AI Literacy

Working with GPTs

Quick Recap

- Generative AI enables machines to create new content, such as text, images, and videos, by leveraging advanced models like transformers, GANs, and VAEs.

- Effective prompt engineering enhances AI-generated outputs through techniques like zero-shot, few-shot, and chain-of-thought prompting, ensuring more accurate and relevant responses.

- As AI evolves, agentic AI enables autonomous decision-making, while physical AI integrates AI with robotics for real-world applications, making responsible AI development crucial for security, ethics, and governance.

Engage and Think

Imagine you're a business leader exploring AI-driven solutions to streamline operations. You need an AI assistant that can analyze data, generate reports, and even create marketing content effortlessly.

What if this AI could also process images, respond intelligently to queries, and adapt to industry-specific needs?

Learning Objectives

By the end of this lesson, you will be able to:

- Apply Generative AI capabilities to enhance efficiency in real-world tasks

- Analyze the multimodal capabilities of ChatGPT-4 to understand how it processes text, images, and customer feedback, enabling more dynamic AI-driven interactions

- Evaluate different categories of GPT models (Writing, Productivity, Programming, Research, and Education) to determine the most suitable GPTs for business applications like marketing, branding, and software development

- Create AI-driven business solutions by integrating GenAI into workflow automation, product research, data analytics, and customer service, optimizing processes through hands-on demos with tools like Zapier, Canva GPT, and MIRO
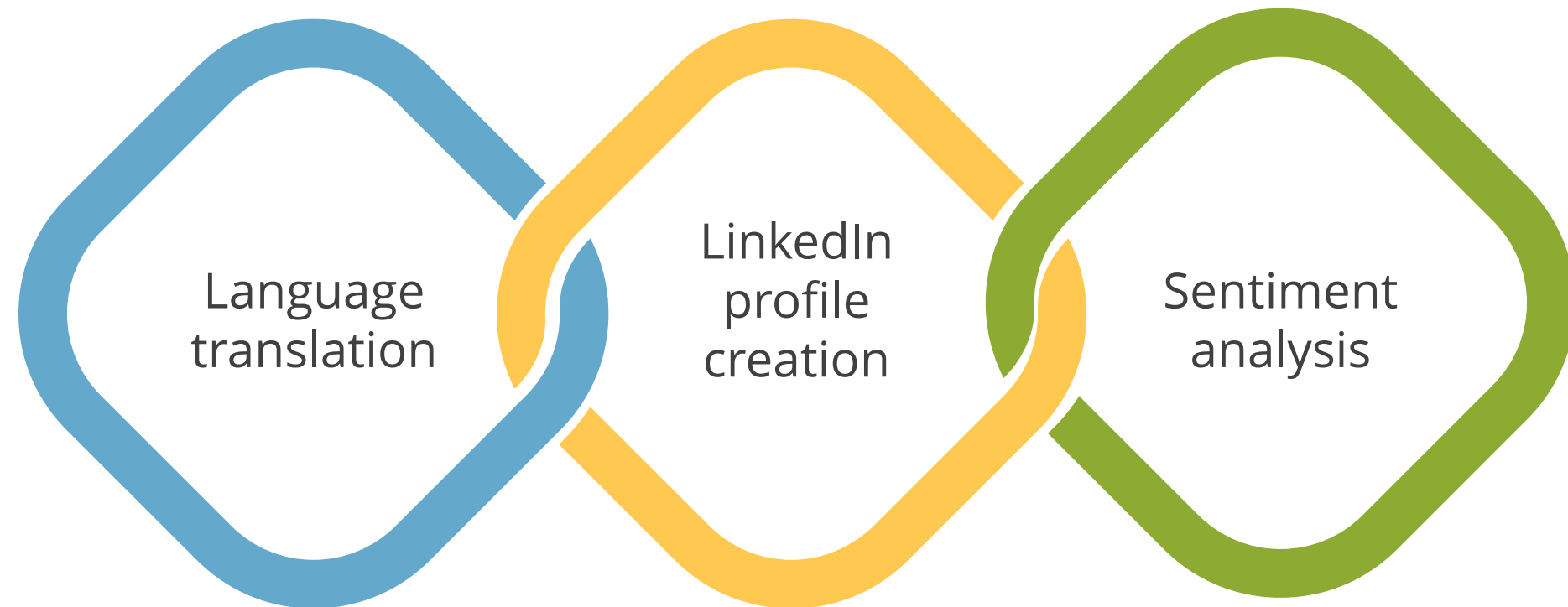
Hands-on with ChatGPT

Day-to-Day Tasks ChatGPT Can Do

ChatGPT is adept at handling a multitude of complex tasks beyond mere conversation.

Here are a few notable examples:

Language translation

LinkedIn profile creation

Sentiment analysis

Demo: Multilingual Book Translation Using ChatGPT

Duration: 10 minutes

Demonstrate how to translate user reviews in various languages using ChatGPT.

Imagine you operate an online bookstore that is popular worldwide. You offer books in multiple languages to cater to a diverse, global audience. To expand your reach and provide readers with books in their preferred languages, you use ChatGPT for real-time book translation.

