RACCOONS PRESENTS:

The potential of generative AI for HR in the hospitality industry

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Hi there!

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NEXT UP:

What is Raccoons

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We are Raccoons.
We explore how artificial intelligence can have business impact

You might have heard us talk about AI technologies

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We create agile teams tailored to your challenge

Generative AI

Conversational AI

Natural language processing

Intelligent document processing

+30 experts

Product and service design

Computer vision

Edge computing

UX/UI

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We empower businesses to unlock their full potential and thrive in an increasingly AI-driven world

We help major players to seamlessly integrate AI at the core of their organization, both technically and strategically.
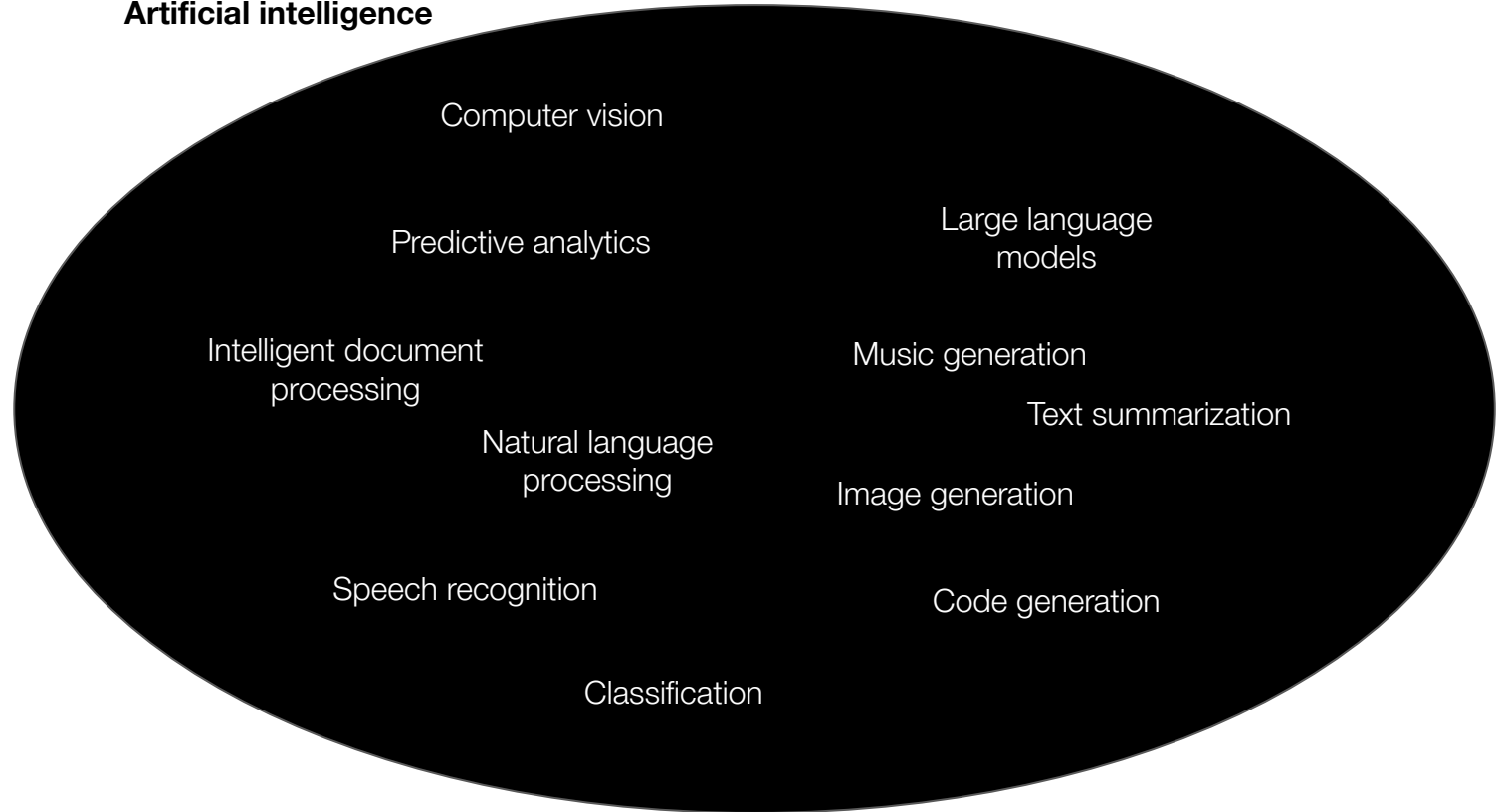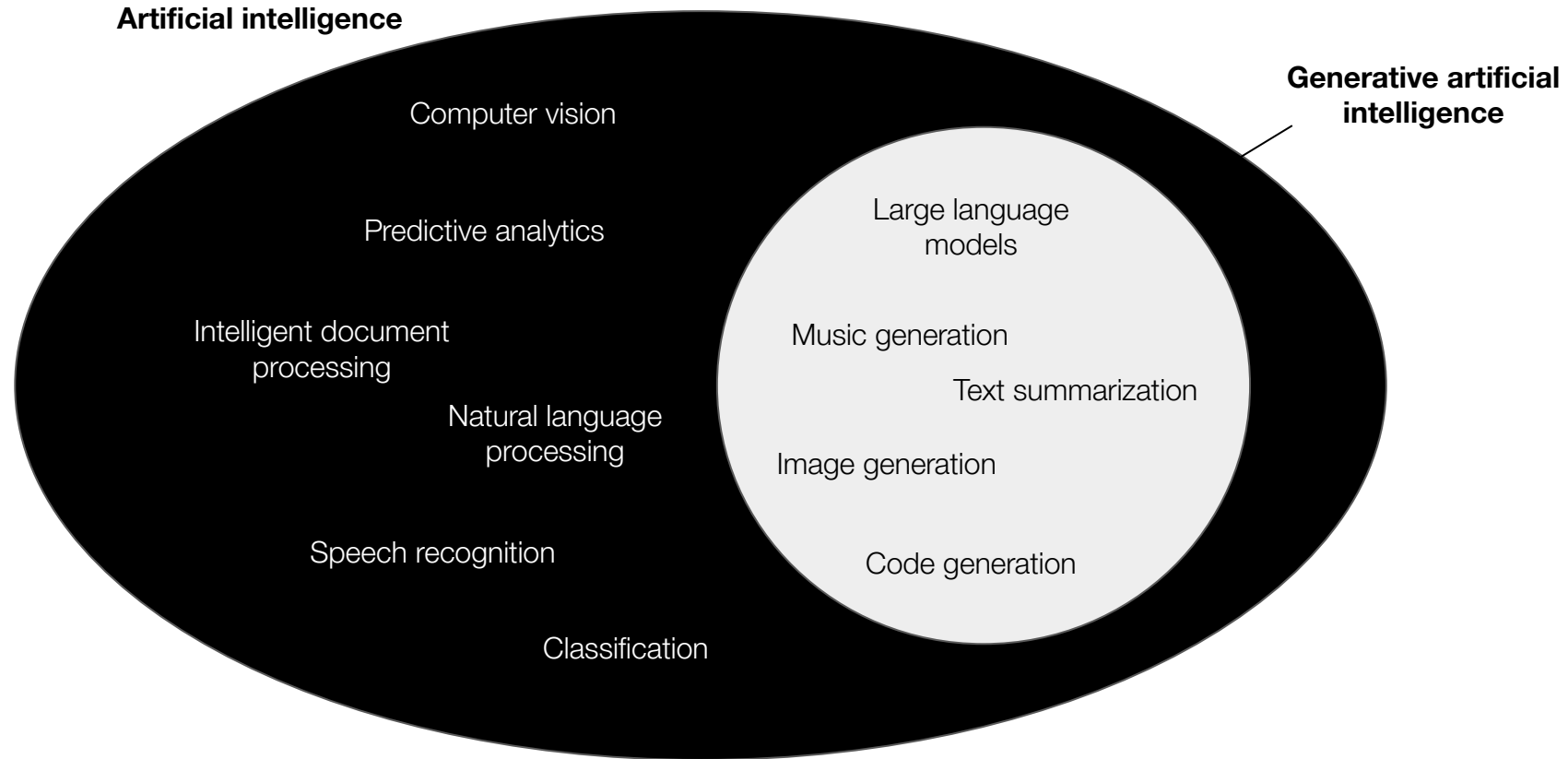
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An introduction to generative AI

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Artificial intelligence is the theory and development of computer systems able to perform tasks normally requiring human intelligence

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Artificial intelligence

Computer vision

Predictive analytics

Large language models

Intelligent document processing

Music generation

Text summarization

Natural language processing

Image generation

Speech recognition

Code generation

Classification

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Artificial intelligence

Generative artificial intelligence

Computer vision

Predictive analytics

Intelligent document processing

Natural language processing

Speech recognition

Classification

Large language models

Music generation

Text summarization

Image generation

Code generation

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With the power of generative AI, computers can now **create** new content in different formats

