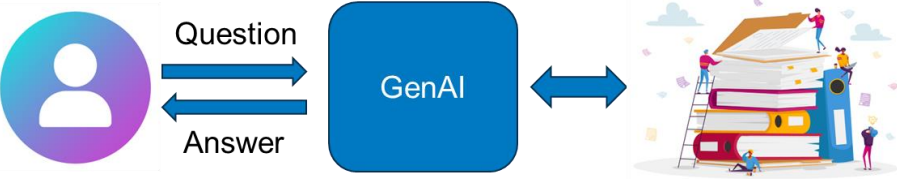

Texts Diagrams Videos
Voice recordings Tables

Tacit knowledge



The scope of GAIK: knowledge processes

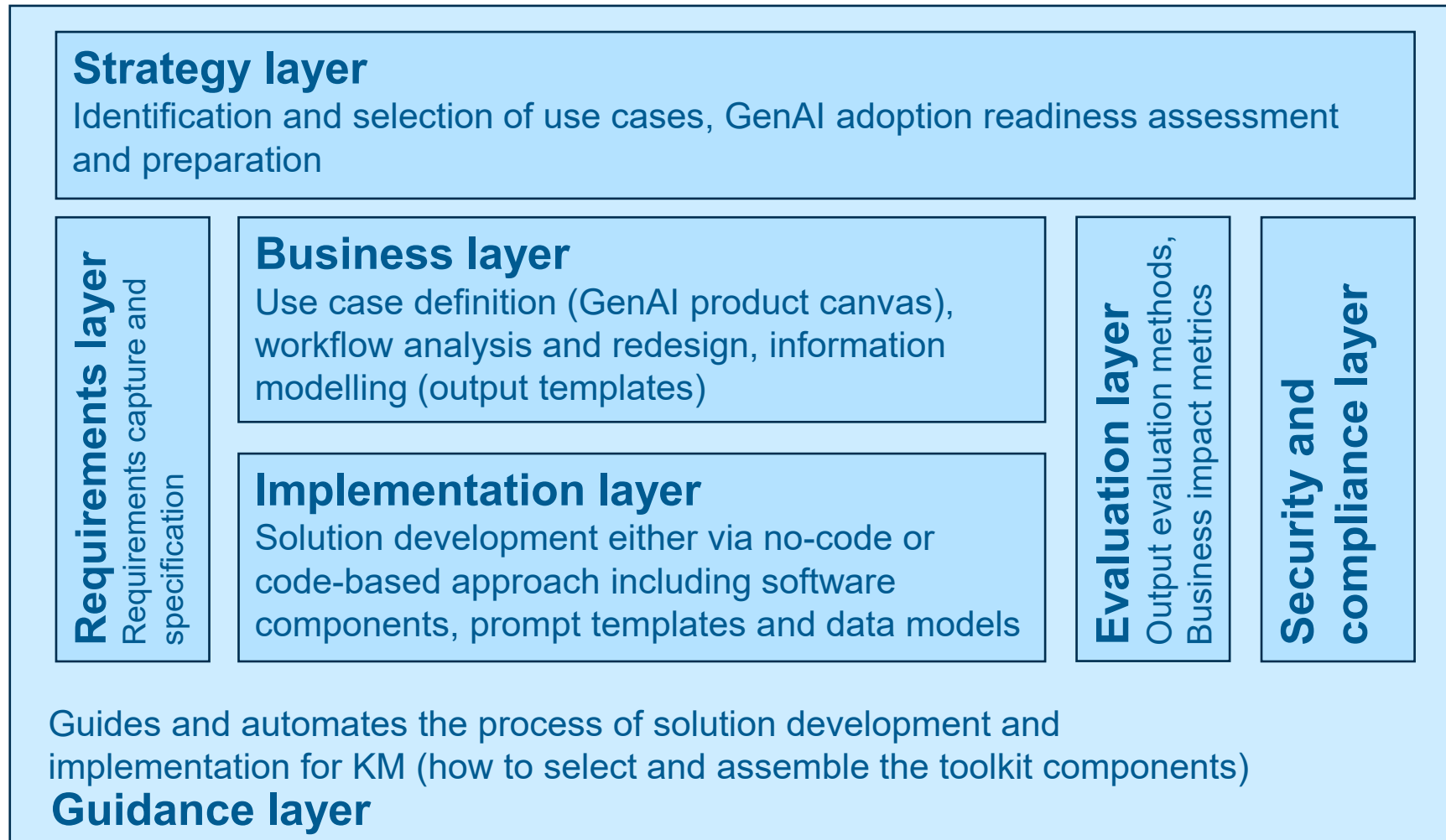
Knowledge processes as the basis

Knowledge capture	Extract needed information from business documents, videos, voice recordings, emails, and meeting recordings	
Knowledge access	Intelligent access to organizational knowledge (document repositories, databases, wikis, CRMs)	
Knowledge synthesis	Automatic generation of business reports, sales proposals, marketing materials, project proposals	

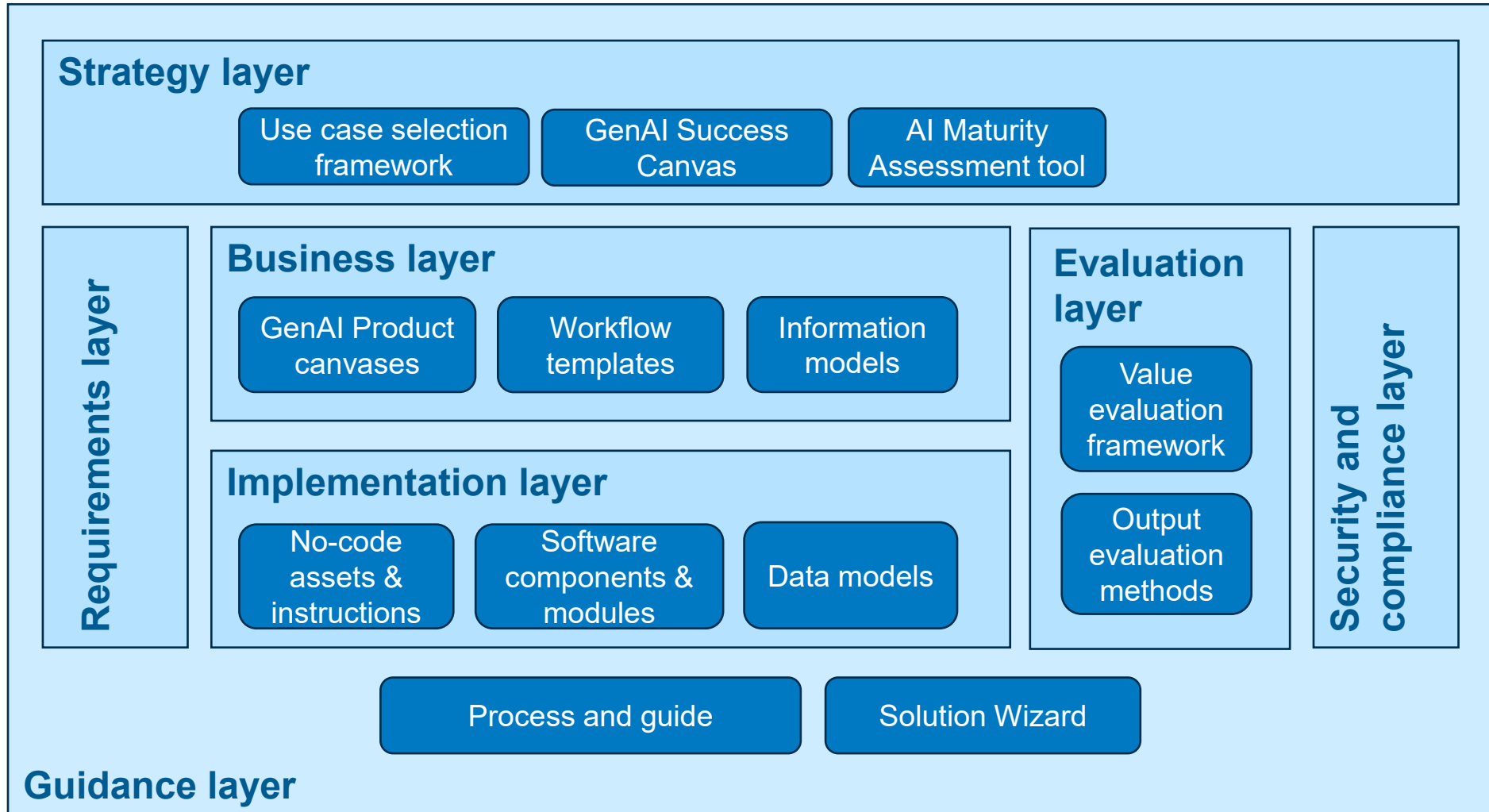
Scope of the GAIK: generic use cases

Knowledge process	Generic use cases
Knowledge capture Extraction of needed information	A. Incident reporting in industry (e.g. for equipment, buildings) B. Creating construction site diaries C. Creation of transcripts and closed captions in various languages for instructional videos and podcasts D. ...
Knowledge access Intelligent access to organizational knowledge	A. Customer assistant for complex products and services B. Semantic audio and video search for the medical instructions C. Learning assistant
Knowledge synthesis Automatic generation of business reports and documents	A. Report preparation B. Sales proposal generation C. ...

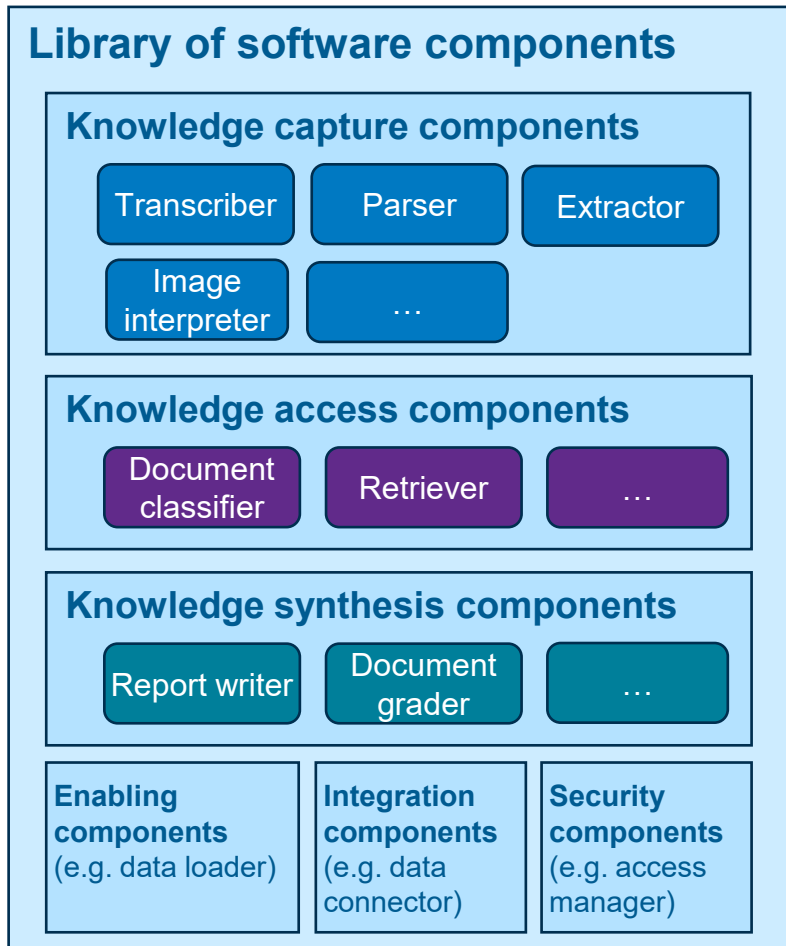
Layers of the GAIK toolkit



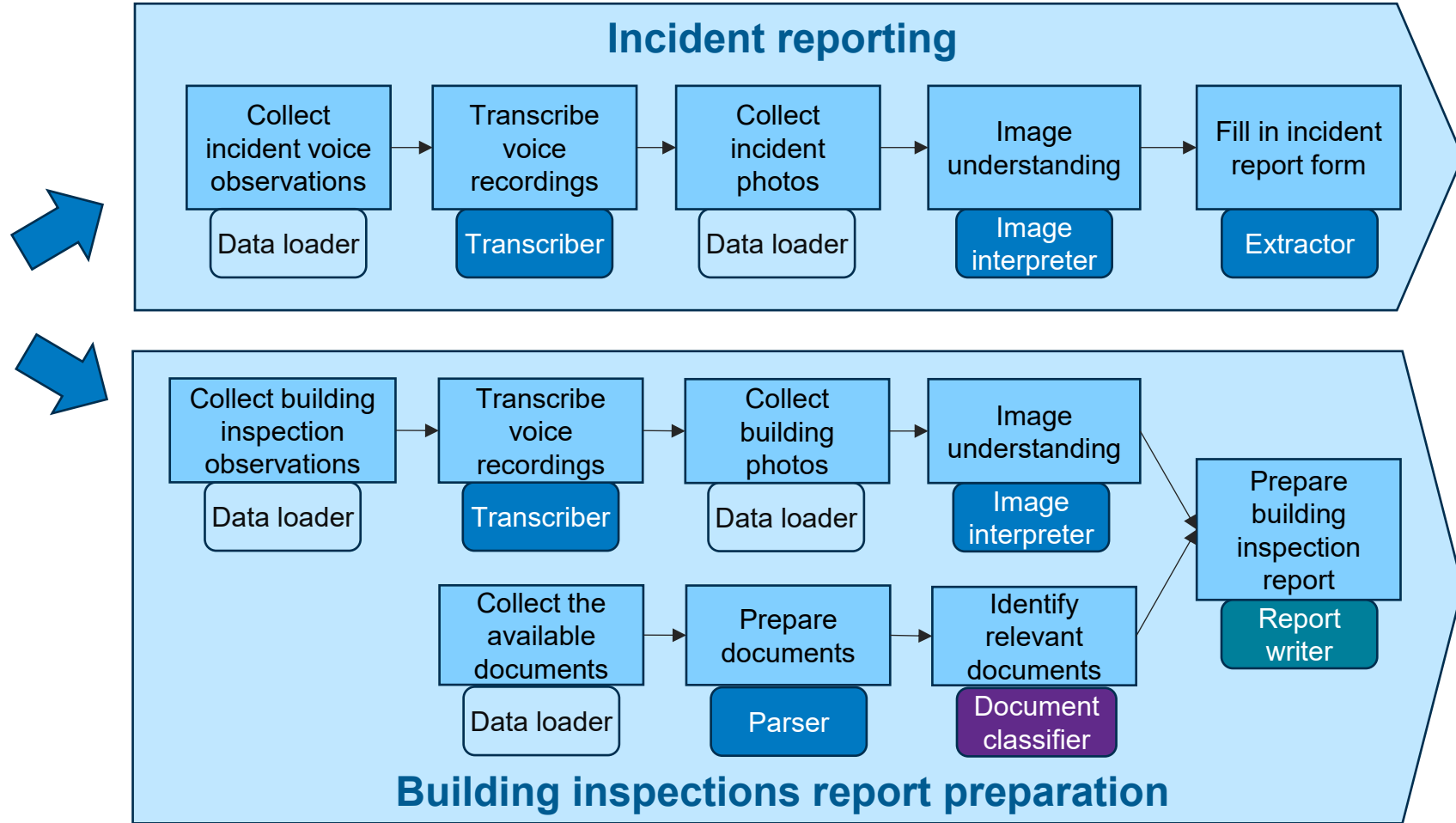
Components of the GAIK toolkit (subset)



