



Some selected insights on our experience around GenAI

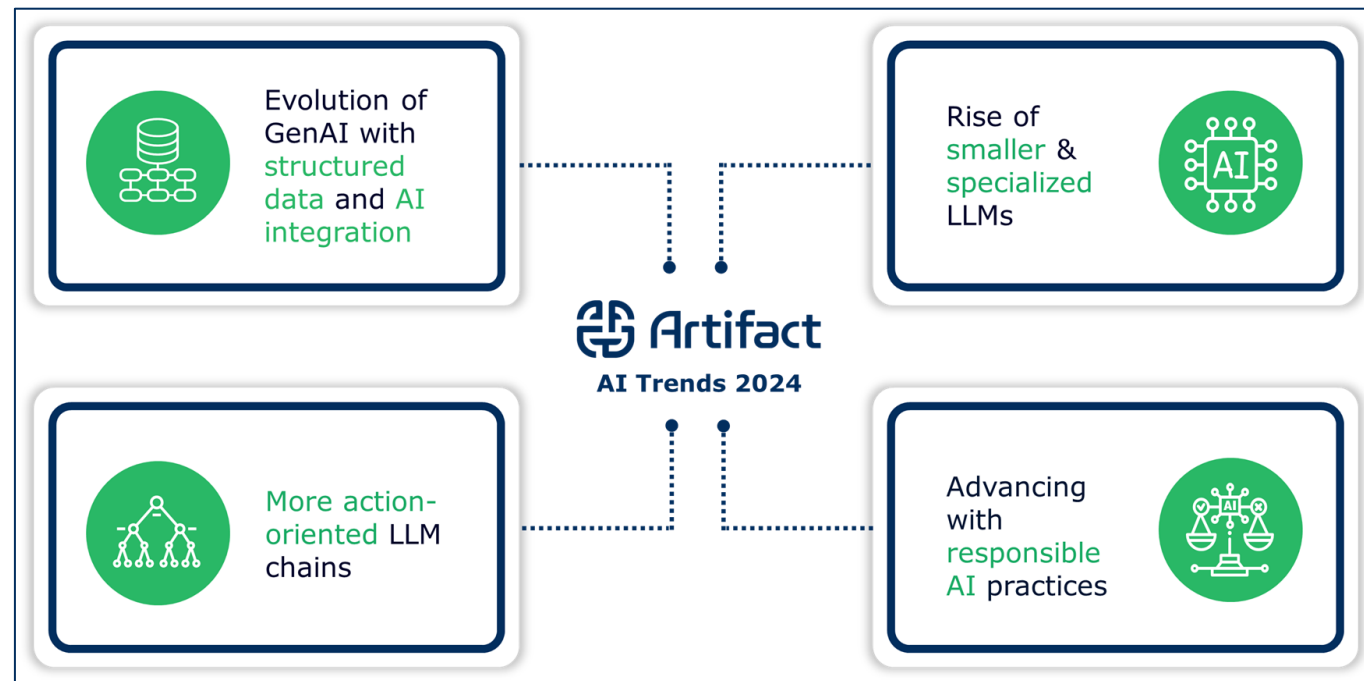
September 2024

Confidential

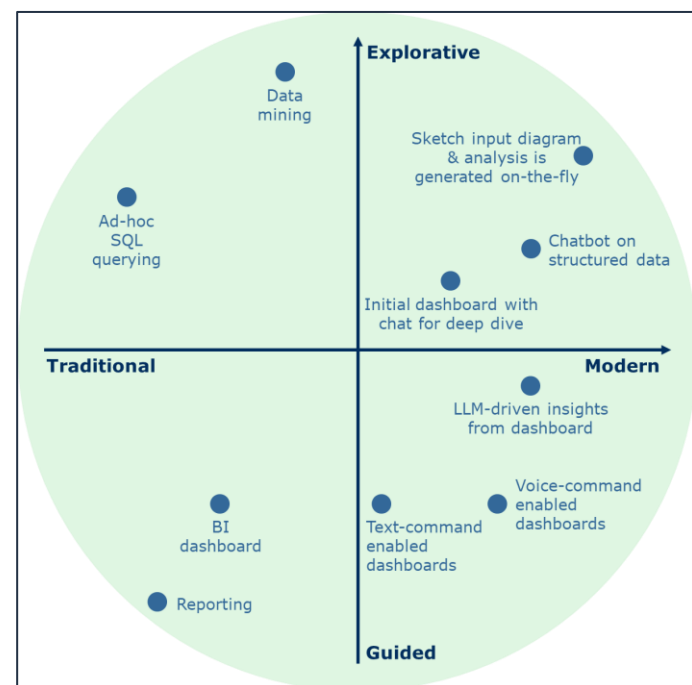
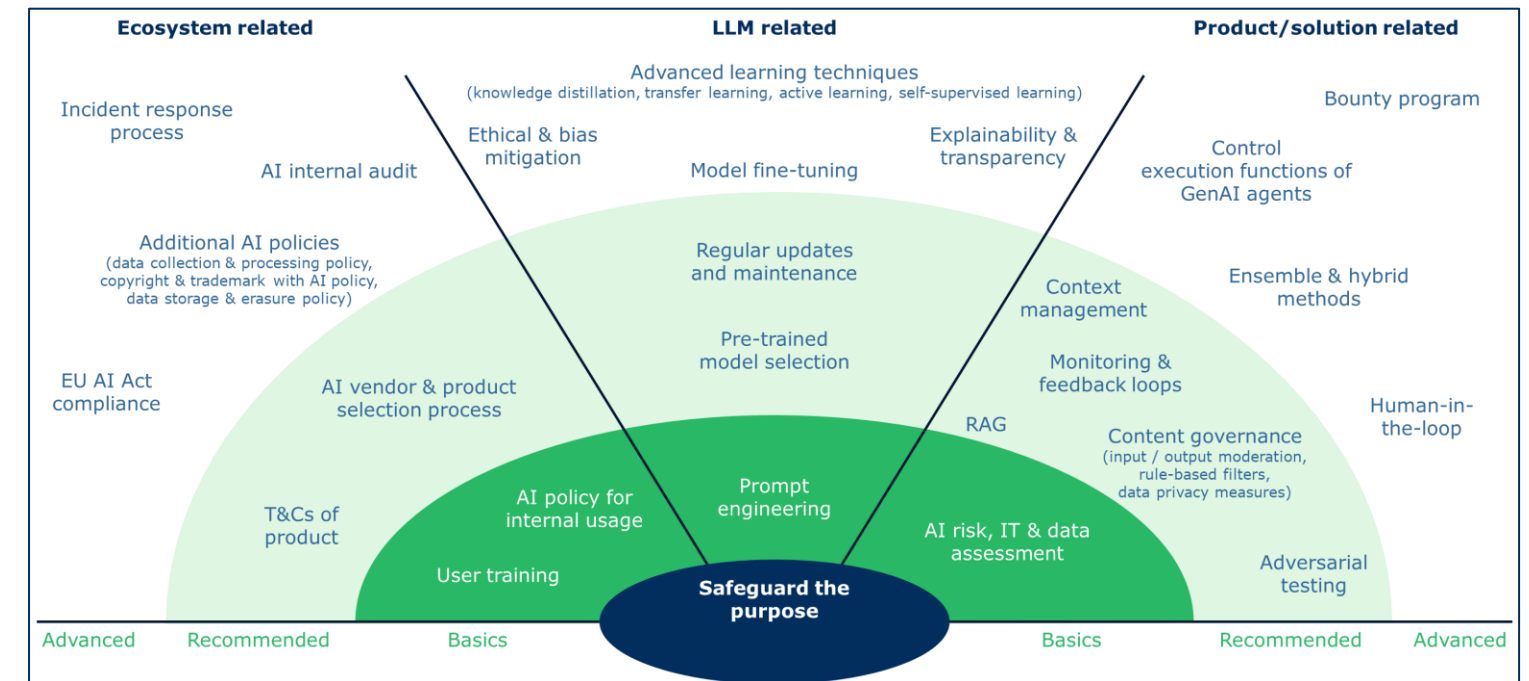
Involvement in the latest thought leadership in GenAI

Covering relevant topics around the current trends, the integration of structured data with LLMs and the next level to include several "GenAI agents" into a wider AI system