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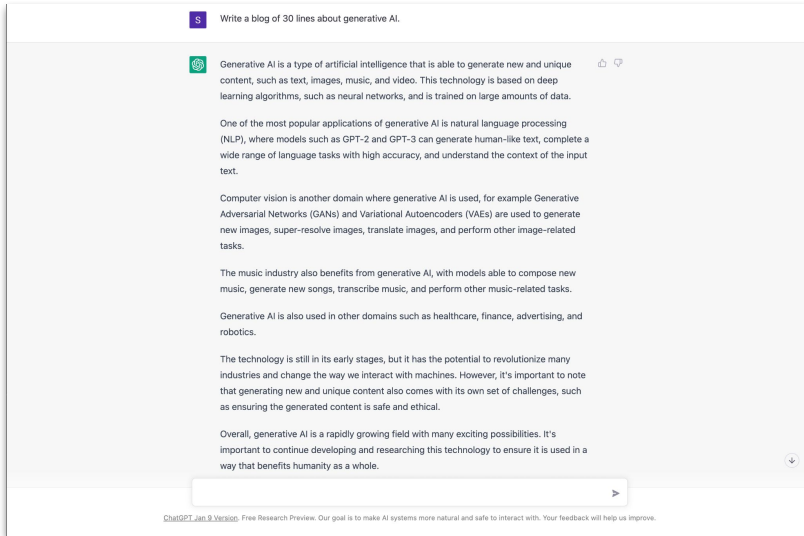Generative AI unraveled

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Generative AI for text

Large language models, such as GPT, are revolutionizing the way we interact with text by enabling a range of advanced capabilities:

- **Text generation:** Given a prompt, these models can produce coherent, contextually relevant text
- **Text interpretation:** By understanding and analyzing text, generative AI can extract meaning, categorize information, and even detect sentiment
- **Text reasoning:** These models can engage in complex reasoning, drawing inferences, answering questions, and providing insights that mimic human thought processes

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OpenAI ChatGPT

ChatGPT is a large language model developed by OpenAI that can generate human-like text and complete a wide range of language tasks with high accuracy.

- Generates **human-like text**
- Based on **GPT** LLM family
- Can complete various **language tasks**
- **"Raw demo"** tool of the GPT LLM
- **"Plus" version** available

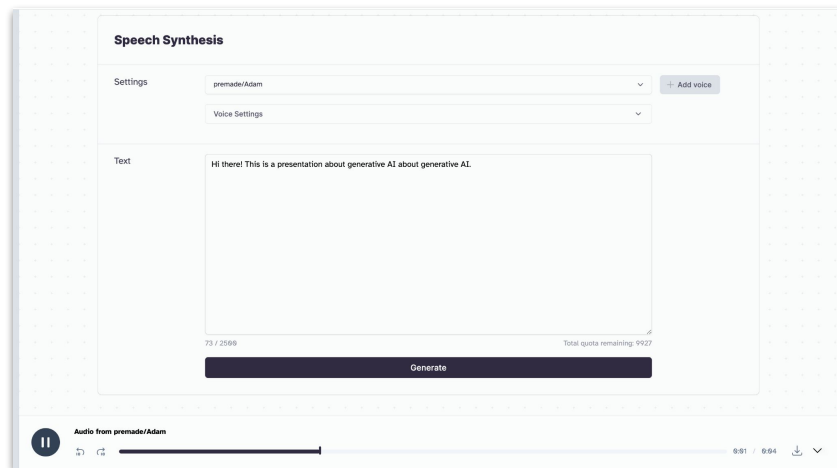**DEMO:** chatgpt.com

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Generative AI for audio

Generative AI is revolutionizing the audio domain with cutting-edge capabilities:

- **Voice generation:** These models can create synthetic voices by adjusting various parameters, allowing for the creation of unique voices tailored to specific needs
- **Voice cloning:** By analyzing existing audio samples, generative AI can accurately clone voices
- **Music generation:** Given a text prompt, these models can generate original music compositions, enabling new possibilities in music production

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ElevenLabs

ElevenLabs launched their VoiceLab which is their one-stop-shop for voice cloning and creating new voices. Samples uploaded to VoiceLab are instantly available for use in Speech Synthesis.