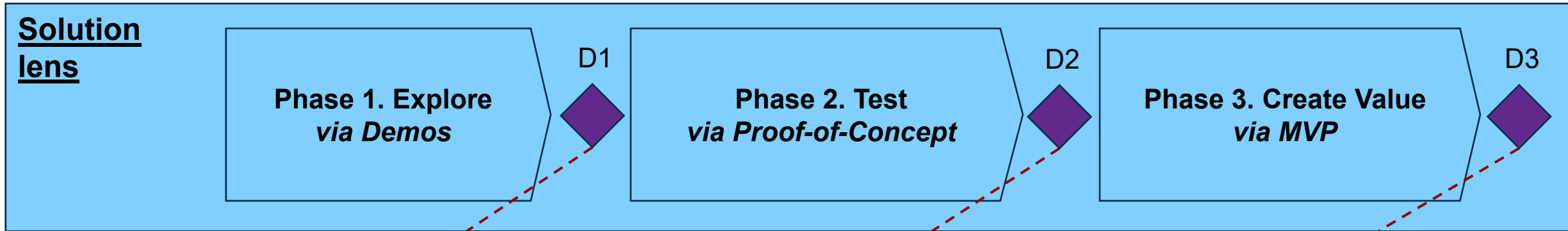
Example link between components and use cases



Application of the toolkit components for two use cases



GenAI implementation processes, Solution lens



Innovate - answers to these questions:
What use cases are relevant for us?
Should we spend time on PoC?
What data is needed for PoC?
What success criteria do we set for the PoC?

Commit - answers to these questions:
Was the PoC successful enough?
Are we ready to invest into MVP?
What integrations are needed?
What success criteria do we set for the MVP?

Scale up - answers to these questions:
Did the MVP succeed (ROI, usability, etc...)?
Are we ready to move it to large-scale usage?
How do we adopt the solution at scale (deploying, operating, monitoring, training)?
How do we continuously improve the system?

GenAI implementation processes, Organization lens

Organization lens

Assess and build organizational AI-readiness

Identify and select AI use cases

Solution lens

Phase 1. Explore
via Demos

D1

Phase 2. Test
via Proof-of-Concept

D2

Phase 3. Create Value
via MVP

D3



GAIK Solution Configuration Wizard

A guided tool that turns a use-case idea into a validated GenAI solution package

What the user does

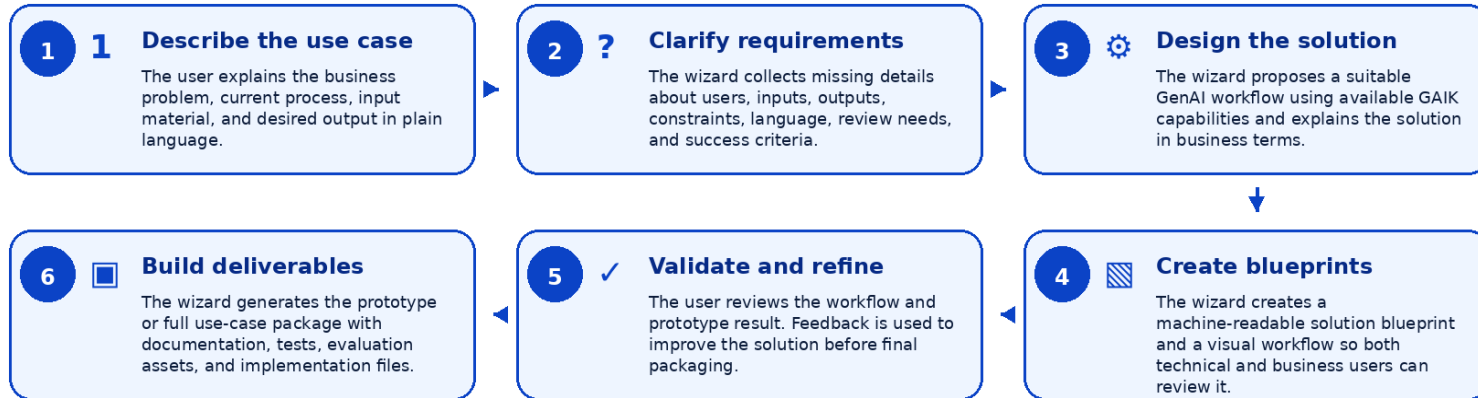
Describe the problem, review the proposed solution, run or inspect the prototype, and approve changes.

What the wizard does

Asks the right questions, maps the use case to GAIK capabilities, creates blueprints, and generates runnable assets.

What the user gets

A reusable GenAI use-case package with blueprint, visual workflow, prototype, documentation, tests, and evaluation assets.



Scope Supported use-case families

A Audio to structured data

D Document to structured data

P Complex document parsing and extraction

V Vision-based extraction

R Retrieval-augmented generation

C Conversational access to internal knowledge

G Report, summary, or proposal generation

S Enhanced speech-to-text

H Semantic and hybrid search

Main outputs

{} Solution blueprint

Central configuration that captures the solution design and drives generation.

📊 Visual workflow

Business-friendly process view for reviewing roles, steps, decisions, and hand-offs.

▶ Runnable prototype

Minimal working package that can be tested with sample or user-provided data.

📁 Full package

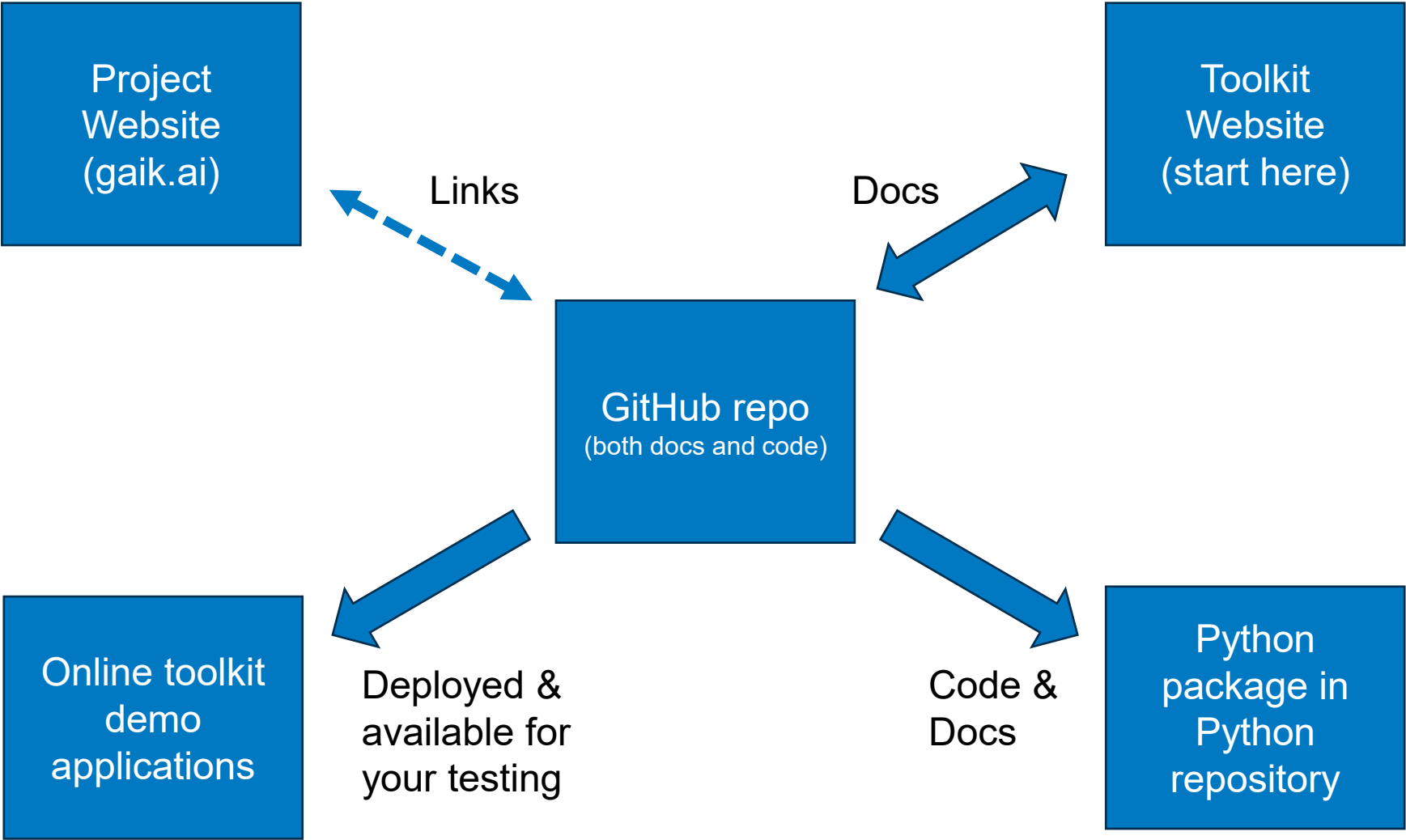
Reusable project structure with code, configuration, prompts, schemas, tests, and evals.

📄 Documentation

Product canvas, technical specification, user guide, developer guide, and evaluation plan.



Access to the GAIK toolkit





Use case 1: Incident reporting and knowledge capture solutions



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Incident reporting solution for Luvata

Solution: Incident reporting app

- Easy speech-to-text tool to log safety observations in an industrial environment
- Support also for text input

Goal: to make logging as easy as possible to ensure a safe working environment

Status: solution is created and tested, preparation for the implementation and business value evaluation

More details from the company representative:

Presentations of Nikke Syväkuru from Luvata:

- at the toolkit launch event – February 4 – [Slides](#) / [Video](#)
- at the GAIK event in Tampere – March 17 – [Slides](#) / [Video](#)



LUVATA



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Haaga-Helia




Tampere University

Use Cases

Incident Reporting Featured

Record an incident, transcribe audio, and extract structured report




Speak or Type Instant Analysis

Organized Data PDF Export

Construction Diary Featured

Record daily construction site activities via voice or text. Extract structured data automatically.