Trends of GenAI in 2024

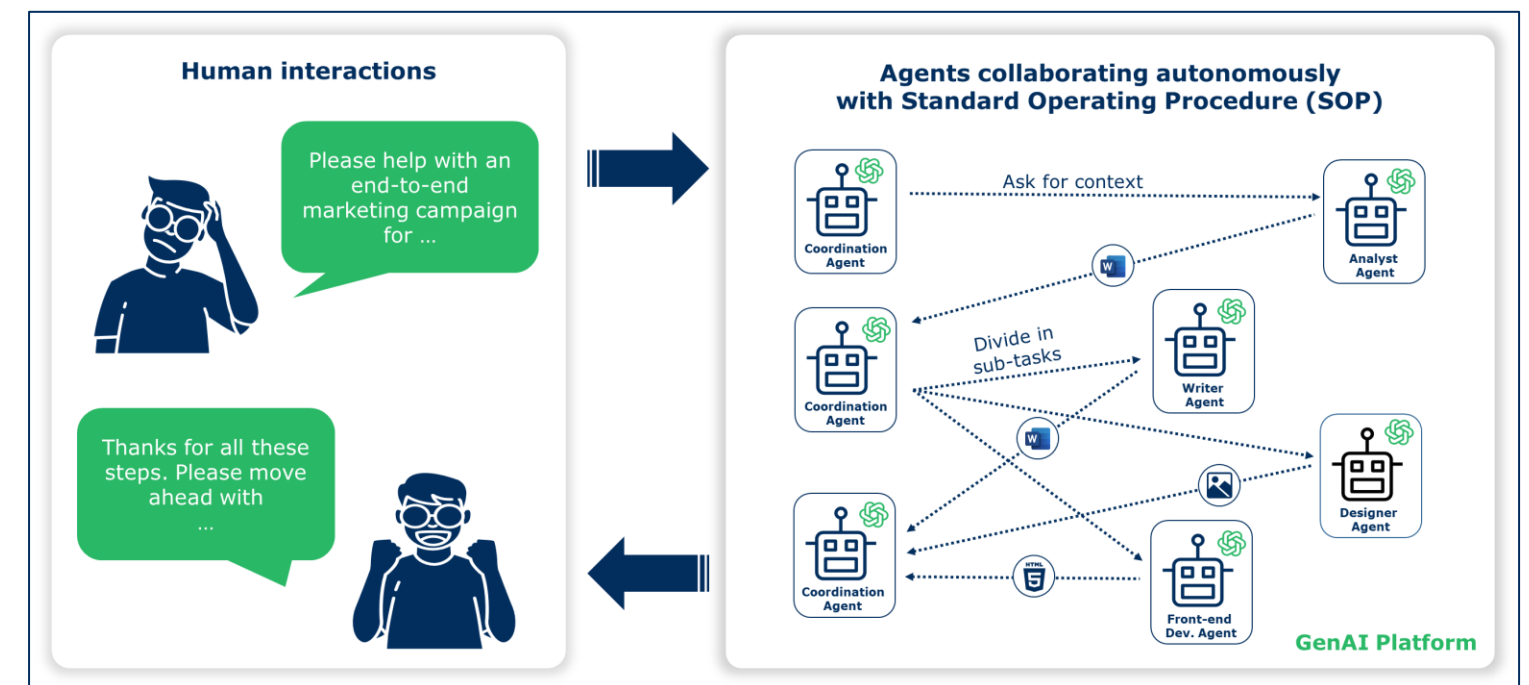


Safeguarding GenAI solutions



Including structured data into GenAI systems

Agent-based approaches



“CompanyGPT” Asset as a GenAI platform

The accelerators we have developed provide the core capabilities to leverage GenAI services within a company and can be flexibly extended or adjusted