- **Voice cloning** based on very short example
- Instantly available afterwards as a **text-to-speech** engine
- **New voice generation** also possible *(without voice cloning)*
- Used to be a **very hard problem** to solve *(large dataset required)*

DEMO: elevenlabs.io

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Generative AI for images

Generative AI is making significant advancements in the field of image processing, offering powerful tools for various applications:

- **Image generation:** From a simple text prompt, these models can create detailed, high-quality images
- **Image upscaling:** Generative AI can enhance the resolution of existing images, improving clarity and detail without losing quality
- **Image editing:** With customized tools and software, these models allow for sophisticated image editing, enabling users to modify, refine, or transform images with unprecedented ease and precision

DALL·E 3

DALL·E 3 is an AI model created by OpenAI that generates images from natural language text, and can also complete text based on a given prompt.

- **Updated** version of DALL·E 2, which was released in May 2022.
- Able to **generate a wide range of images from text**, from simple drawings to more complex and realistic images.
- Part of the **ChatGPT** platform
- **No advanced prompt engineering** needed!
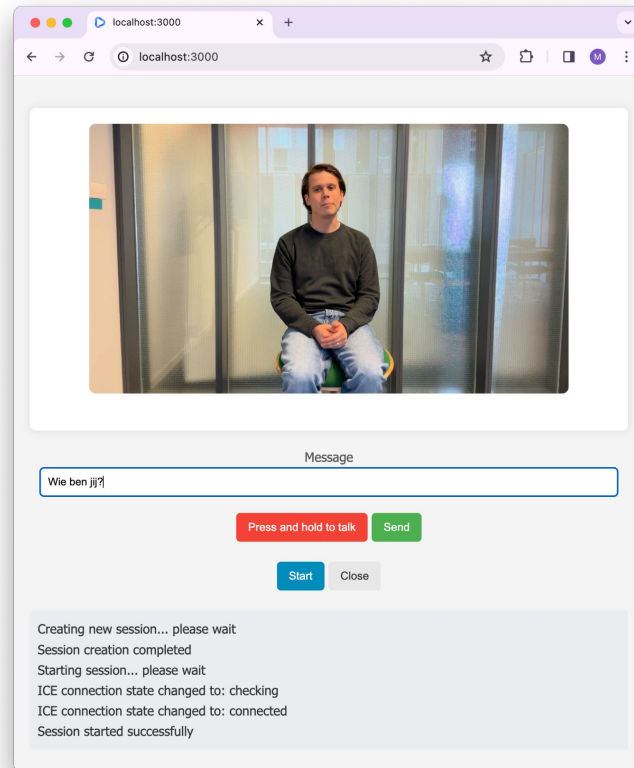

DEMO: chat.openai.com

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Generative AI for video

Generative AI is pushing the boundaries of video content creation with innovative capabilities:

- **AI avatars:** These models can create realistic AI-driven avatars, capable of mimicking human expressions and movements, which can be used in virtual assistants, video games, and digital influencers

- **Video generation:** From a text prompt, and possibly an image, these models can generate entire video sequences, making it possible to create animations, promotional videos, or cinematic content with minimal manual effort

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Interactive AI avatars

Real-time digital AI avatars offer lifelike AI agents that can provide 24/7 assistance. These virtual agents, integrating with large language models, enhance user engagement, scalability, and cost efficiency while delivering data-driven insights. The technology stands out for its realism and flexibility, suitable for diverse industries like e-commerce and healthcare. By leveraging AI for customer interactions, businesses can offer superior service, improving satisfaction and loyalty.

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Use cases for businesses

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The true power of generative AI unfolds by integrating the technology into core processes of organizations.
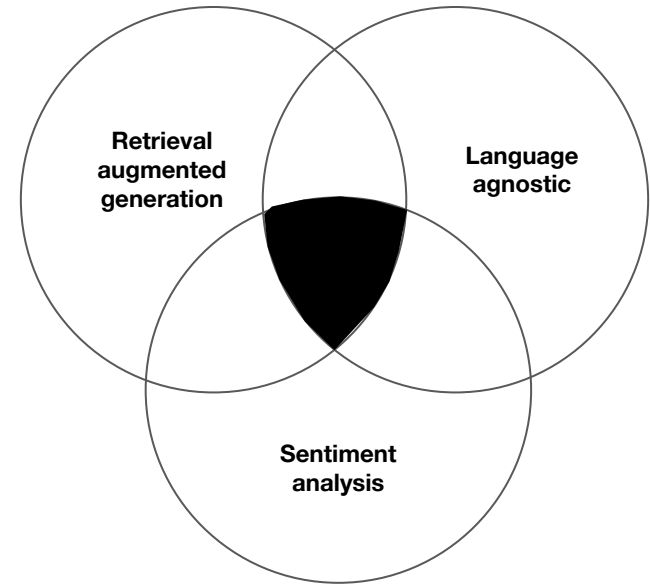
And this is possible, **if**:

→ You have the right **technical** expertise.
→ You analyse the **core processes** thoroughly.
→ You identify your **champion use cases**.