To explore this further, let's consider a demonstration in which we'll utilize ChatGPT to facilitate the translation process and demonstrate its effectiveness in handling language barriers.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

DEMONSTRATION

Demo: Creating a LinkedIn Profile Using ChatGPT

Duration: **minutes**

Demonstrate how to create an impressive LinkedIn profile using ChatGPT.

Imagine you're preparing to create your LinkedIn profile, but you're aiming for something more exciting by creating a personal brand.

Let's check out this demo, where we'll use the ChatGPT prompt to help make your LinkedIn profile awesome and stand out from the crowd!

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

DEMONSTRATION

Demo: Sentiment Analysis of User Reviews Using ChatGPT

Duration: 10 minutes

In this demo, we're showcasing sentiment analysis with ChatGPT to distinguish between praises, complaints, and many other types of feedback.

Have you ever scrolled through tons of online reviews, wondering which ones are positive and which are negative? This can be time-consuming.

ChatGPT can instantly analyze the reviews and provide the percentage of positive and negative feedback.
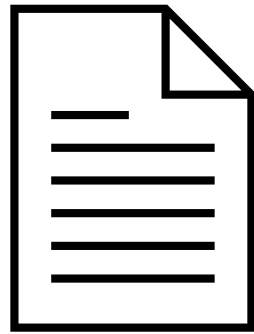
> **Note:** Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.
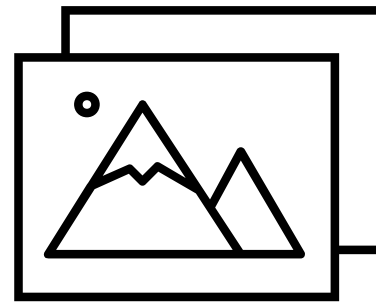
ChatGPT: Multimodal Capabilities

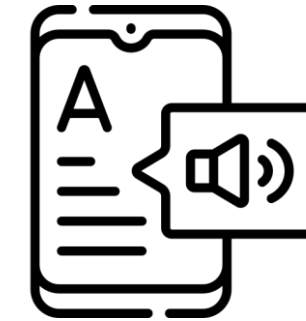# ChatGPT: Multimodal Capabilities

The advanced version of the ChatGPT (ChatGPT – 4) model has multimodal capabilities that go beyond just text generation.

Text/Document

Image

Text-to-speech/
Speech-to-text

Note: ChatGPT has the capability to convert text-to-speech and speech-to-text in the mobile version.

ChatGPT: Multimodal Capabilities

- **Integration of multiple modalities**: Combines text, images, videos, audio, and more to understand and generate responses

- **Enhanced context awareness**: Utilizes visual and auditory cues to provide more comprehensive and accurate answers

- **Dynamic and interactive responses**: Enable a more natural and human-like conversation experience

- **Image captioning**: Describes images using natural language

- **Video analysis**: Extracts information from video content and responds accordingly

- **Virtual assistants**: Offer image-based responses for enhanced assistance

Demo: Exploring Multimodal Capabilities of ChatGPT

Duration: 10 minutes

Demonstrate how ChatGPT works beyond text.

In this demo, our objective is to delve into the realm of multimodal tasks, where ChatGPT will be equipped to handle both visual and textual inputs concurrently.

Through this endeavor, we aim to showcase the potential of ChatGPT in addressing complex multimodal tasks and advancing the capabilities of GenAI systems.

> **Note:** Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

DEMONSTRATION

Demo: Customer Feedback Analysis Using ChatGPT-4

Duration: 10 minutes

Demonstrate how to use ChatGPT to categorize customer feedback into positive, negative, constructive, or neutral sentiments and visualize the results.

As a data analyst at a large e-commerce company, your task is to analyze the customer feedback collected after a major sales event. The objective is to identify areas of success and opportunities for improvement, thereby aiding the company in enhancing its future sales strategies.

To address this, let's explore a demo where we'll experiment with using ChatGPT prompts to tackle this issue.

> **Note:** Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Explore Powerful GPTs

Comparison between ChatGPT 3.5,4, and 4o

Here is a comparison highlighting key differences:

Feature	ChatGPT-3.5	ChatGPT-4	ChatGPT-4-turbo (4o)
Model size	Medium	Large	Large
Context length	Up to 4,096 tokens	Up to 8,192 tokens	Up to 128,000 tokens
Speed	Fast	Slower than 3.5	Faster than 4
Use cases	General conversation, basic tasks	Complex tasks, nuanced understanding	Complex tasks, faster responses
Optimizations	Basic	Advanced	Turbocharged for efficiency
Multimodal capabilities	No	Yes	Yes

ChatGPT Comparison Based on a Use Case

Scenario: A researcher needs to summarize a 20-page research paper to identify key findings, methodologies, and conclusions.

Responses	ChatGPT-3.5	ChatGPT-4	ChatGPT-4-turbo (4o)
Summary quality	Provides a general summary but may miss some nuanced details	Produces a detailed and accurate summary, capturing nuanced details and methodologies	Matches the detail and accuracy of ChatGPT-4
Speed	Fast response	Slower compared to 3.5	Faster than ChatGPT-4
Context handling	May struggle with longer context, requiring multiple prompts	Handles longer context better, providing a more cohesive summary	Handles very long context efficiently, making it ideal for summarizing lengthy documents in one go

Comparison Based on a Prompt

Here are the responses from different ChatGPT models based on a single prompt.