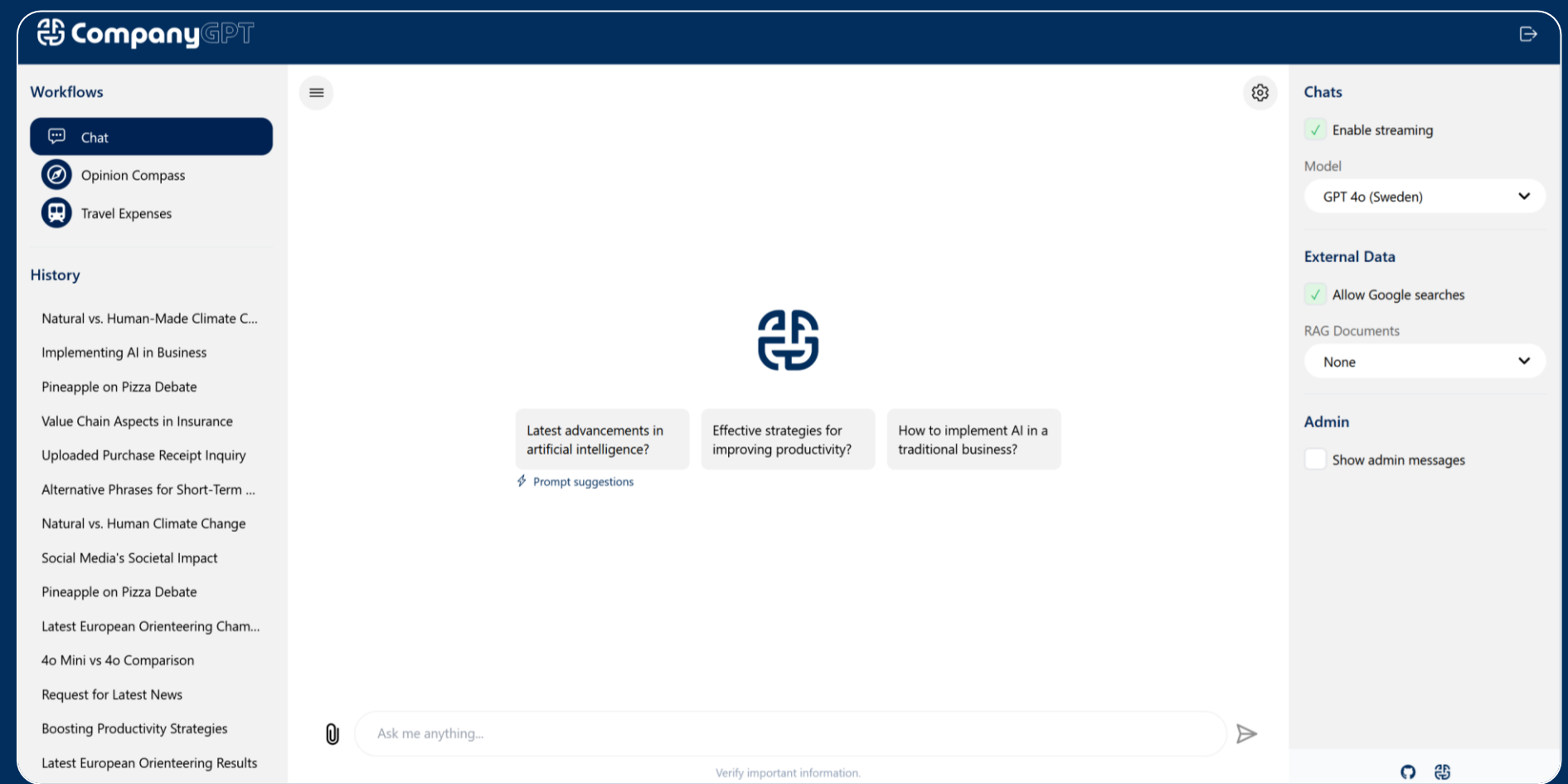
Solution statement

A platform solution which is **making the power of large language models available for solving time intensive and repetitive tasks** more efficiently, all while keeping your internal data securely stored on your own IT infrastructure

What does CompanyGPT offer?

- **Seamless integration** of large language models into company workflows and customer-facing chatbot channels
- Keeps **control over private & internal data** by running on own IT infrastructure or any cloud environment
- Current capabilities address common challenges:
 - **Create Workflows** – tailor to common tasks to increase efficiency
 - **Internal documents** – include information from internal documents & provide source
 - **Incorporate the web** – include up-to-date data & sources
 - **Customizable data handling** – remove personally identifiable information
- Easily **scalable** to include further solutions

Screenshot of UI



See intro video: <https://www.youtube.com/watch?v=U6nQyk77IH4>

“Workflows” of the CompanyGPT

The CompanyGPT can have tailored “workflows” for specific tasks with dedicated system prompting, additional governance, specific documents via RAG and custom logic to serve a given purpose; here two examples

Workflow to generate travel expenses based on bills and user comments in natural language

CompanyGPT

Workflows

- Chat
- Opinion Compass
- Travel Expenses**

History

- Natural vs. Human-Made Climate C...
- Implementing AI in Business
- Pineapple on Pizza Debate
- Value Chain Aspects in Insurance
- Uploaded Purchase Receipt Inquiry**
- Alternative Phrases for Short-Term ...
- Natural vs. Human Climate Change
- Social Media's Societal Impact
- Pineapple on Pizza Debate
- Latest European Orienteering Cham...
- 4o Mini vs 4o Comparison
- Request for Latest News
- Boosting Productivity Strategies
- Latest European Orienteering Results

Turn your travel receipts and car distances into an expense report

You can upload your travel receipts (train, taxi, ...) in order to have the relevant data extracted. You may also give the distances travelled by car. Everything you specify will be consolidated into a joint table, which you can use in your expense report.