Voice or Text Multilingual

Personnel Tracking PDF Export

Video Transcription & Captioning

Upload audio or video, or open the ready-made example, to generate subtitles and transcripts

Semantic Video Search

Ask in plain language and jump to the right moment in indexed videos

Purchase Order Processing

Upload a purchase order, BOMs, and a pricing table to calculate line-item prices and generate an order draft

More Use Cases Coming

- Customer onboarding and sales assistant Soon
- Report Writing Soon
- Sales Proposal Generation Soon
- Learning plans & recommendations Soon

Incident reporting – generic solution

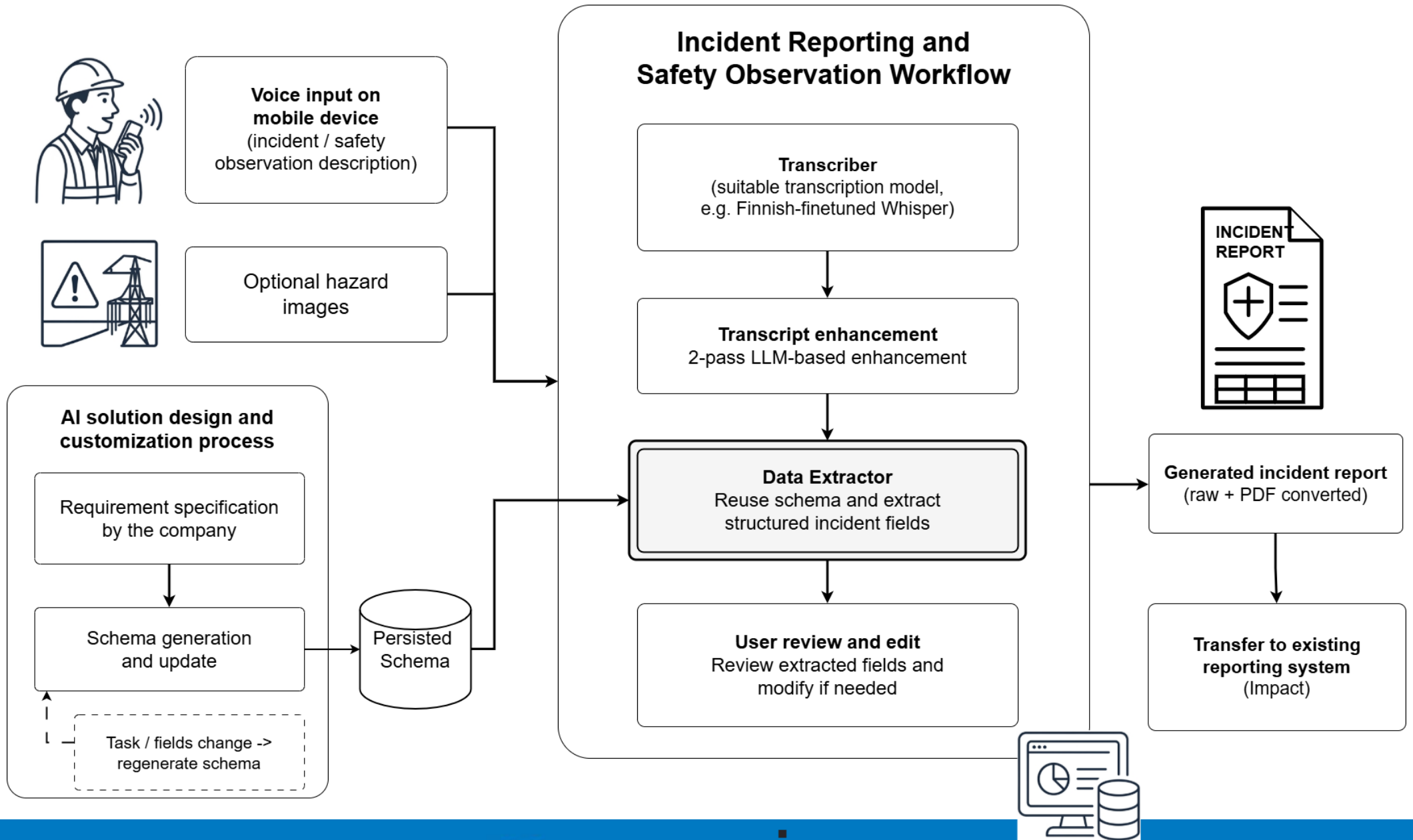
- Use voice to create incident reports
- Avoid laborious manual reporting (writing)

Demo link (**registration needed**):

<https://gaik-demo.2.rahtiapp.fi/>

Demo recording:

<https://www.youtube.com/watch?v=iJdfjEq1DbE>



Incident reporting GAIK components

Business layer

- GenAI product canvas: Incident reporting use case
- Business process templates: Incident reporting use case

Implementation layer

- Code and no-code versions

Evaluation layer

- Value evaluation framework
- Value evaluation framework: Incident reporting use case (including metrics)
- Evaluation methods (quality & performance)

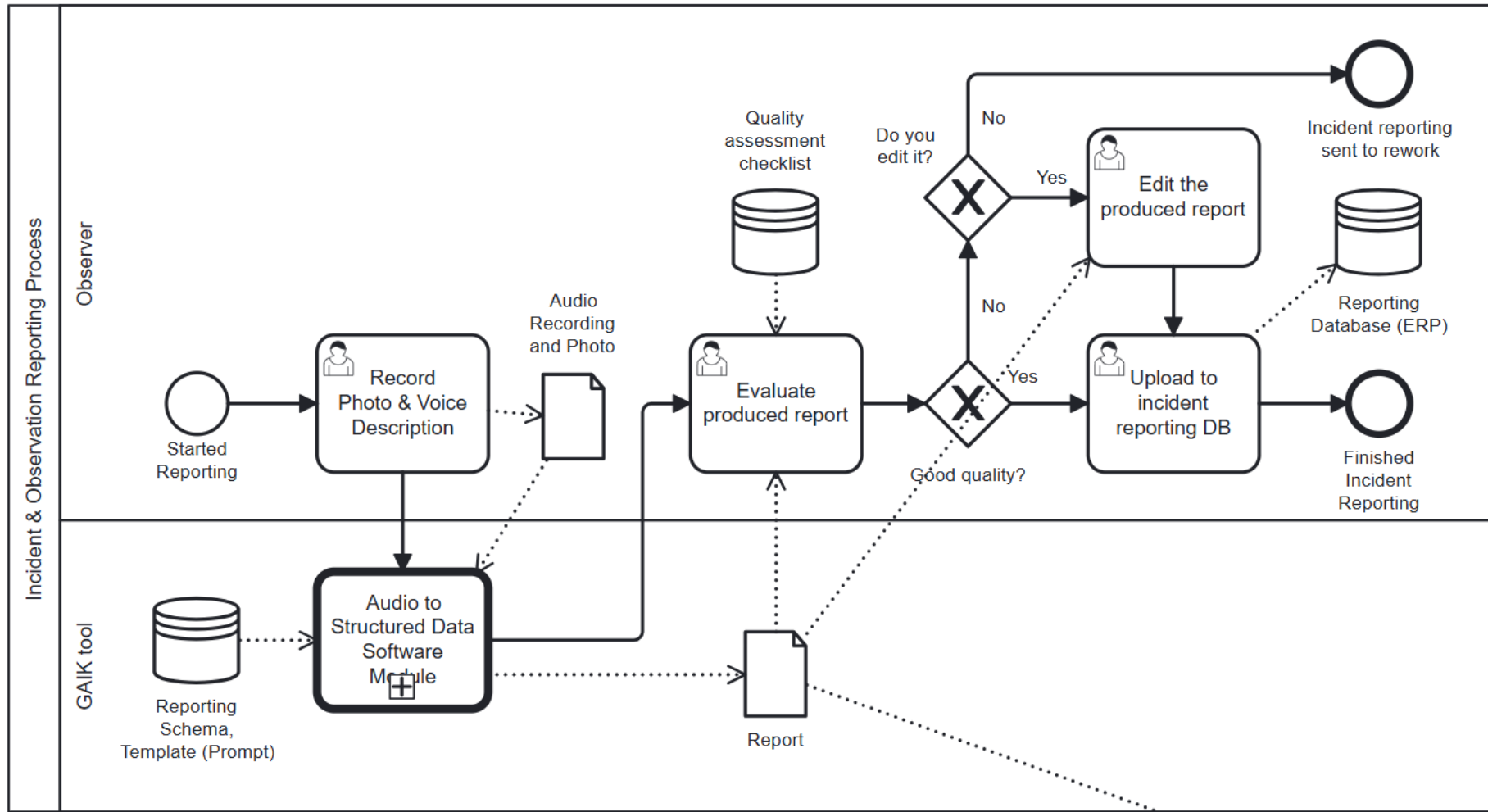


GenAI product canvas/description (incident reporting)

Name	Incident reporting assistant
Task	Incident reporting
Knowledge processes	Knowledge Capture + Knowledge synthesis
Business need	Incidents such as broken equipment or water leaks are common and must be reported quickly so they can be resolved.
Solution	The new AI-driven solution will enable employees to report incidents quickly through voice input on their mobile phones from different locations (including outdoors).
Users	Everyone
Input	<ol style="list-style-type: none">1. Voice input (Verbal description of an incident)2. Images(photos), maybe with annotations3. Template/-s for incident reports (list/-s of questions)4. Reference data (list of equipment, list of facilities, list of incident types and severity levels)
Output	Incident report (filled in template)
Expected benefits and value	<ol style="list-style-type: none">1. Faster Response Time2. Increased Accuracy and Consistency3. Improved Safety4. Better Compliance and Documentation



Process model: desired state

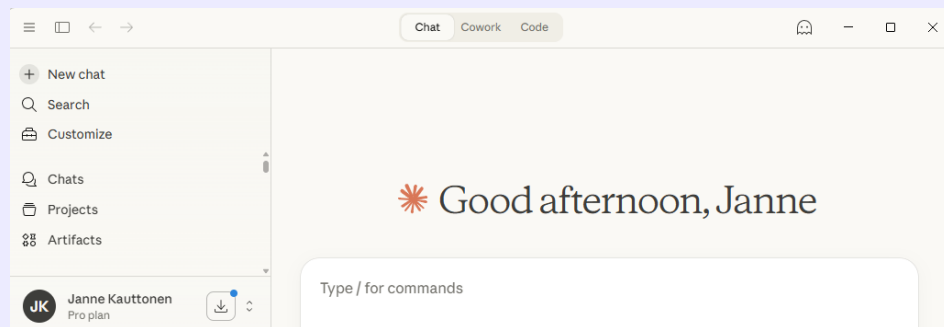


Implementation - No-Code or Code

No-code

- Claude Skill + MCP server
- One-click guided setup

Use Claude Desktop as GUI



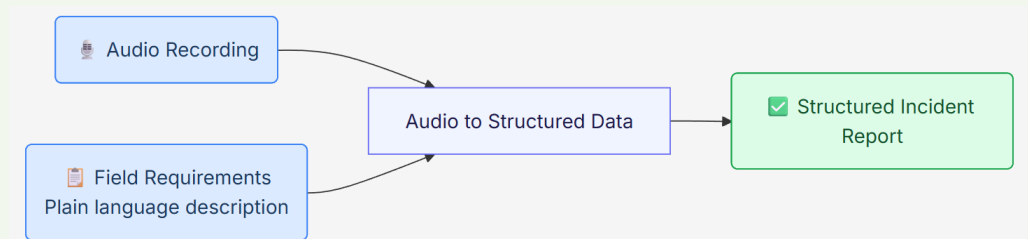
Code

Pick two Python components:

- **Transcriber** (audio → text)
- **Extractor** (text → structured data)

OR module **Audio To Structured Data**

Use as part of your app



Value evaluation framework - Value dimensions

Benefits of GenAI Implementation



Informational value – data-driven prevention decisions

Economic value – reduced operation costs

Operational value – faster response times

Social value – better collaboration

Emotional value – employees feel heard

Value evaluation model: Incident reporting value items

Informational Value

- Better incident data
- Improved insights
- Stronger analytics

Outcome:

Smarter prevention decisions

Emotional Value

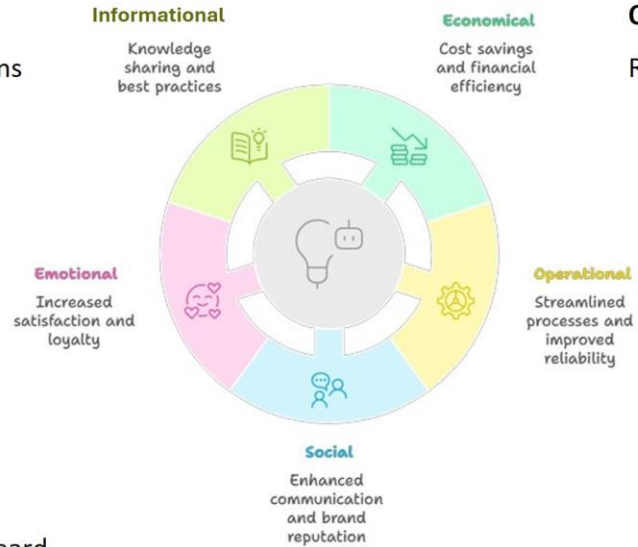
- Higher confidence
- Increased trust
- Less reporting friction

Outcome:

Employees feel safer and heard

Incident reporting

Benefits of GenAI Implementation



Financial Value

- Lower admin effort
- Accident cost avoidance
- Productivity gains

Outcome:

Reduced operational costs

Functional Value (Primary)

- Faster reporting
- Less effort
- Complete, standardized reports
- Accessible on-site

Outcome:

More incidents reported, faster fixes

Social Value

- Shared safety responsibility
- Stronger safety culture
- Corporate responsibility

Outcome: Better collaboration and reputation

Value evaluation model: Incident reporting metrics

	Metric	Calculation Formula or Methods	Explanation
Operational	Average Time per report	= Total processing time / Number of reports	Average report completion time as an indicator of process efficiency, and may be evaluated on a monthly, quarterly, or annual basis.
	Human labor time per report	= Total human labor time / Number of reports	Average amount of human working time required per report as an indicator of the automation level of the AI tool.
Economical	Average cost per report	= (Human labor time per report × Labor rate) + System cost per report + Other allocated costs per report	The sum of all resource costs required to produce a report.
	Early Insight Financial Impact (EIFI)	= Expected loss without early detection - Actual loss	...
	ROI	= (Total benefits - Total costs) / Total costs	...
Informational	Information coverage/Report completeness rate	= Captured relevant information/Total relevant information	...
	Information Accuracy rate (%)	= Correct information outputs/total outputs	...
	Decision confidence score (decision support)	= Average value of users' confidence in decisions supported by GenAI, measured using a Likert-scale survey (e.g., 1 = strongly disagree, 5 = strongly agree)	...