Prompt: Explain polymorphism to me in a line

ChatGPT-3.5

> **ChatGPT**
>
> Polymorphism refers to the ability of different objects to be treated as instances of a common superclass, allowing for flexible and interchangeable use of objects within a hierarchy.
>
> ‹ 1 / 3 ›

ChatGPT-4

> **ChatGPT**
>
> Polymorphism is a programming concept that allows objects to be treated as instances of their parent class, enabling methods to operate differently depending on the class of the object they are called on.
>
> ‹ 2 / 3 ›

ChatGPT-4-turbo (4o)

> **ChatGPT**
>
> Polymorphism is a programming concept where objects of different classes can be treated as instances of the same class through a common interface, allowing methods to be used interchangeably.
>
> ‹ 3 / 3 ›

Explore GPTs: Categories of GPTs

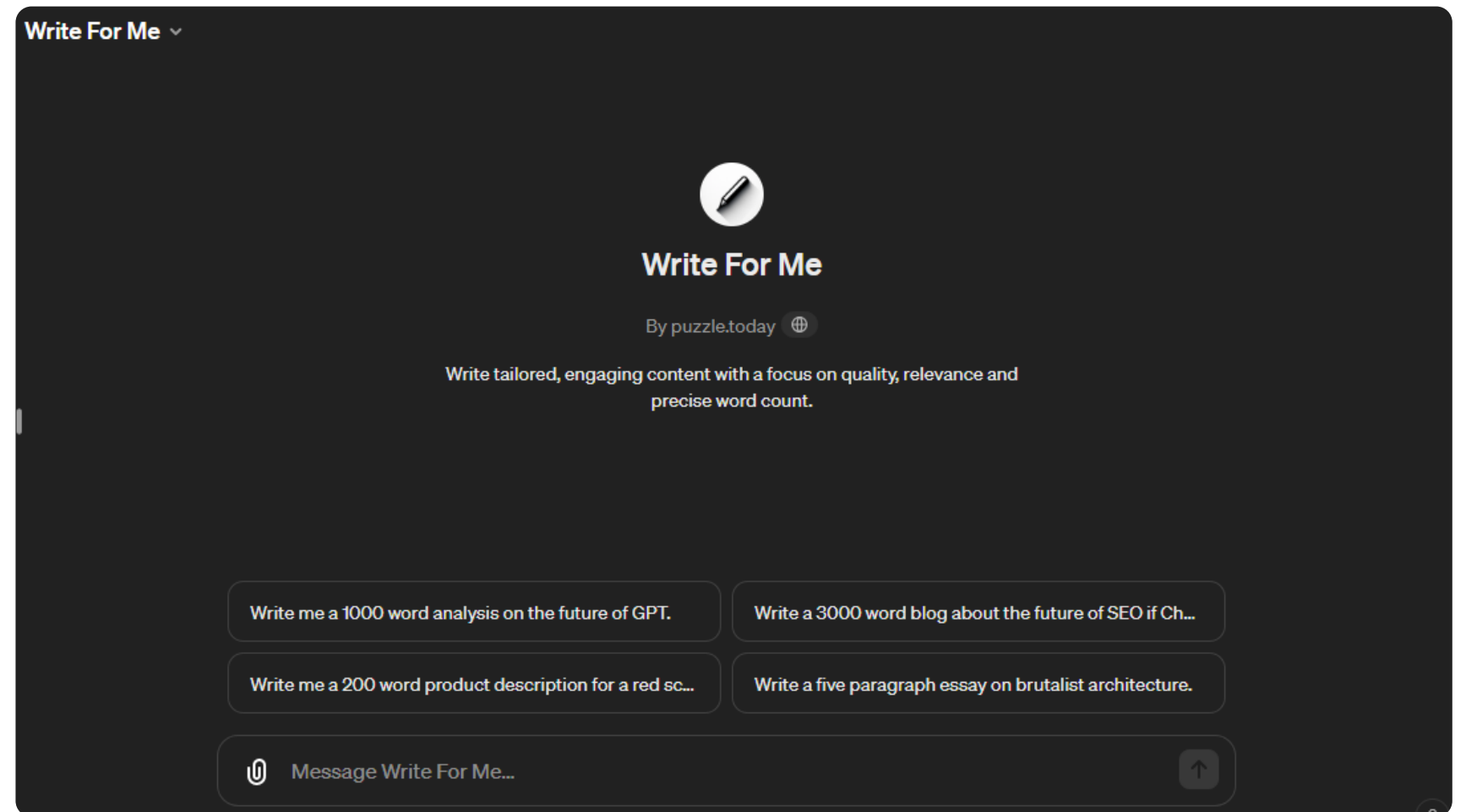The explore GPTs are custom GPTs accessible only with the GPT-4 version.

The Explore GPTs can be categorized in different ways, as shown below:

Writing GPTs: Write For Me

This GPT is focused on writing, such as content generation, writing assistance, or editing.