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So, how do you get started?

1. **Identify** your processes.
2. Identify steps in the process where **(generative) AI** could help.
3. Identify steps in the process where **human validation** is necessary.
4. Select the **right technology**, keeping GDPR, privacy, and security in mind.
5. **Implement**.

→ **The goal**? Creating more efficient, faster, and cost effective process where people are at the core.

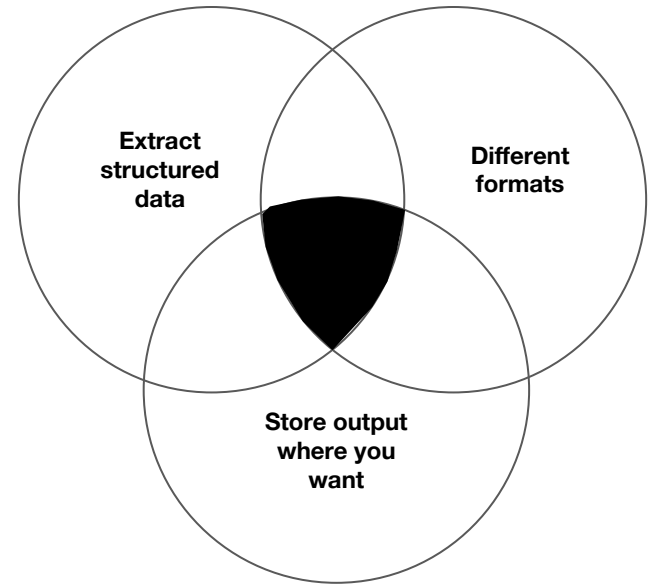**raccoons**

Question answering

- **Retrieval augmented generation:** Based on your own company data, enabling personalized, factual and relevant interactions.
- **Language agnostic:** Ability to adjust language and communication style according to user preferences and profiles.
- **Multi-channel integration:** Operable across various communication channels, providing a seamless experience for customers.
- **Human in the loop**: Can function with or without human oversight, offering flexibility in deployment and operation.
- **Sentiment analysis:** Capable of analyzing and adapting to customer sentiments, enhancing engagement and satisfaction.

Retrieval augmented generation

Language agnostic

Sentiment analysis

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Data structuring

- **Extract structured data:** Extract structured data from spoken notes, meetings, blogs, articles, product descriptions…
- **Different formats:** Not only extract data from text, but also images, videos, infographics, product packages…
- **Searchable data:** By structuring data, the data is searchable by both classical and semantic search engines, enabling better data retrieval now and in the future
- **Fixed vs loose structure**: Decide how you want to structure your data, based on a fixed structure you provide, or let the AI define the structure
- **Store output where you want**: Structured output can be stored in a CRM, a CMS, a database, an HR platform…

Extract
structured
data

Different
formats

Store output
where you
want

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Limitations & considerations

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As with every innovation, with excitement, so comes risks. There are still ethical and practical considerations, maybe even risks, that you must consider when calling upon generative AI.

- **Generative AI can be wrong**

- **Systemic bias**

- **Privacy concerns**

- **Intellectual property rights**

- **Sustainability**

- **Safety & security**

- **If needed, put a human in the loop**
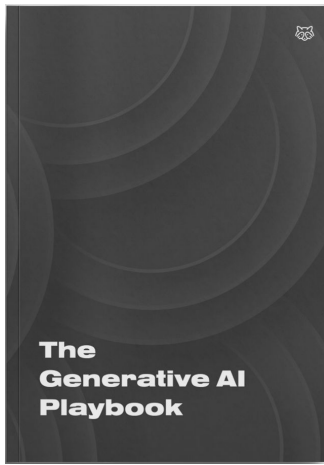
- **Models are often trained on historic data**

What about job displacement?

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EXPERT VS TOOL?

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EXPERT + TOOL > EXPERT

AI WILL NOT REPLACE YOU,

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AI WILL NOT REPLACE YOU, BUT THE PERSON USING AI WILL.

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Generative AI playbook

The AI Integration Framework