Output evaluation methods - Strategies

Objective Evaluation

- Determines the output against hard metrics (e.g., accuracy)
- Compares system output with a correct reference
- Allows fair comparison
- Fast, consistent, and repeatable

Subjective Evaluation

- Checks how good the output appears to a **human**
- Humans review for clarity, correctness, and readability
- Ensures the result makes sense and sounds natural

LLMs-as-judge

- Automates subjective evaluation using predefined scoring rubrics
- Scale human-like assessment
- Might introduce biases (e.g., verbosity)

Output evaluation methods - Objective Metrics

Transcription Evaluation

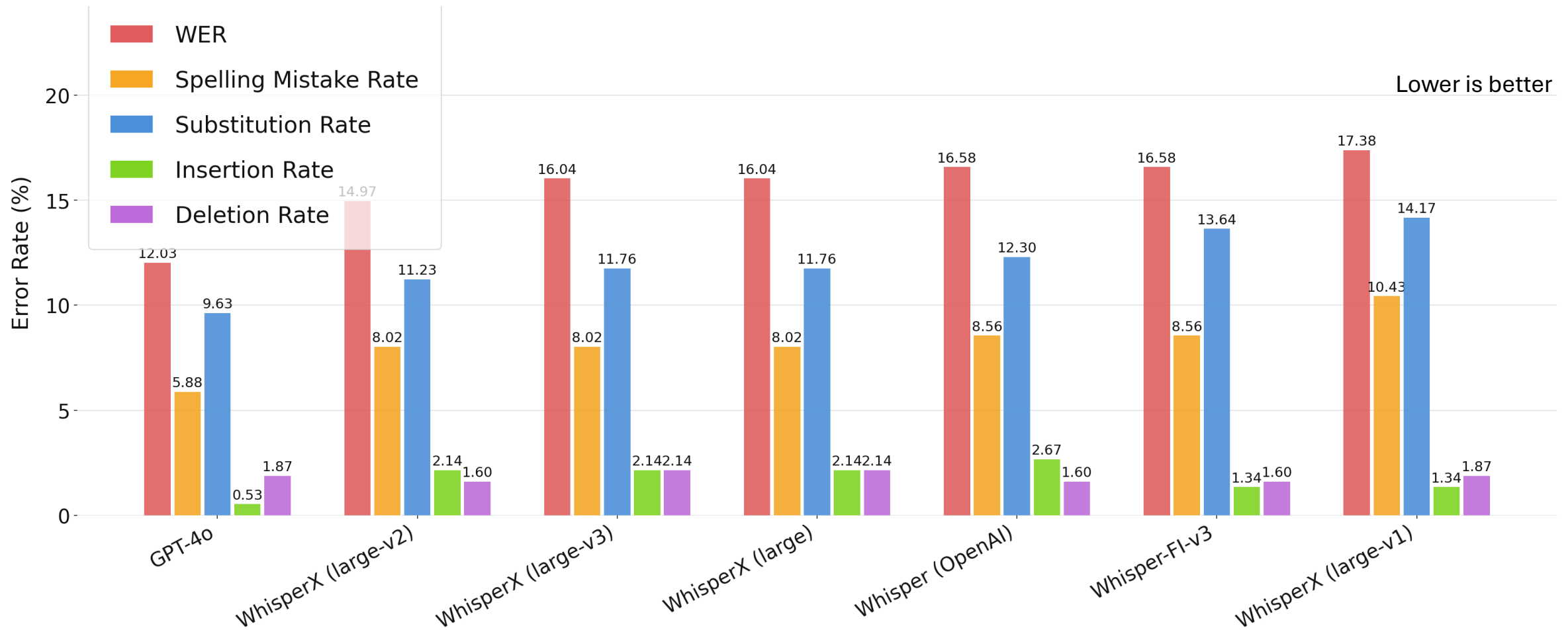
- **Word Error Rate (WER)** - How close the transcription is to the original audio
- **Missing Words (Deleted Rate):** Words that were skipped or left out
- **Extra Words (Added Rate):** Words added that weren't in the original
- **Substitution Error:** How often the model replaced a correct word with a wrong word.
- **Spelling Error:** Misspelled words

Information Extraction Evaluation

- **Exact Match Rate:** Certain fields (e.g., Name and Date) must match exactly.
- **Semantic Match Rate:** Certain fields (e.g., Event Description) should match approximately 70% in meaning.



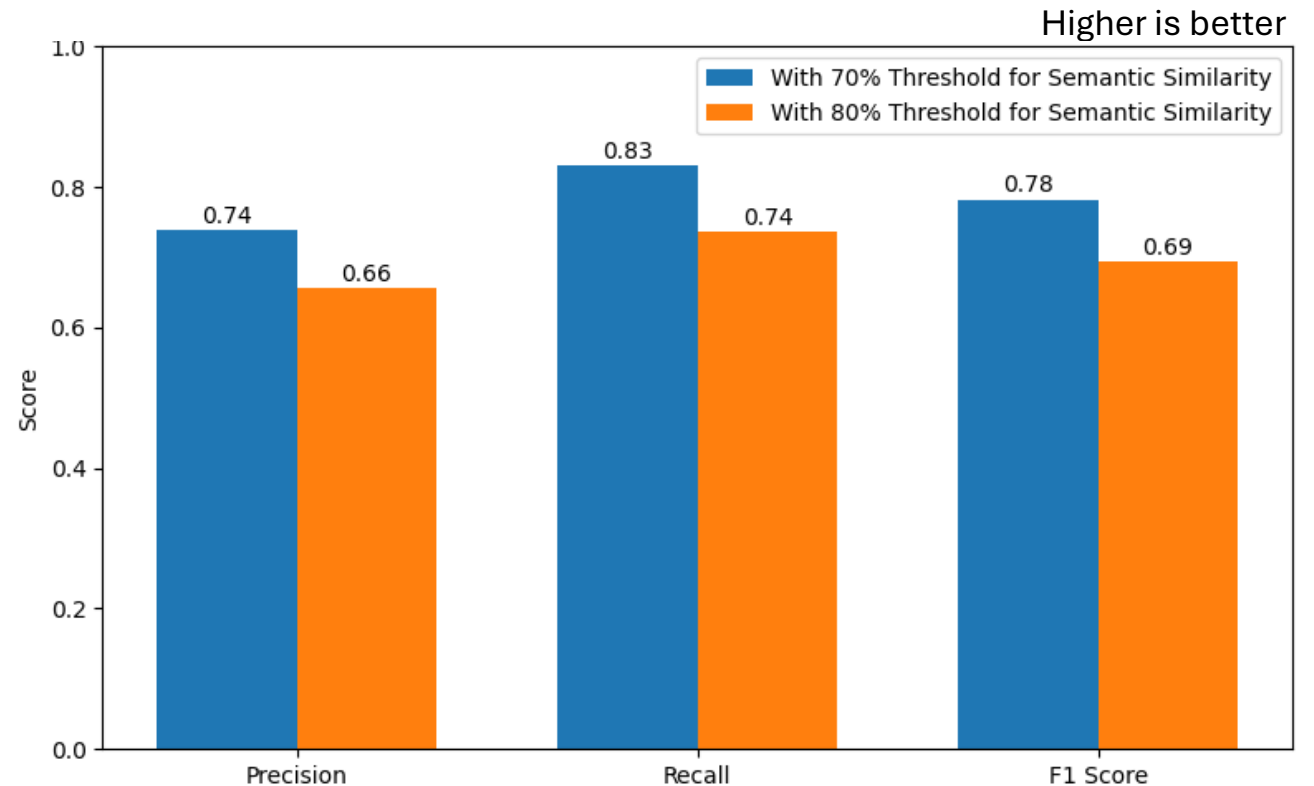
Output evaluation methods - Transcription evaluation



Output evaluation methods - Information extraction evaluation

Manual inspection showed that a model sometimes mixes semantics of the fields, e.g.

- adds location into 'mitä tapahtui' field
- mixes 'lähellä piti' and 'toteutetut toimenpiteet'





Use case 2: Transcription, Captioning & Translation



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Transcription, Captioning & Translation solution for QAdental

Solution: Creation of closed captions in various languages (e.g. English, Swedish) for Finnish educational videos and podcasts

Goal: To make a webinar/podcast in one language available/accessible for users in various languages

Status: solution is created and tested, preparation for the implementation and business value evaluation

More details from the company representative:

Presentations of Jani Korpela from QAdental:

- at the toolkit launch event – February 4 – [Slides](#) / [Video](#)
- at the GAIK event in Tampere – March 17 – [Slides](#) / [Video](#)



Transcription, Captioning & Translation solution, GenAI product canvas

Objective	To make educational video and podcast content available and accessible to users in multiple languages.
Task	Creation of domain-specific closed captions and spoken translations for educational videos and podcasts originally produced in one source language.
Business need	The organization's content is mainly available in the original language, which limits its use in other language markets and reduces accessibility for international or multilingual audiences.
Solution	A tool or workflow that automatically creates accurate, domain-specific captions, translated subtitles, and spoken audio versions in selected target languages.
User/-s	Professionals, learners, customers, and organizations that need access to specialized educational content in their preferred language.
Input	<ul style="list-style-type: none"> • Video and audio content • Presentation slides or supporting learning materials • Domain-specific terminology and vocabulary
Output	<ul style="list-style-type: none"> • Source-language transcripts and closed captions • Translated closed captions in target languages
Expected benefits / value	<ul style="list-style-type: none"> • Wider reach among international and multilingual audiences • Easier entry into new language markets • Improved accessibility for users who need captions or translated content • Higher value from existing educational videos and podcasts • Better user experience for professionals and learners working in different languages

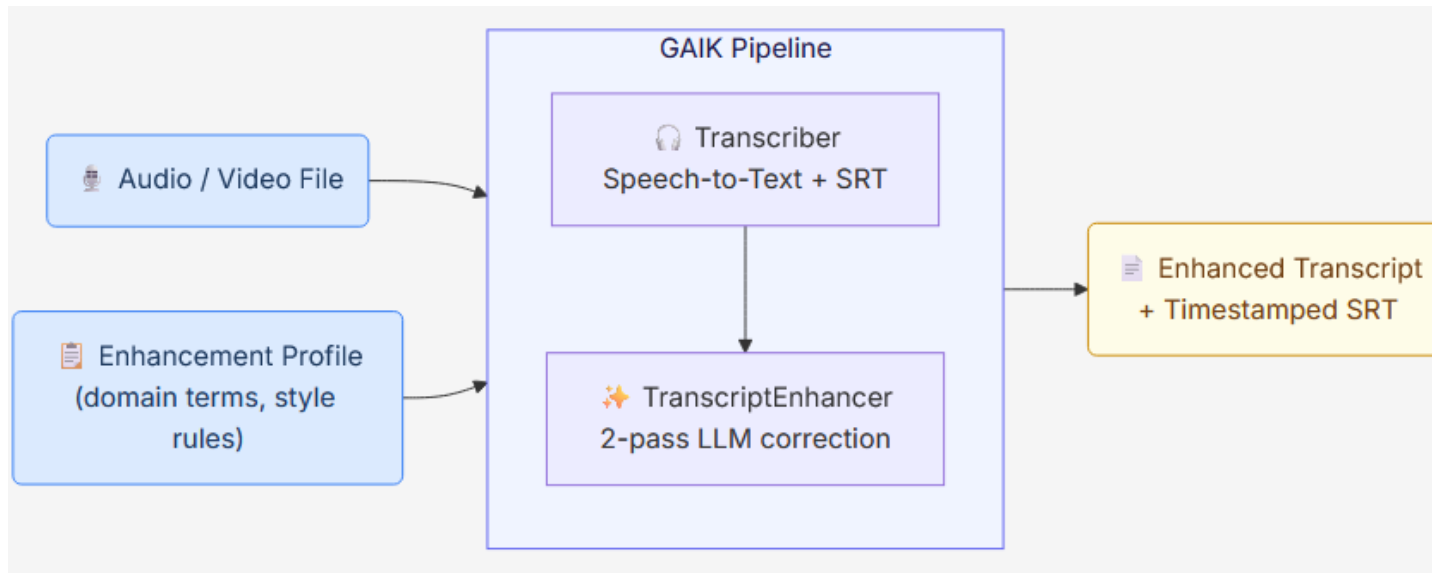
The screenshot displays the GAIK application interface. At the top, there are navigation tabs: 'Use Cases', 'Software Components', 'Software Modules', and 'No-code Assets', along with a 'Sign out' button. The main content area is titled 'SRT Subtitles (122 segments)'. It shows a list of subtitle segments with their start and end times and the corresponding text. Below the list, there are buttons for downloading 'Transcript (.txt)', 'Subtitles (.srt)', and 'Subtitles (.vtt)', and a button for 'Open Semantic Video Search'. At the bottom, there is a 'Ready-made Example' section featuring a video player and a 'Reload Example Output' button. The video player shows a man speaking with subtitles. The example title is 'Kielitaito tuo etulyöntiaseman työelämässä' and it includes 122 subtitle segments, a transcript, and SRT + VTT files.

Transcription and captioning – generic solution

- User uploads video or audio
- The system produces the transcript and subtitles

Demo link (**registration needed**):
<https://gaik-demo.2.rahtiapp.fi/>

Implementation layer



Two GAIK software components handle the AI-powered stages of the pipeline:

1. Transcriber
2. TranscriptEnhancer

The resulting enhanced transcript feeds into a downstream translation step that converts the content into the target language and produces SRT subtitle files ready for publishing or archival.