Write For Me is a personal writing assistant. It crafts tailored content, focusing on needs, audience, and SEO, ensuring ideas are transformed into engaging written material.

Write For Me ∨

Write For Me

By puzzle.today 🌐

Write tailored, engaging content with a focus on quality, relevance and precise word count.

Write me a 1000 word analysis on the future of GPT.

Write a 3000 word blog about the future of SEO if Ch...

Write me a 200 word product description for a red sc...

Write a five paragraph essay on brutalist architecture.

📎 Message Write For Me...

Demo: Creating Marketing Content for Eco-Friendly Water Bottles Using Write For Me GPT

In this demo, you will be able to illustrate the use of the **Write For Me** GPT for creating marketing content for an eco-friendly reusable water bottle, aiming to connect with environmentally conscious consumers.
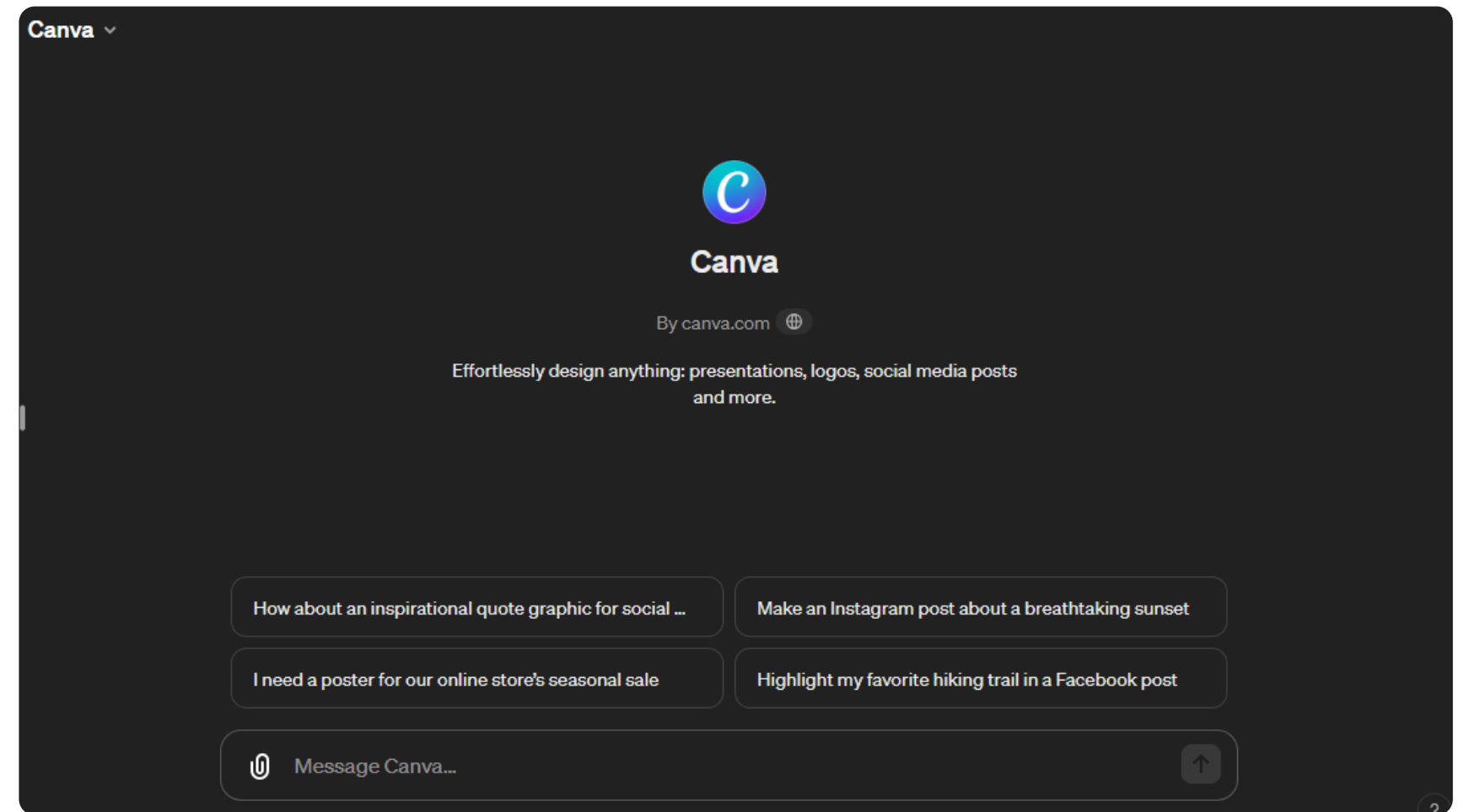
The purpose is to demonstrate the application of GPT technology in creating engaging content that resonates with the target audience's environmental values.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Productivity GPTs: Canva AI

This helps with increasing efficiency in tasks or workflows.

Canva AI makes designing easy by creating designs from your descriptions. Perfect for beginners and pros, it helps you make social media posts and presentations and turns text into images.