I did 45km by car last Friday

Would you like to add any further receipts or trips?

no this is all

Your expense report has been created and is available below.

Date	Description	Receipt nr.	Net amount CHF	% VAT	Amount VAT	Amount incl VAT
01.09.2024	EasyRide journeys	1	11.19	8.1	0.91	12.10
	Car travel (45.0km)	2	24.98	8.1	2.02	27.00

Copy for Excel

Ask me anything...

Verify important information.

Chats

- Enable streaming
- Model: GPT 4o mini (Sweden)
- External Data**
- Allow Google searches
- RAG Documents: None
- Admin**
- Show admin messages

Provide for certain answers the range of two extreme positions to make foster critical thinking of the users

CompanyGPT Opinion Compass

Fairness and critical thinking with Generative AI

Separating Fact from Opinion

- We Detect Whether The Prompt Is Asking For A Fact Or An Opinion
- Opinions Are Researched With More Variety In Mind
- Creative Output Receives More Range, While Facts Remain Facts

Steering Towards a Fair Perspective

- Moving away from linear answers to opinion questions is key
- We show multiple sides per prompt: one balanced and two extremes
- The user is engaged to think, rather than to just consume & accept

Full Awareness & Control

- Our interface shows the user how we interpret their prompt
- Fact or opinion can be toggled, and the amount of creativity adjusted

User Prompt

Fact or Opinion?