Use case 3: Building inspection report preparation and knowledge synthesis solutions



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Building inspection reports for Lotus Demolition

Solution: Automate the process of compiling building inspection reports

Goals:

- ▶ Time and cost savings
- ▶ The price for the inspections and surveys decreased

Status: solution is being tested now

More details from the company representative:

Presentations of Juha Tanner from Lotus Demolition:

- at the toolkit launch event – February 4 – [Slides](#) / [Video](#)



Building inspections report creation, GenAI product canvas

Task	<p>Building inspections and surveys, including:</p> <ul style="list-style-type: none"> A. Building condition assessment (template 1) B. Pre-demolition audit (template 2) C. Indoor air quality survey (template 3) <p><i>These inspections and surveys are required for planning maintenance, renovation, or demolition activities and must adhere to standardized internal formats and regulatory guidelines.</i></p>
Business need	<p>There is a need to decrease the service price, so time and cost savings are needed.</p> <p>Analysis of existing documents and site inspections with handwritten notes and photos. Data is compiled into technical reports using standardised templates. Current process is time-consuming and labor-intensive.</p>
Solution	<p>A GenAI tool to automate the process of compiling reports by helping surveyors create structured reports.</p>
User/-s	<p>Supervisors</p>
Input	<ul style="list-style-type: none"> • Voice-recorded notes and observations • Documents about the building, including structural drawings, building plans, renovation history • Photos • Report template and guidelines
Output	<p>Building inspection report as a draft that can be quickly reviewed and finalized</p>
Expected benefits / value	<ul style="list-style-type: none"> • Time and cost savings • The price for the inspections and surveys decreased (at least 30% lower)

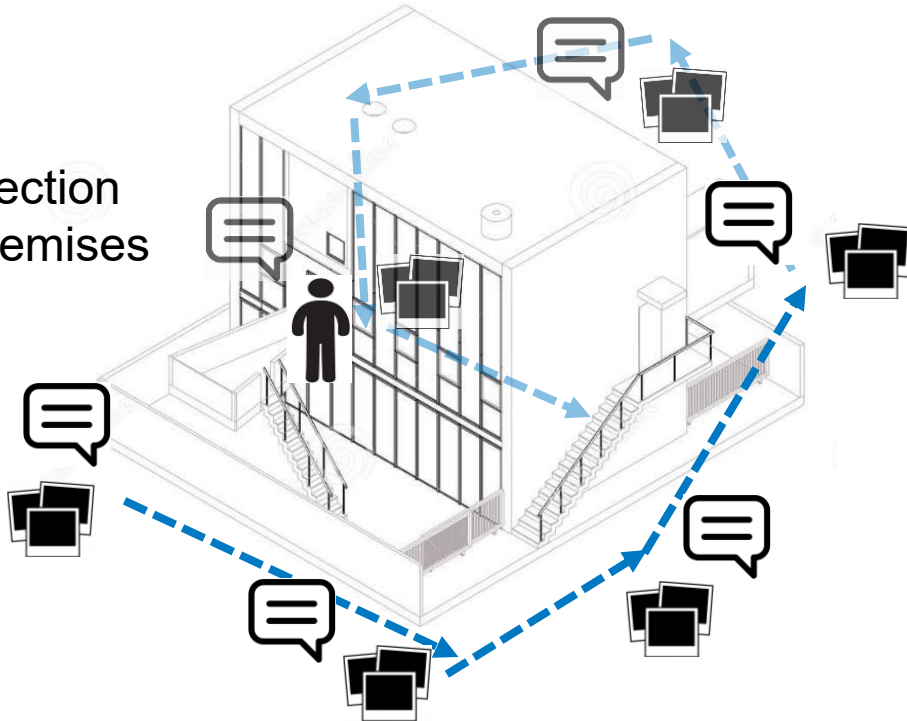
Building inspections report creation: Workflow

Historical documentation



- **Inspection data:** Photos, notes and audio recordings
- **Background data:** Historical technical documentation
- **Report** is created by combining all data according to pre-defined templates

Inspection at premises



Historical documentation

Inspection recordings, notes and images

Report template and guidelines



Property Condition Assessment Report



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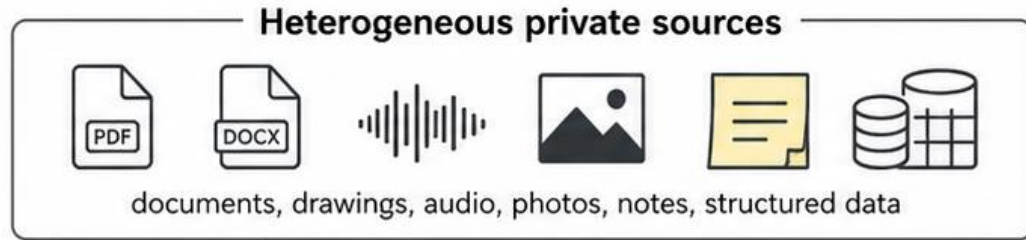


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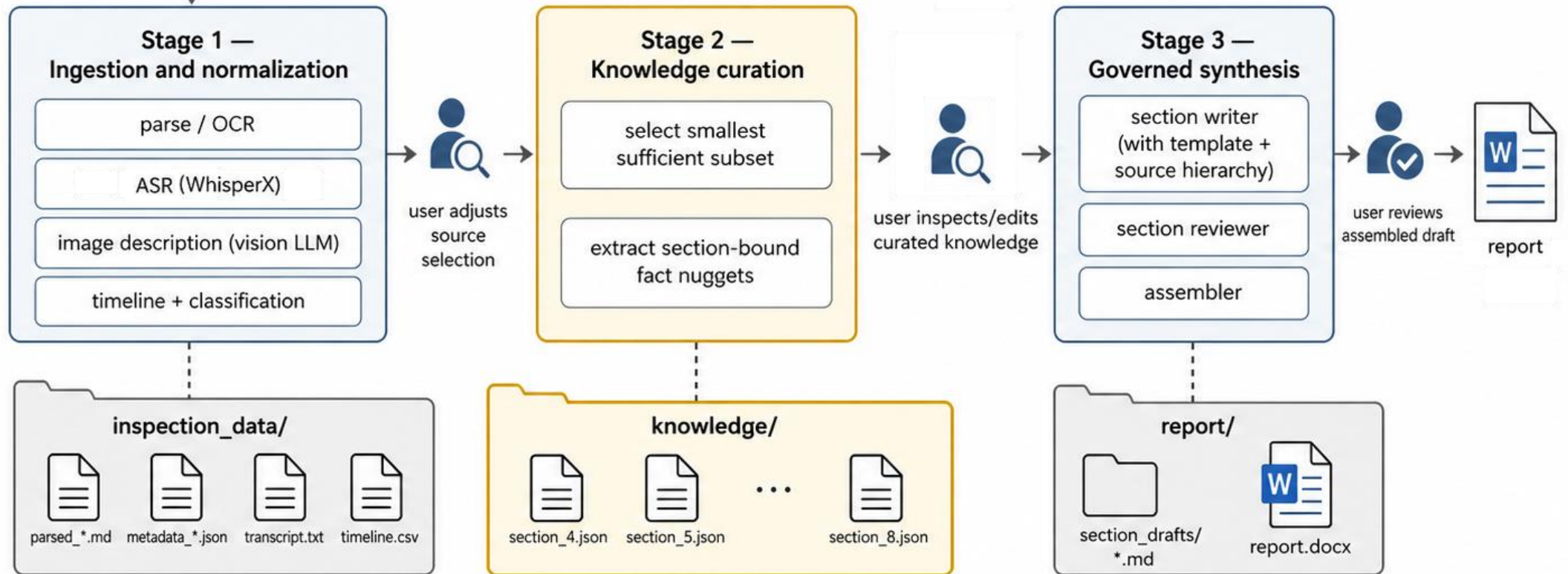


Tampere University

GAIK toolkit: Three-stage process (generic)



CURACT: A Curation-Anchored Framework for Generative-AI Report Writing in Knowledge-Intensive Expert Work



GAIK toolkit: Generic Report Writer

- Accepts multiple documents in varying formats (pdf, xlsx, docx, audio/video, images)
- Allows users to create their report writing use cases and save for later use
- Allows to change settings for parsing, transcription, and report writing
- Generates the report in Markdown and DOCX formats with curated evidence
- GAIK components used:
 - parser
 - transcriber
 - vision_extractor

Report Writer
Generate structured reports from any mix of documents, audio, images, and spreadsheets

Reload Example Upload Config Download Config

Example loaded — your edits are temporary and will not be saved back to the example template.

Use Case
Define what report to generate

Report title
Q2 Product Planning Meeting Report

Report description
A structured report of the Q2 product planning meeting held on September 10, 2024, documenting decisions, priorities, action items, and open questions.

Sections
Define the report sections. Use depends_on (Advanced) to write summary/conclusions sections after their dependencies.

1 Executive Summary
Summarize the purpose and outcome of the Q2 product planning meeting. Cover the main themes discussed, the overall direction the team aligned on, and any high-level capacity or resource considerations mentioned.

Advanced (id - depends_on)

2 Decisions Made
List and briefly explain the key decisions reached during the meeting. For each decision, state what was agreed and the main reason or constraint behind it.

Generated Report
5 section(s) · 20,136 tokens

Executive Summary Decisions Made Action Items Open Questions
Next Steps

Q2 Product Planning Meeting Report

Executive Summary

The available materials do not document a Q2 product planning meeting held on September 10, 2024. Instead, they document a Q3 Product Roadmap Review held on December 15, 2024, attended by Sarah Chen, Mike Rodriguez, Lisa Park, James Wilson, and David Kim. The stated purpose of that meeting was to review three items: mobile app launch status, dashboard redesign, and the API modernization project (meeting_recording.mp3).

The discussion centered on execution readiness across those

Download .md Download .docx

Action Items Decisions Made Executive Summary Open Questions
Next Steps

```
[Decisions Made] done
[Executive Summary] draft written (276 words) → reviewer
[Executive Summary] reviewer: 1 correction(s) proposed, 1 applied
[Executive Summary] style polish applied
[Executive Summary] done
Phase 1/2 complete → Phase 2
Phase 2/2 - writing 1 section(s) in parallel: Next Steps
[Next Steps] context: 3 dependency section(s)
[Next Steps] evidence loaded → curation
[Next Steps] curated evidence → drafting
```



Use case 4: FAIR AI Help Desk and knowledge access solutions



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AI Help Desk for Finnish AI Region

Context / Need

FAIR EDIH (Finnish AI Region European Digital Innovation Hub) needs a scalable first-line AI support service to help SMEs and public sector organisations navigate complex AI services, infrastructures, and regulations.

Solution: Chat assistant on the FAIR website: answers questions about FAIR/EDIH services, events and AI adoption in plain language (FI/EN), and hands over to a human expert when needed. Answers grounded in the real service catalogue.

Goals:

Improve service accessibility for SMEs, response speed, and ecosystem navigation (24/7)

Identify emerging needs and improve FAIR services

Free expert time for the real cases.

Status: In production. 22 service cards + fairedih.fi content as a knowledge base, expert hand-off with ticketing and an admin dashboard, automated quality benchmarks (40/40 passing). GDPR-compliant consent.

AI assistant for the FAIR service catalogue — live at <https://helpdesk.2.rahtiapp.fi/>



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FAIR Helpdesk AI Agent

1. User questions



The user asks about FAIR services, AI project support, public AI information, or help from a human expert.



2. Intent router



The assistant identifies what the user needs and chooses the most suitable route.



3. Route selection



The question is handled by service knowledge, selected public information, expert handoff, or guardrail.



4. User response



The user receives a concise answer, a relevant FAIR service suggestion, a next step, or an expert handoff form.



Uses conversation context (chat history) + Admin instructions or settings



FAIR Helpdesk Agent

Orchestrates routing, tool use, and response generation



Understands intent



Selects route



Calls tools



Composes answer



Service knowledge route

For questions about FAIR services, advisory support, testing, PoC, or providers.

Query type How can FAIR help me test my AI idea?

Knowledge FAIR service cards

Tool used Search FAIR services + get service details

Answer FAIR offers AI testing and PoC support. Book a session with an AI advisor to validate your concept.



Selected public-source route

For current public information that may not be in the service-card catalogue.

Query type What is new about FAIR or the EU AI Act?

Knowledge Selected domains: FAIR, Haaga-Helia, EU/EC sources

Tool used Selected-domain web search

Answer Current answer from approved public sources



Expert handoff route

For questions where the user wants human support, a specific contact, or hands-on expert guidance.

Knowledge Contact information linked to FAIR service cards

Tool used Expert handoff tool

Answer A short message plus contact form for the user



Ask approval

User confirms intent



Contact form

User adds details



Expert options

Relevant contacts



Ticket + email

Request is sent



Guardrail route

For requests outside FAIR or AI-for-business scope.

Response

Briefly decline and redirect to FAIR services or AI adoption support.



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Welcome!
Hi! How can I help you today?



What AI services does FAIR offer?



We want to start an AI pilot (PoC)



What FAIR events are coming up?



How could AI help my small business?



What is FAIR / EDIH?



Connect me with a

Real case: “We want to start an AI pilot (PoC)” → grounded service recommendation

We want to start an AI pilot (PoC)

> 7 services found

Answer

Two FAIR services are usually the best starting point for an AI PoC (a small, low-cost test to see if AI fits your problem):

- **AI Implementation Advisory** — helps you define the problem, data needs, budget, and what the pilot should prove. Typical format: 1–3 short workshops.
- **AI Proof-of-Concept** — builds and tests the actual AI prototype for one concrete business problem. Typical duration: 3–6 weeks.

There are also accelerator programs and test environments if you want a broader pilot setup.

What kind of business problem are you hoping to test with AI?



Yes, show AI services

Show AI advisory contacts

What is an AI maturity assessment?