Demo: Designing Visually Appealing Content Using Canva GPT

Duration: 10 minutes

In this demo, you will be able to showcase **Canva** GPT's role in boosting productivity by designing appealing content for a coffee shop's new product, Sunrise Brew.
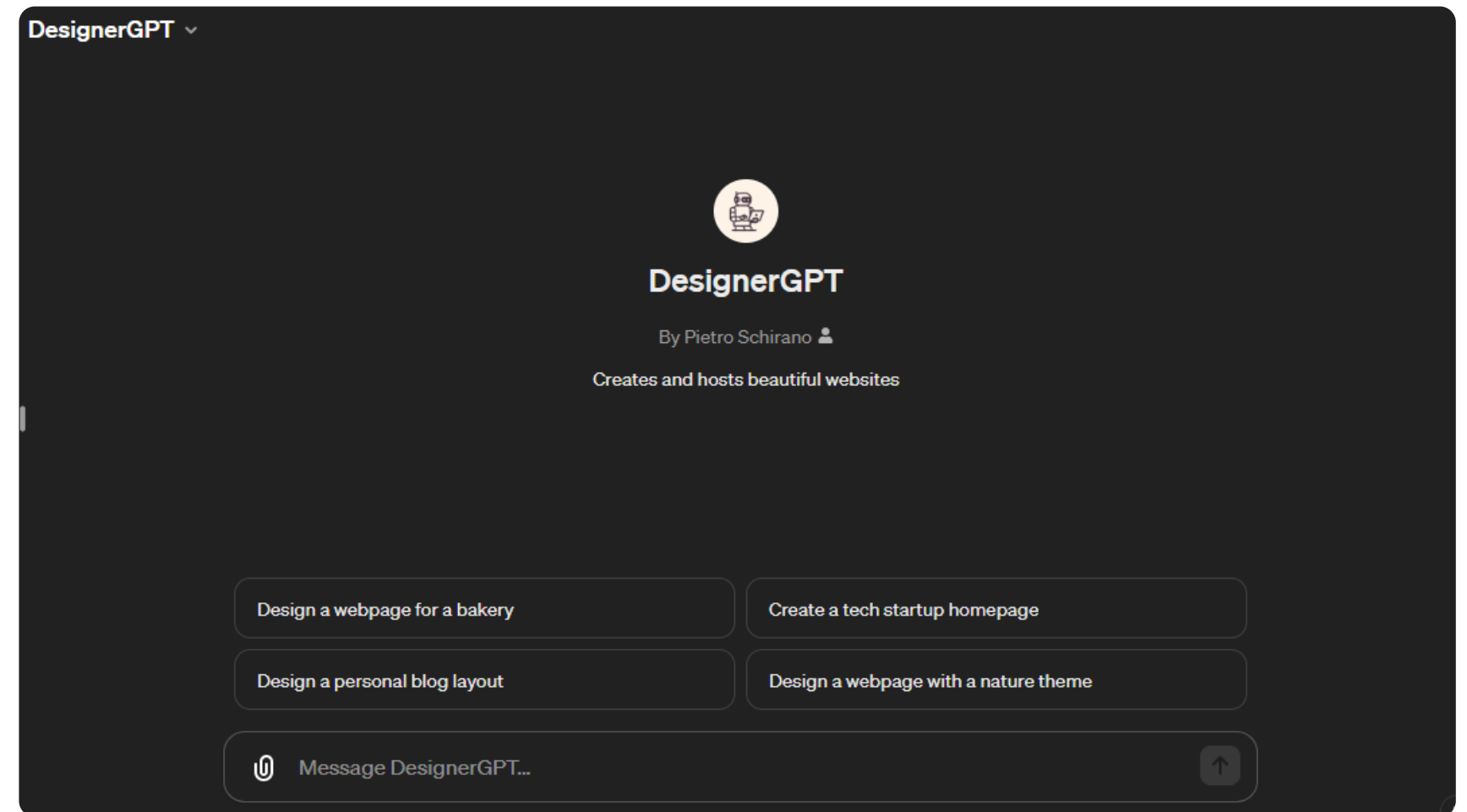
This demonstrates how GPT technology can streamline the design process and enhance marketing productivity.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Programming GPTs: DesignerGPT

This helps with coding, such as automatic code generation, code reviews, or even educational tools for learning programming.

DesignerGPT is a specialized AI designed to instantly create and host beautiful, responsive HTML web pages tailored to user requests, streamlining web design with precision and efficiency.