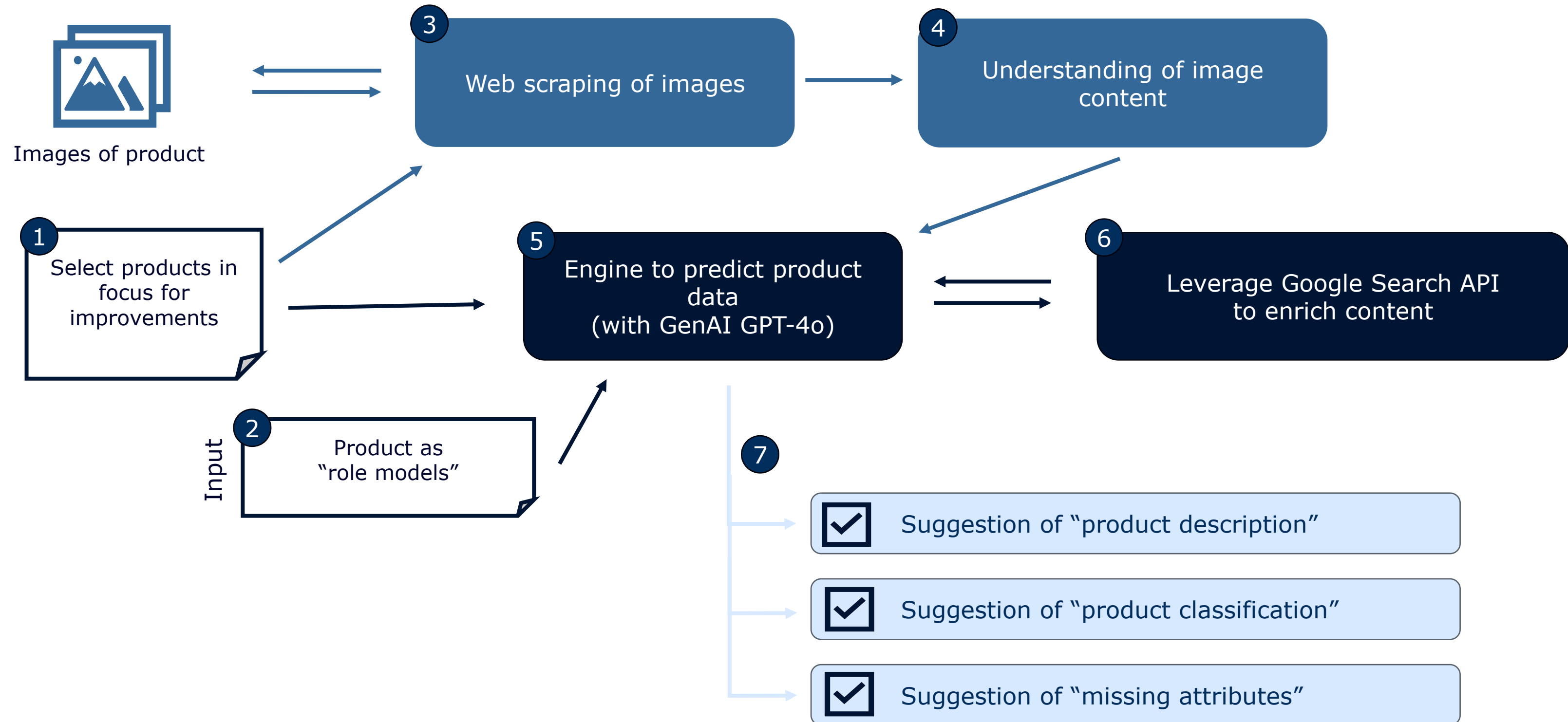
Formatting and Repetitions

Output

Extreme #1 Extreme #2

Extract product attributes automatically

Project to help a retailer to extract product information from images and dedicated internet sources to improve the quality of the data shown in the Ecommerce shop



A case study made public early 2024 with Swiss Tourism

- **Swiss Tourism** has **showcased** an **innovative** interface based on LLMs / GenAI to extract, analyze and display information from novel **studies** including the Tourism Monitor Switzerland (big survey) and the tourist accommodation statistics
- Key objectives:
 - A new **demonstrator tool** (web app) developed and successfully setup and available for different users (to pose questions on the related data)
 - Question of the selected areas are content-wise **correctly** answered
 - Answer provide enough **transparency** for the user to understand the underlying data used for the answer
 - A **presentation at the STNet Ferientag** was held successfully with appropriate media coverage

The logo for Switzerland, featuring the word "switzerland" in red lowercase letters with a white square containing a red cross in the middle of the "i".

switzerland



by GenAI

Integration of structured data and GenAI

More details of the solution with Switzerland Tourism

User interface

Compare the strengths of Zürich and Bern.

✓ Compare the strengths of Zürich and Bern. → Split into multiple queries

✳ Retrieve the strengths of Zürich

✳ Retrieve the strengths of Bern

Using TMS

The bar chart illustrates the strengths of Zürich and Bern based on total occurrences in %. Here are some key points:

- Public transportation is a leading strength for Zürich with 8.5%, while Bern only has 4.1%.
- Bern surpasses Zürich in the area of the old town with 14.1% compared to Zürich's 4.4%.
- Zürich has a higher score in terms of cleanliness (4.9%) compared to Bern (2.2%).
- Both cities have similar scores for nature with Zürich at 4.6% and Bern at 3.7%.
- The safety score is higher in Zürich (4.6%) than in Bern (2.8%).

Strengths of Zürich and Bern

Total Occurrences [%]

Strengths	Zürich	Bern
old town	4.4%	14.1%
public transportation	8.5%	4.1%
history	2.1%	5.5%
cleanliness	4.9%	2.2%
nature	4.6%	3.7%
safe	4.6%	2.8%
shopping/stores	3.9%	3.6%
friendly/welcoming	3.8%	3.6%
water	3.8%	3.0%
lovely/beautiful	2.5%	3.6%

Using TMS

Show more

Capabilities

1. Understands the user's needs
2. Defines & selects the most relevant data sources, automatically
3. Automatically writes database queries and retrieves the relevant information
4. Generates insights based on the provided, trusted data
5. Selects the appropriate visualization type, generates diagrams and explanation text on "the fly"



hA/di

Artifact & switzerland



Digital Innovation of the Year

SCHWEIZ TOURISMUS – ARTIFACT SA

SHORT DESCRIPTION

hAldi, the working title of an innovation project to create a virtual assistant, is intended to offer representatives of tourism destinations low-threshold, AI-based access to complex data on Swiss tourism. The system is intended to support and accompany decision-makers in tourism as a 'digital assistant' for complex issues by using structured data from Switzerland Tourism in a targeted manner to provide fact-based recommendations for action. To this end, the linguistic strengths of LLM models are combined with the automatic generation of database queries, the results of which form the sole information basis for the chatbot's response in order to rule out 'hallucinations'. The AI is integrated centrally for the analysis of the enquiry, the design of the database queries, the data analysis, the graphical processing of the results and the interpretation of the facts.

JURY STATEMENT

Schweiz Tourismus solution enhanced their partner user experience by transforming their chat interaction with its database. While the solution is leveraging AI and RAG solution, specific market knowledge and approach have been incorporated into the solution, and specific scripts and software has been developed to improve the answer and avoid hallucination. This is a promising approach to address B2B needs of the various tourism actor across Switzerland. The solution is then retained as finalist.

swi+zerland

 Artifact

Finding the most relevant teaser image in a video

Project with SRG to select most relevant teaser images from a video