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Real case: “We want to start an AI pilot (PoC)” → grounded service recommendation

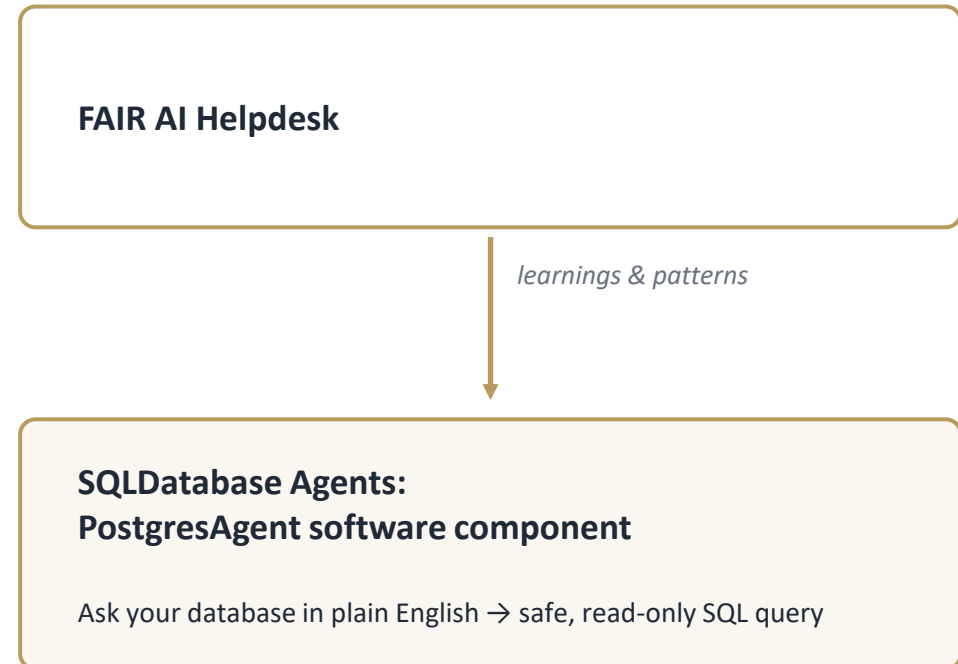


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From the solution to reusable components

- What we learned building the Helpdesk was contributed back as a reusable component
- **The reusable component lets an organisation connect an AI assistant to its own database.**
- A user can ask a question in normal language, and the system safely searches the database and gives an answer.
- External open-source components were also used:
 - ToolLoopAgent component to handle multiple different tool calls





New components and use cases



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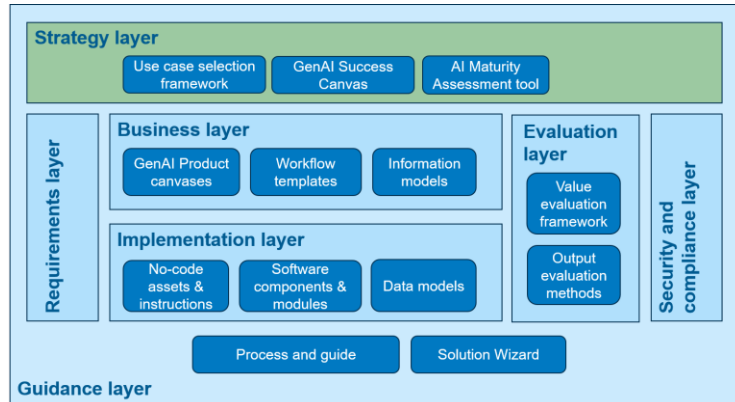
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New components at the Strategy level



GenAI Success Canvas

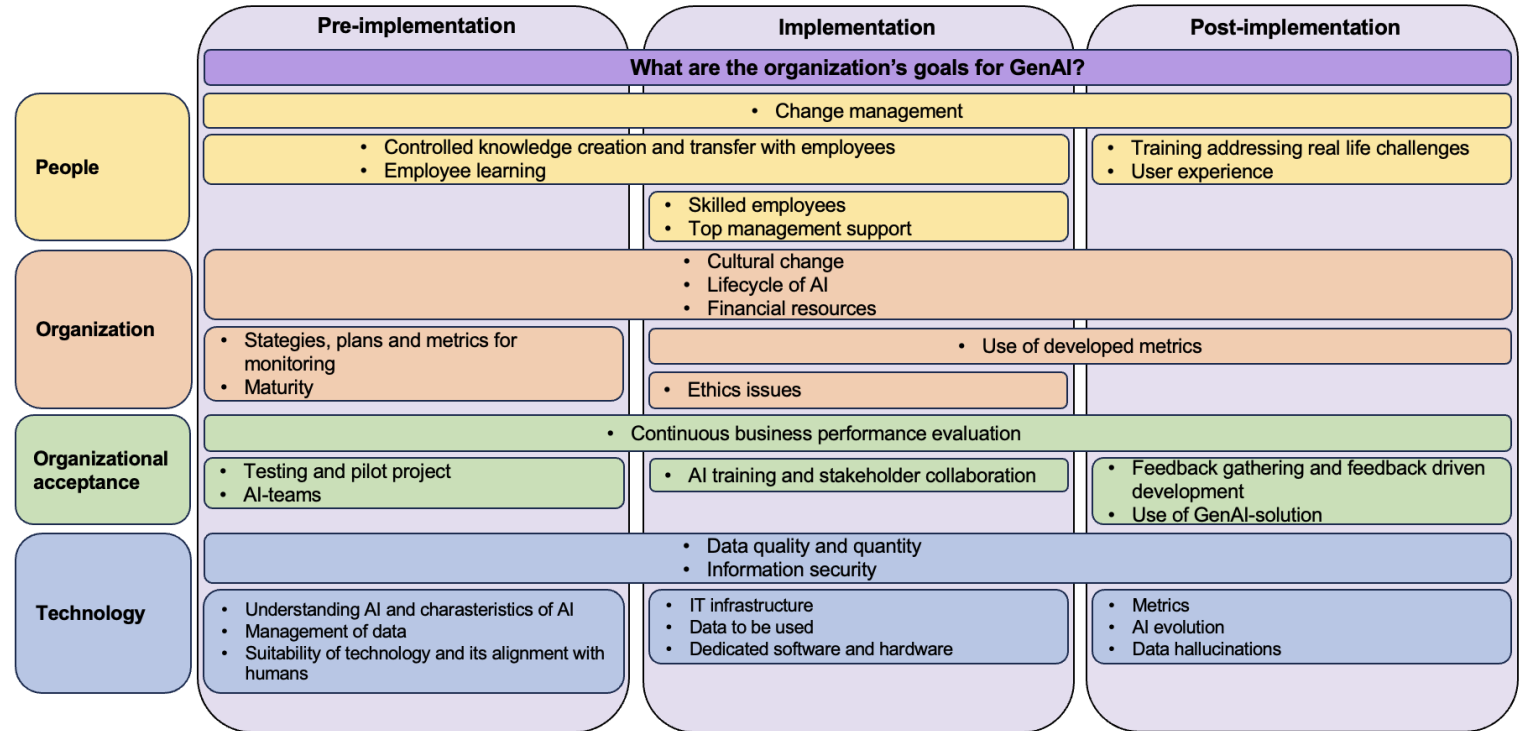
Master thesis:

Author: Veera Saastamoinen

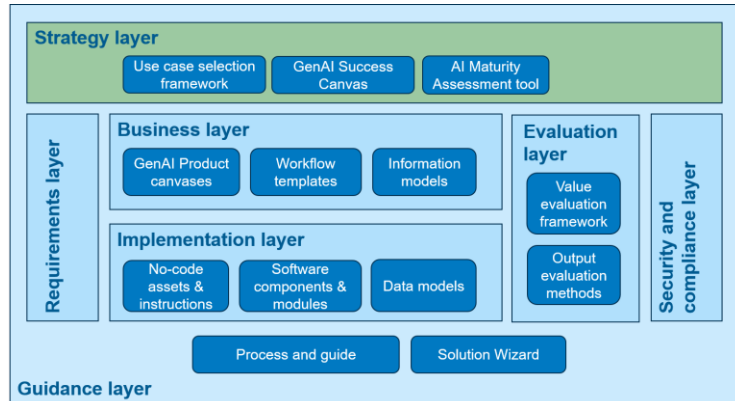
Title: Successful adoption of GenAI from a knowledge management perspective

University of Tampere

Canvas: Critical Factors of GenAI Adoption



New components at the Strategy level



Use case selection framework

Developed and tested
in the FAIR project

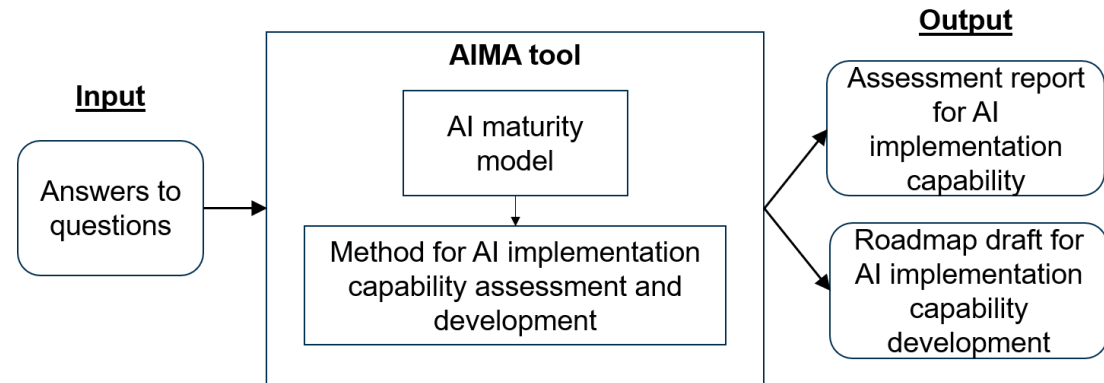
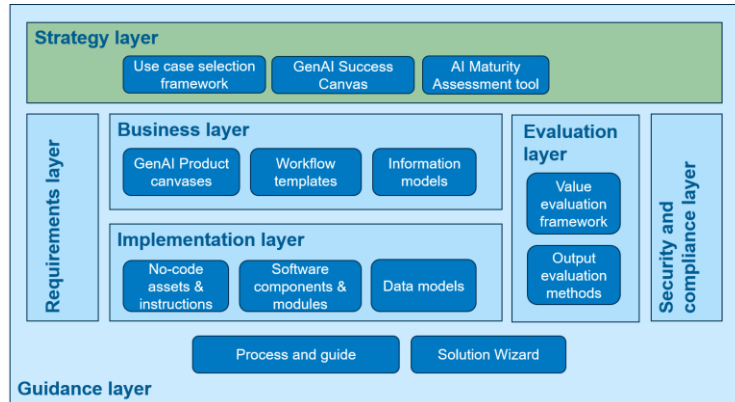


Process:

1. Define AI application vision and objectives
2. Identify AI opportunities (iteration 1)
3. Select the primary AI application object (combination is possible):
 - business processes or
 - products/services of the company or
 - customer experience or
 - business model
4. Describe the primary AI application object(-s)
5. Map AI opportunities to the primary AI application object(-s)
6. Enrich the list of AI opportunities (iteration 2)
7. Prioritise AI opportunities: Impact / Implementation complexity
8. Create an AI implementation roadmap

Format: Workshop

New components at the Strategy level

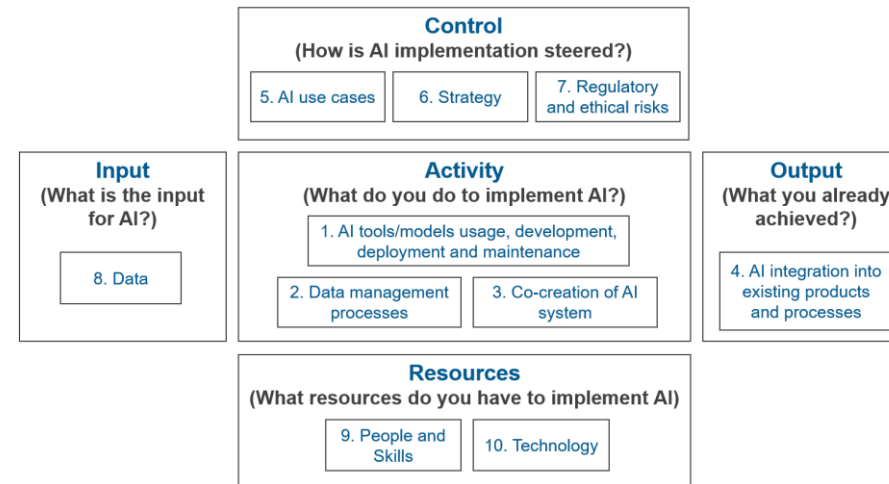


AI Maturity Assessment tool

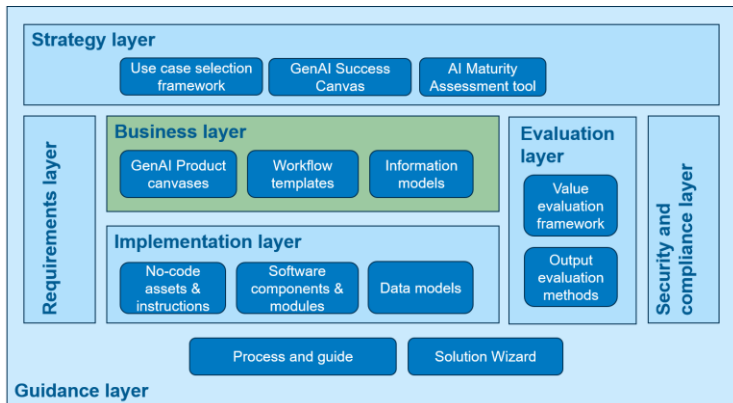
Developed and tested in the FAIR project



Dimensions of the AI implementation capability



New components at the Business level



Workflow templates for generic use cases:

- for Incident reporting
- for Purchase Order Processing
- ...