Demo: Creating a Website Design Using DesignerGPT

Duration: 10 minutes

In this demo, you will be able to use **DesignerGPT** to generate a visually appealing website design or product landing page for an online store, focusing on Programming GPT.
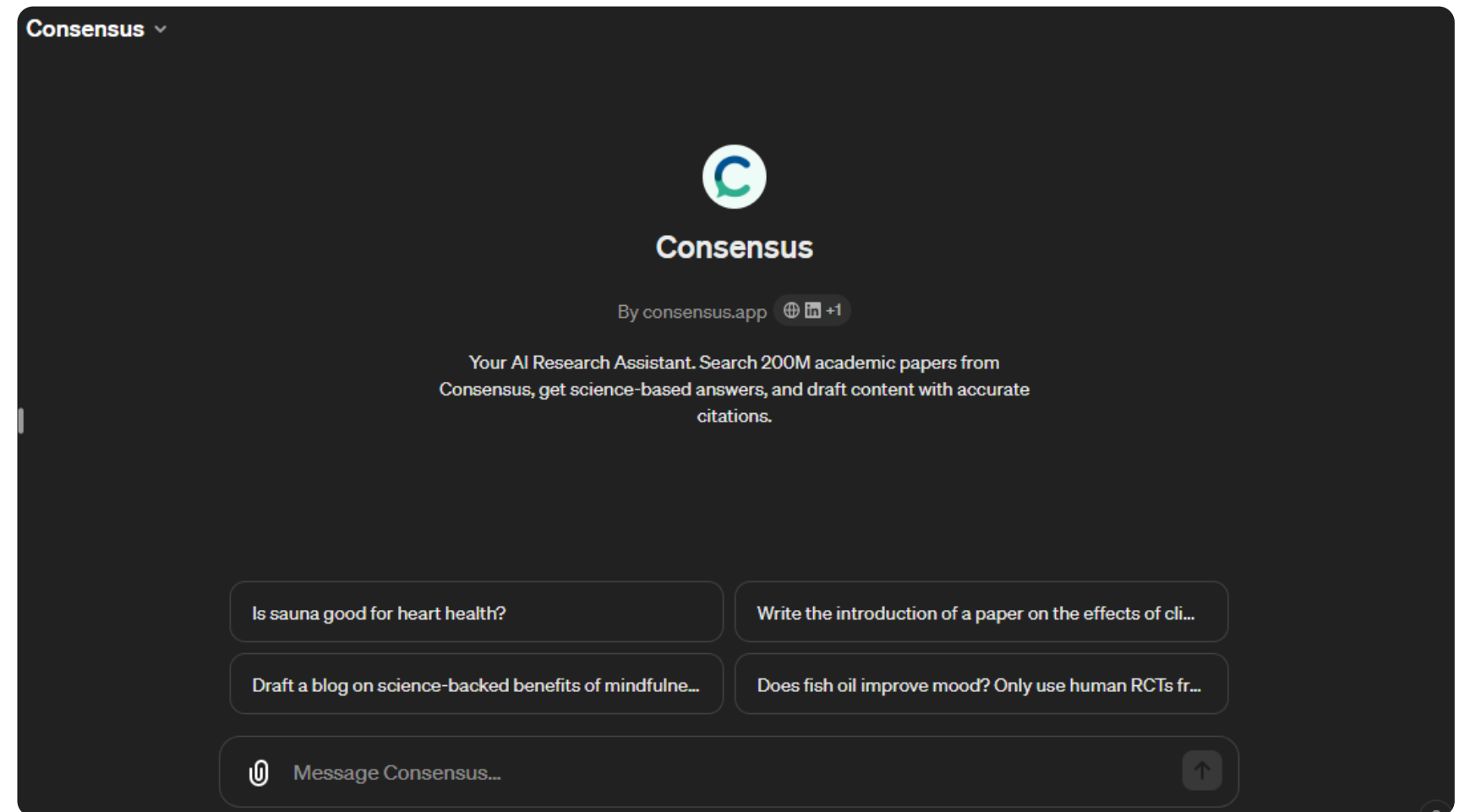
Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Research and Analysis GPTs: Consensus

This aids with research, data analysis, or information synthesis.

Consensus is a scientific research assistant leveraging AI to synthesize insights from academic papers, providing clear, concise summaries and evidence-based responses to your inquiries.