Workflow templates for software modules:

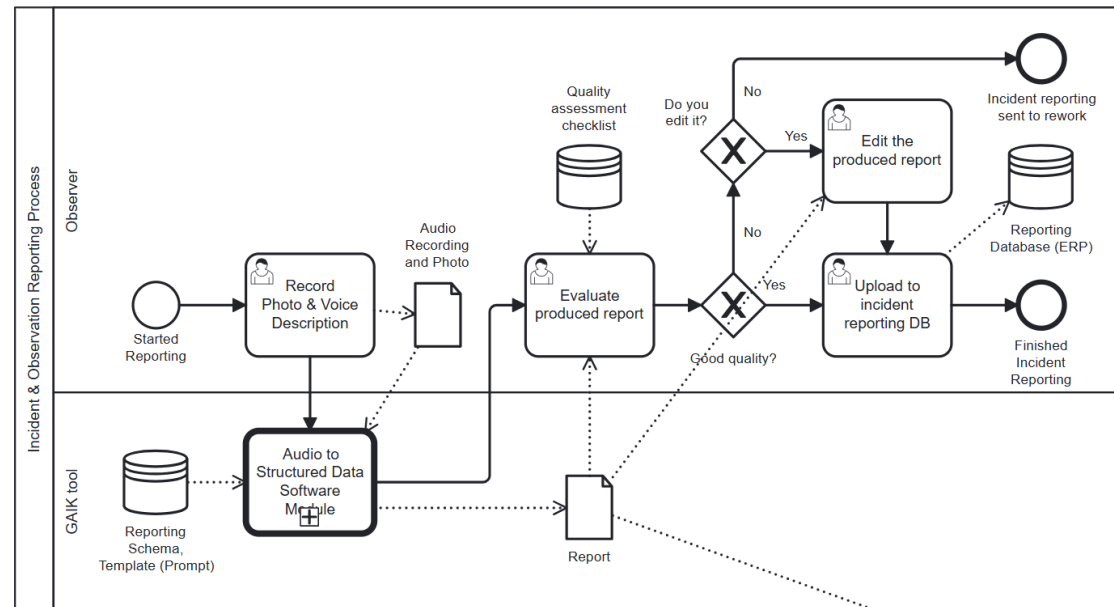
- for Audio-to-Structured-Data conversion
- for Building a Searchable Media Index
- ...

Modeling guidelines

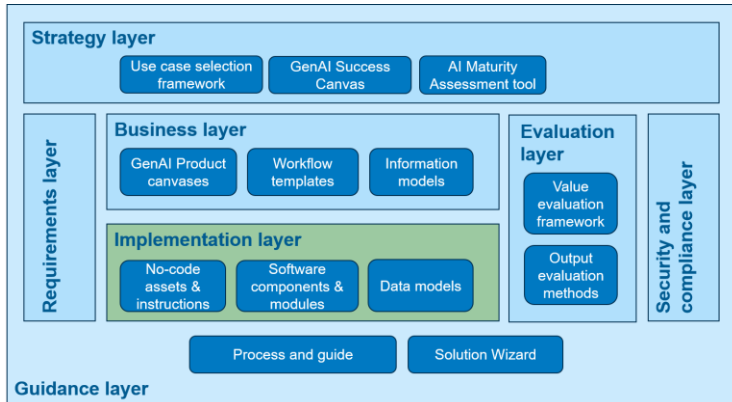
Workflow/process templates

Accepted paper:

Maslov I., Kudryavtsev D., Khan U.A., Simonofski A. (2026) A BPMN-Centered Method for Process-Based Knowledge Management with Generative AI. Pacific-Asia Conference on Information Systems (PACIS 2026).



New (and existing) components at the Implementation level



New (and existing) software components and modules

Software components

- Transcriber, Parser, Extractor, Document Classifier,
- **NEW:** Vision extractor, Transcript Enhancer, Evaluators, SQLDatabase Agents (PostgresAgent)

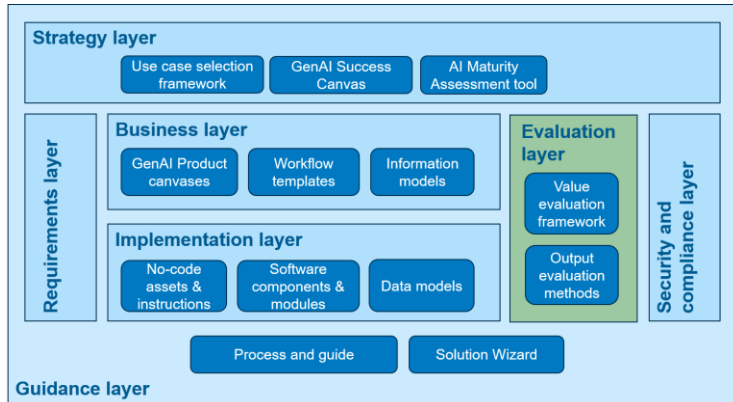
Software modules:

- Audio to Structured Data (Knowledge capture)
- Documents to Structured data (Knowledge capture)
- RAG Builder (Knowledge access)
- **NEW:** Multi-Source Report Generator (Knowledge Synthesis)

NEW: GAIK's free services

- Finnish enhanced transcription service
- High-quality custom parsing service
- Finnish-focused text-to-speech service
- Custom bulk extraction service
- Knowledge access (RAG) service

New (and existing) components at the Evaluation layer



Reference metrics for three knowledge processes

	Knowledge Capture	Knowledge Access	Knowledge Synthesis	Calculation Formula / Method
Operational				
Financial				
Epistemic				
Emotional				
Social				

Value evaluation framework extension

Master thesis:

Author: Xiaohui He

Title: Evaluation Metrics for Business Value of Generative AI-Driven Knowledge Management

Haaga-Helia UAS

<https://www.theseus.fi/handle/10024/924424>

Procedure for Customizing the Framework to Specific Use Cases

Step 1. Identify which of the three knowledge processes are involved in the use case.

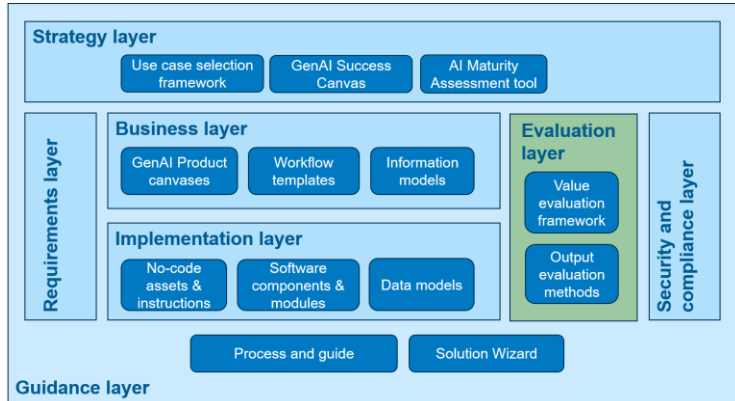
Step 2. Review the metrics and corresponding calculation formulas or assessment methods under the involved knowledge processes from the general framework (see Appendix 1), and select those applicable to the use case.

Step 3. Refine metric names, calculation formulas, or assessment methods when necessary to better align with the characteristics and requirements of the use case.

Step 4. New metrics that are not included in the general framework may be created when necessary based on the specific characteristics and requirements of the use case. Corresponding calculation formulas or assessment methods should also be defined.

Prompt Template for customising the metrics

New (and existing) components at the Evaluation layer



Output evaluation methods

Evaluation methods for:

- **Transcriptions,**
- **Translation,**
- **Knowledge Extraction,**
- **Retrieval Augmented Generation (RAG)**
- **Report writing**

The evaluation methods layer provides:

- **Performance Metrics:** Quantitative measures for assessing GenAI solution quality, accuracy, and efficiency
- **Evaluation Scripts:** Automated evaluation workflows for generic use cases
- **LLM-as-Judge:** Evaluation approaches where language models assess output quality
- **Test Cases & Ground Truth:** Reference data and input-output pairs for validation
- **Benchmarking:** Tools for comparing different approaches or configurations

Use cases / solutions described

Company	Use case / Solution	Problem	Solution	Knowledge process/-s
MANU & CONS	Incident reporting / Safety observations	Reporting safety incidents is slow due to manual form filling	Voice and image-based reporting with automatic structuring into reports	Knowledge CAPTURE & SYNTHESIS
HEAL	Multilingual webinar/ podcast content (Transcription, Captioning & Translation)	Content available only in Finnish limits market reach	Automatic transcription, captioning, and translation into multiple languages	Knowledge CAPTURE
HEAL	Multilingual webinar/ podcast content (Transcription, Captioning & Translation)	Content available only in Finnish limits market reach	Automatic transcription, captioning, and translation into multiple languages	Knowledge CAPTURE



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Information search from public data sources



Finding regulatory and guidance information is time-consuming



Haaga-Helia

Chat-based AI retrieves answers from multiple data sources

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Knowledge ACCESS

Other use cases / solutions we have already developed

Company	Use case / Solution	Problem	Solution	Knowledge process/-s
MANU	Purchase order processing assistant	Manual extraction of order details and price lookup is slow and error-prone	Automates extraction of order data, matches with price lists, and generates sales orders	Knowledge CAPTURE
CONS	Construction site diary creation	Difficult and time-consuming to document daily site activities	Converts voice notes, calls, and photos into structured daily diaries	Knowledge CAPTURE & SYNTHESIS
HEAL	Semantic video search	Hard to find specific information in long video content	Search by meaning with timestamped results across video library	Knowledge ACCESS
HEAL	Learning assistant	Users lack personalized learning paths and relevant content discovery	Generates personalized learning plans, recommendations, and assessments	Knowledge ACCESS & SYNTHESIS
FINA	Information search from public data sources	Finding regulatory and guidance information is time-consuming	Chat-based AI retrieves answers from multiple data sources	Knowledge ACCESS



Plans for toolkit development and application



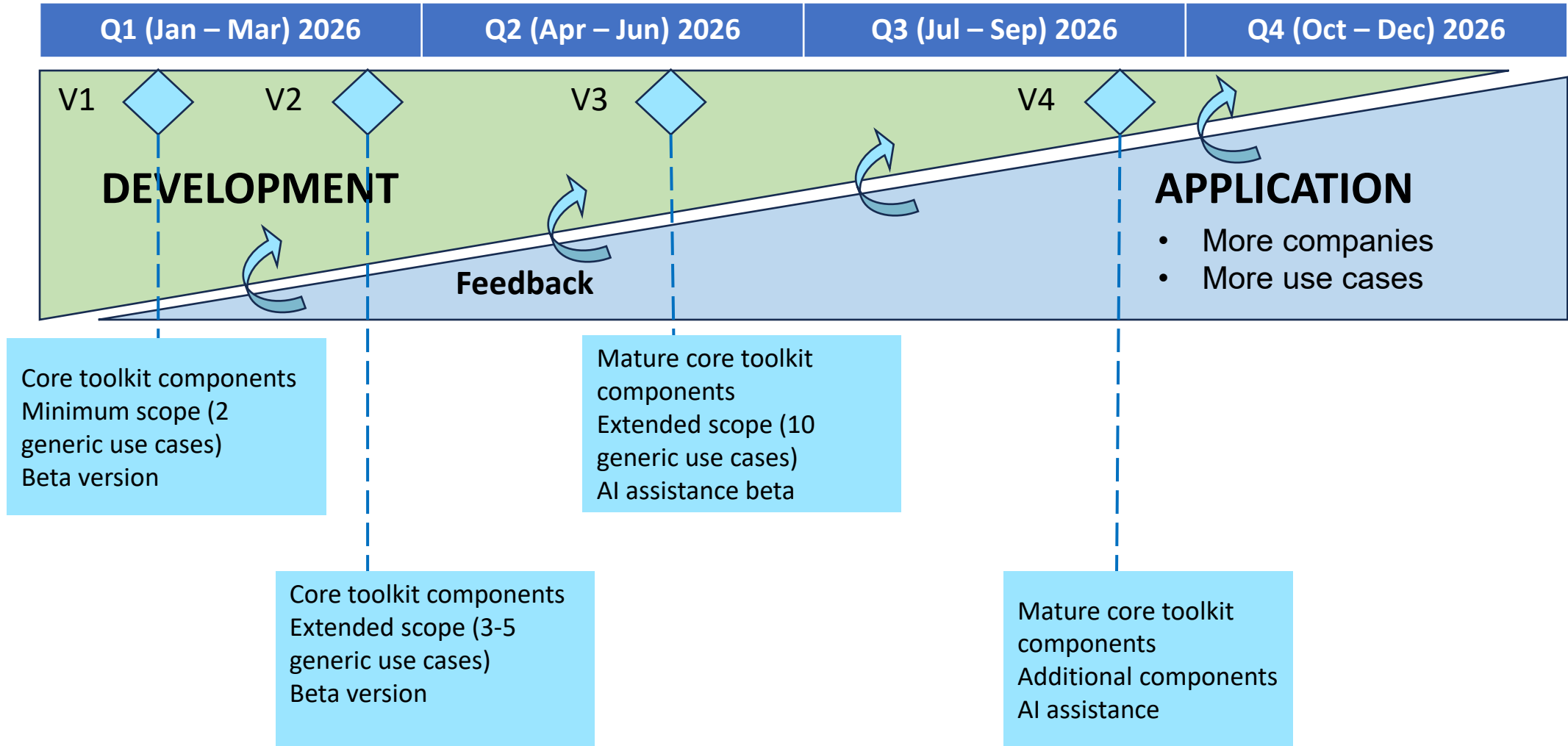
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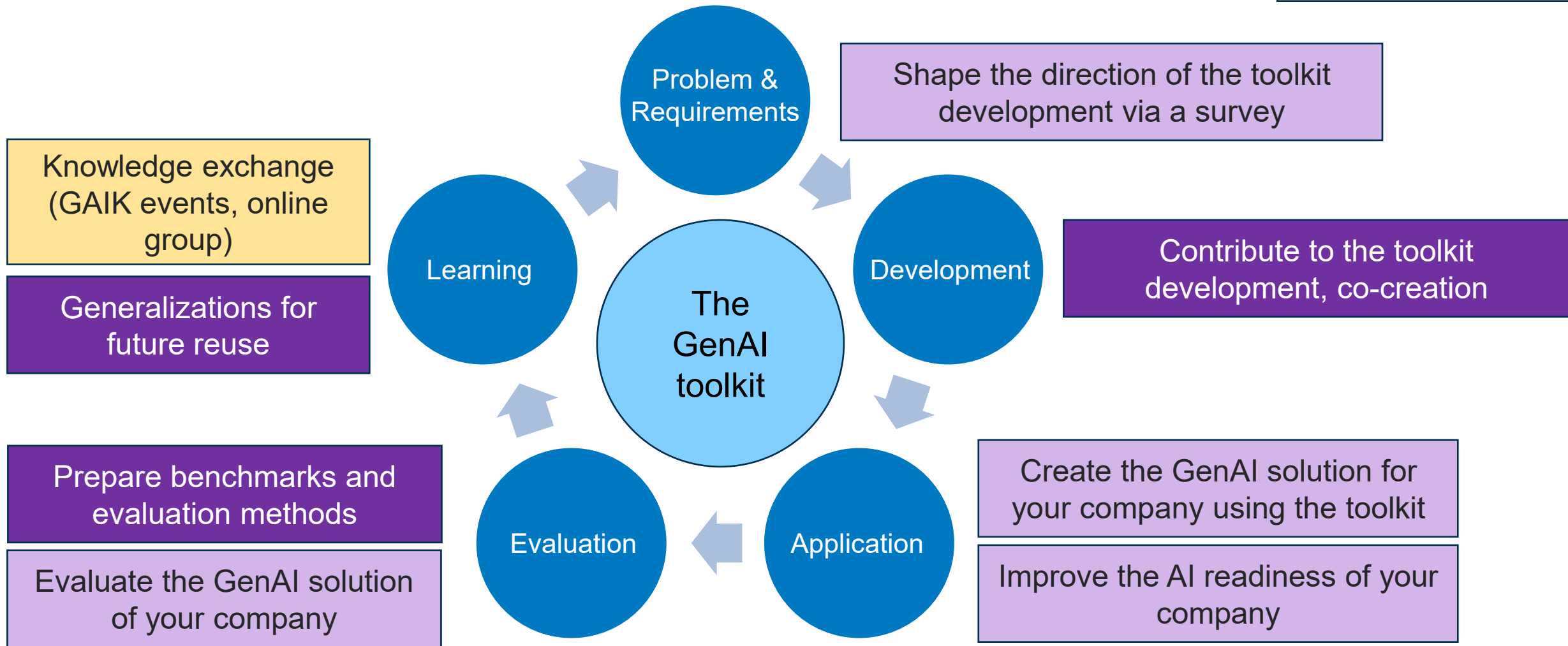