Duration: 10 minutes

In this demo, you will be able to use the **Consensus** GPT for research and analysis to conduct a literature survey on the impact of Large Language Models (LLMs) on natural language understanding (NLU) tasks.
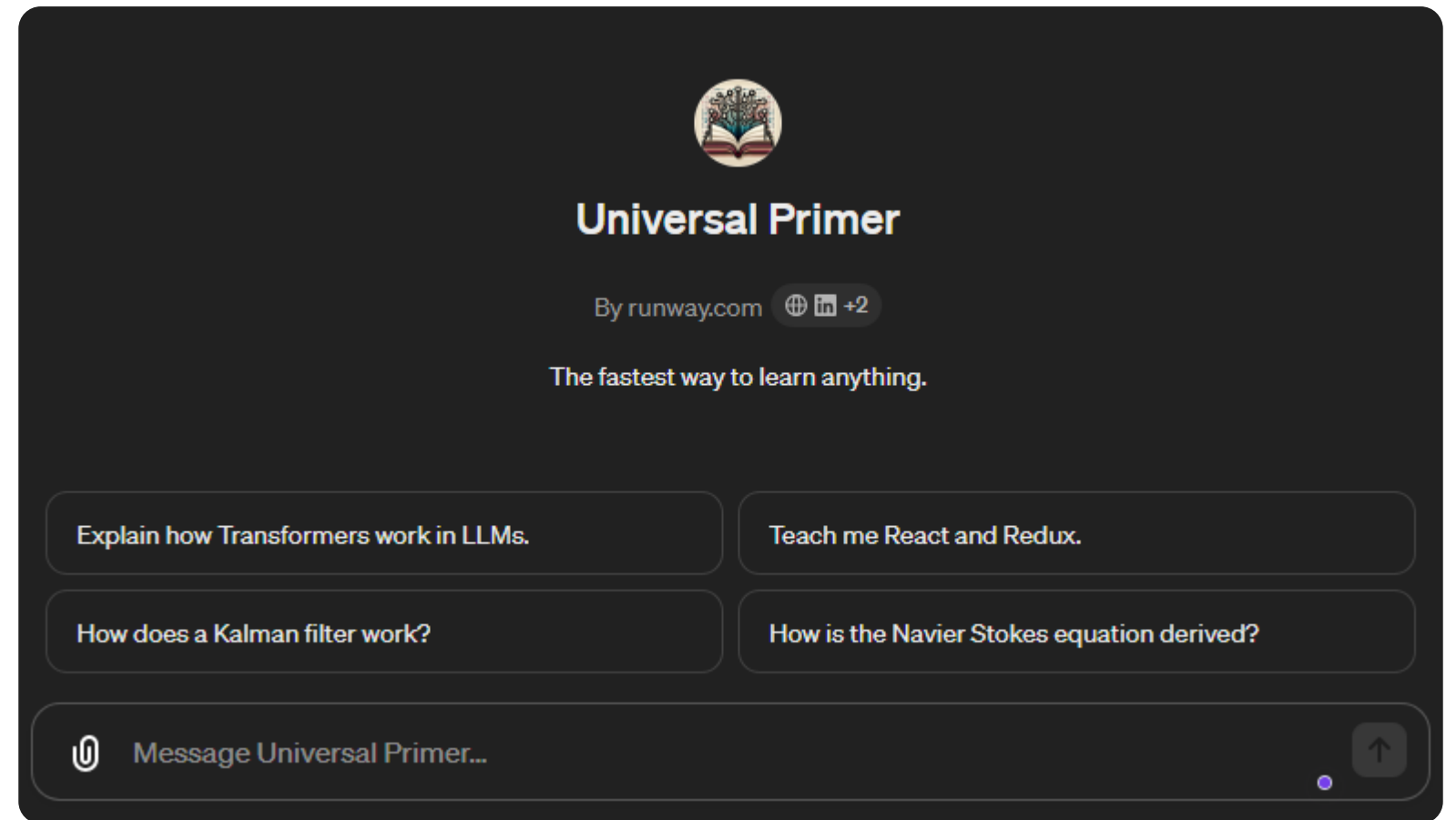
The goal is to gather recent studies on LLM advancements, particularly in question answering, text summarization, and sentiment analysis, and analyze key trends and challenges while highlighting the role of fine-tuning and transfer learning.

> **Note:** Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Education GPTs: Universal Primer

This encompasses GPT for teaching, tutoring, or creating educational content.

Universal Primer is the fastest way to learn everything about anything.

Universal Primer

By runway.com ⊕ in +2

The fastest way to learn anything.

Explain how Transformers work in LLMs.	Teach me React and Redux.
How does a Kalman filter work?	How is the Navier Stokes equation derived?

🔗 Message Universal Primer...

Demo: Enhancing Educational Material Using Universal Primer GPT

In this demo, you will be able to use the **Universal Primer** GPT to enhance educational content on chemical equilibrium for high school students.