Toolkit development and application roadmap



Cooperation opportunities with GAIK

- For companies (mainly)
- For AI professionals
- For ALL





How can you utilize the Toolkit in practice



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Toolkit application opportunities

- **Select the scenario**

1. From Strategy to Implementation
2. Implementation acceleration
3. Implementation acceleration with adoption support
4. Fragmented usage of the toolkit components and/or services

- **Select the approach**

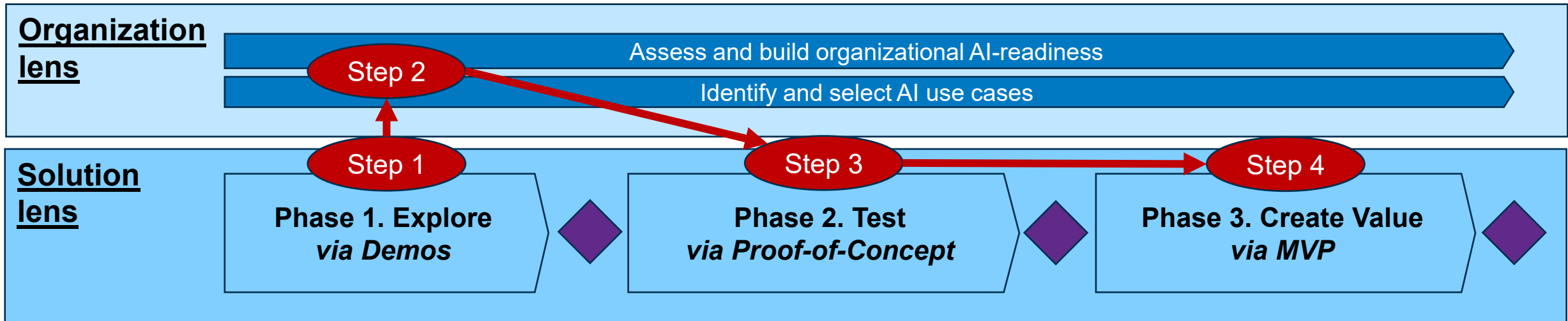
1. Code-based
2. No-code

- **Select the required support**

1. With GAIK team support (recommended now)
2. DIY



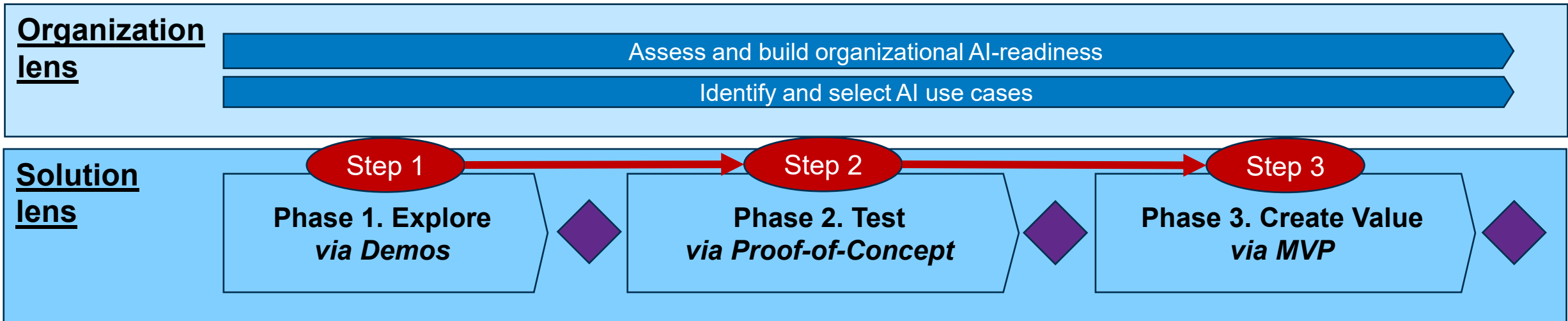
Toolkit application scenarios: From Strategy to Implementation



Conditions:

- GenAI use case is not clear and must be defined
- GenAI implementation readiness is not clear

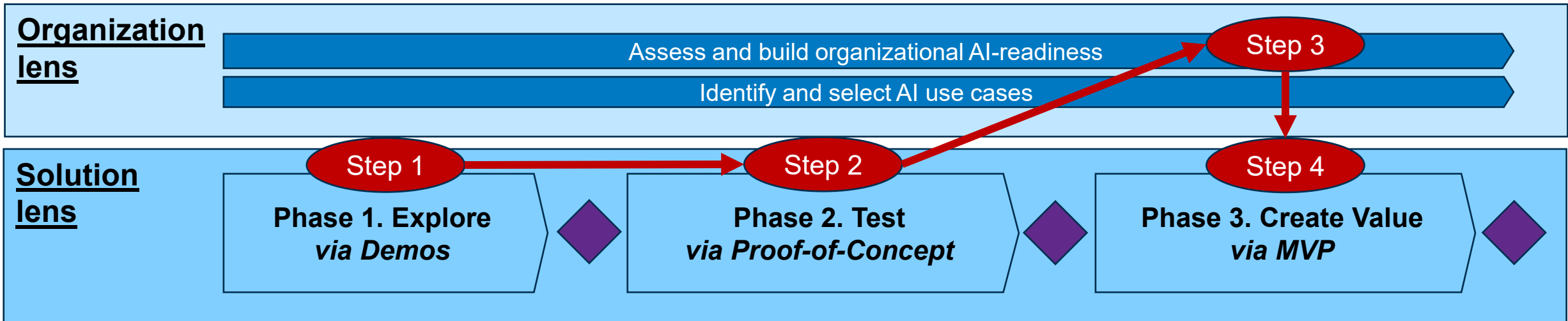
Toolkit application scenarios: Implementation acceleration



Conditions:

- GenAI use case is selected
- Company has everything for creating PoC and MVP
- On-Demand support at organization lens

Toolkit application scenarios: Implementation acceleration with adoption support



Conditions:

- GenAI use case is selected
- Company has everything for creating PoC and MVP
- On-Demand support at organization lens

Solution lens, process for phase 2 (PoC) and 3 (MVP)

Steps	Description	Toolkit components
Define	Define the use case and expected value	<ul style="list-style-type: none"> • GenAI product canvas • Value evaluation framework
Analyse	Analyse existing processes, data, needed outputs, and requirements	<ul style="list-style-type: none"> • Process description guidelines and templates • Information modeling guidelines and templates • Requirements specification guidelines
Design	Design solution architecture vision and future processes	<ul style="list-style-type: none"> • Software modules and components OR No-Code assets • Process description guidelines and templates • Information modeling guidelines and templates
Deploy	Deploy the system	<ul style="list-style-type: none"> • Software modules and components OR No-Code assets
Evaluate	Evaluate output quality, select value evaluation metrics, start monitoring	<ul style="list-style-type: none"> • Output evaluation methods • Value evaluation framework

Why to use GAIK GenAI Toolkit?



Easy-to-use, tested and re-usable components



Focus on practical and common business cases



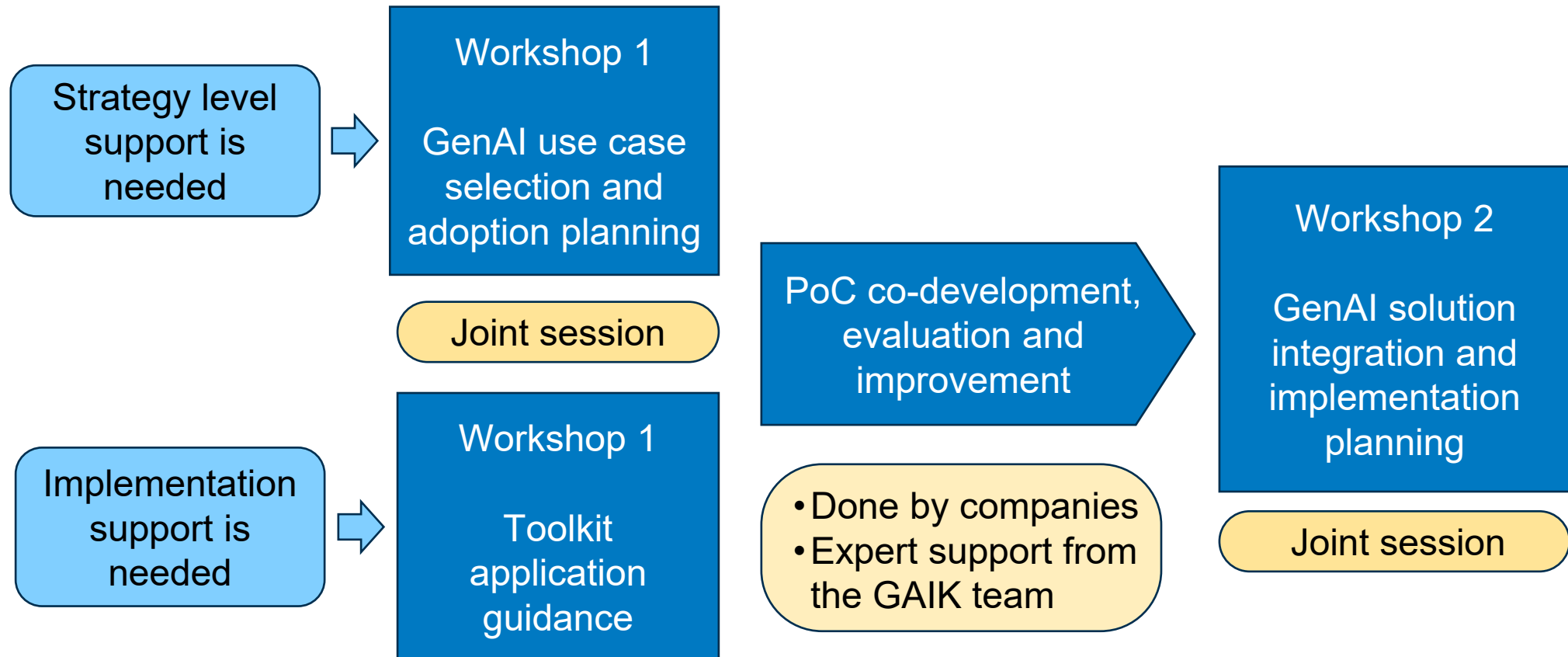
Specialization in Finnish language



Deployment support from GAIK team



Offer for companies (free), GAIK toolkit piloting





Thank you!

Questions?



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