The main goal is to demonstrate the Education GPT tool's ability to improve learning materials and help students understand complex concepts.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.
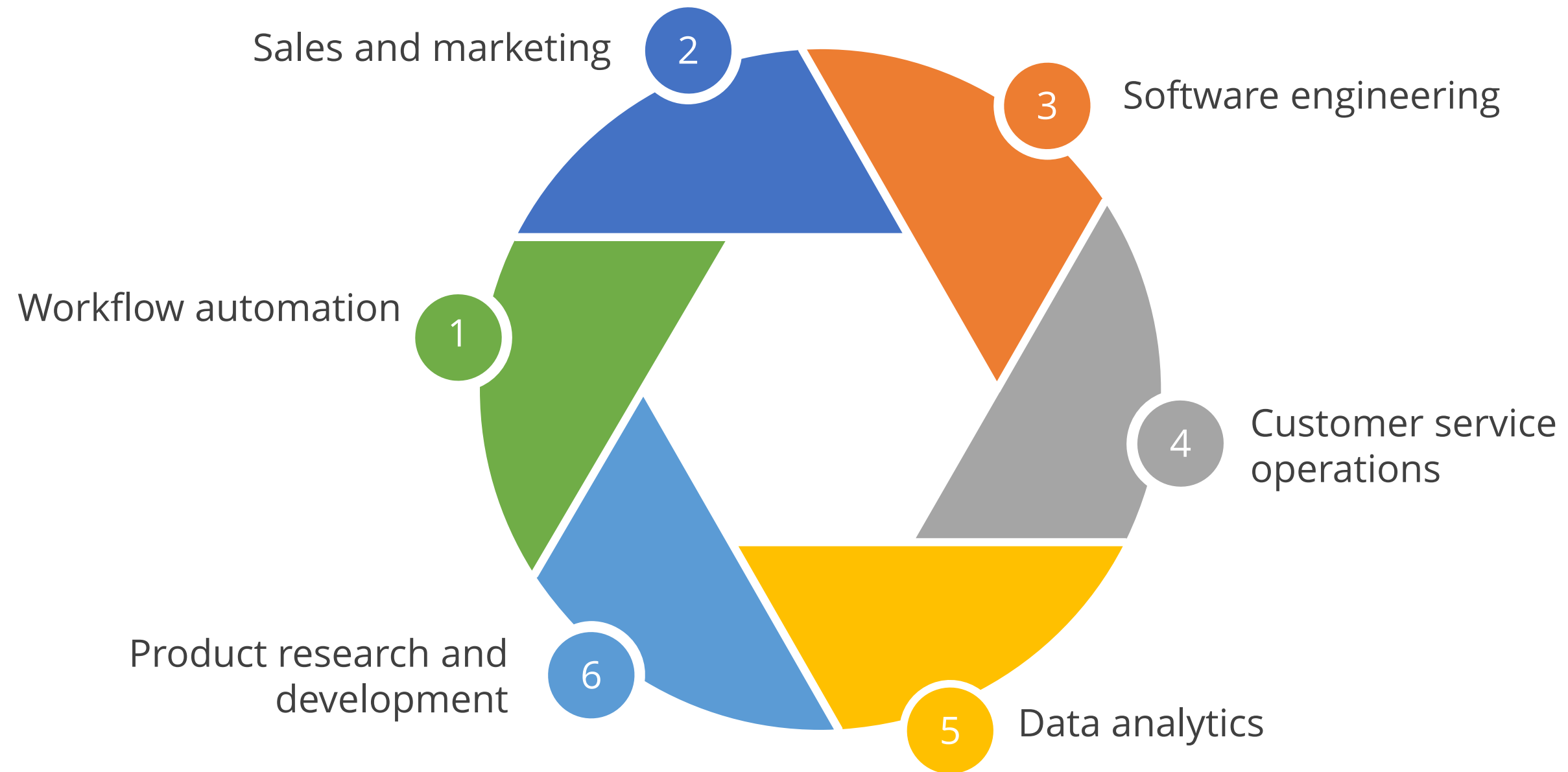
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Impact of Gen AI on Various Business Domains

Impact of Gen AI

GenAI impacts various business domains, including:

Sales and marketing

Software engineering

Workflow automation

Customer service operations

Product research and development

Data analytics

Workflow Automation

Generative AI tools make it easy to automate tedious and repetitive tasks, such as autogenerating CRM support tickets from emails and automating email campaigns and data entry.

Here are a few popular tools:

Demo: Setting Up a Zapier Account and Creating a Zap

Duration: 15 minutes

In this demo, we will guide you through setting up a Zapier account and creating your first Zap to streamline and automate your marketing workflows, enhancing efficiency and productivity.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

Sales and Marketing

Generative AI tools have enhanced sales and marketing efforts through personalized content generation, data-driven insights, and engaging customer interactions.

Here are a few popular tools:

invideo

Rytr

Stable Diffusion

Demo: Creating a Video Using AI

Duration: 20 minutes

In this demonstration, we will showcase how to utilize InVideo to craft dynamic and engaging video content tailored to specific preferences and settings, enhancing audience engagement and impact in your marketing initiatives.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

DEMONSTRATION

Software Engineering

Generative AI tools have streamlined software engineering by automating coding tasks, improving code comprehension, and fostering efficient developer collaboration.

Here are a few popular tools:

Copilot

Uizard

Amazon CodeWhisperer

Demo: Designing User Interfaces with Generative AI

Duration: 15 minutes

In this demo, we aim to demonstrate the creation of an engaging e-commerce product page through intuitive user interface design using Uizard, a generative AI platform. By leveraging Uizard's capabilities, you'll craft a visually appealing and user-friendly interface that enhances the shopping experience and drives conversions for your e-commerce business.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Data Analytics

Generative AI tools have transformed data analytics by automating data preparation, enabling natural language querying, and generating insights from complex datasets.

Here are a few popular tools:

tableau

Julius

Data Squirrel

Demo: Data Integrity Using GenAI

Duration: 15 minutes

In this demo, we aim to ensure the quality of data using Julius AI. By leveraging GenAI's capabilities, you'll implement robust data validation, cleaning, and enhancement techniques. This enhances the accuracy, reliability, and usability of the data for informed decision-making and actionable insights.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Customer Service and Operations

Generative AI tools have revolutionized customer service operations by enabling personalized, real-time responses, automating routine inquiries, and providing data-driven recommendations.

Here are a few popular tools:

sendbird

Otter.ai

Demo: Transcribing Audio Calls to Text

Duration: 20 minutes

In this demo, we'll demonstrate how to generate a clean transcript using Otter.ai. By leveraging Otter.ai's transcription capabilities, we'll efficiently convert audio recordings into accurate text, enhancing the accessibility, searchability, and readability of the content for auditing purposes.

Note: Please download the demo documents from the LMS **Reference Material Section** for a detailed explanation.

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Key Takeaways

- ChatGPT can automate day-to-day tasks, including multilingual translation, sentiment analysis, LinkedIn profile creation, and customer feedback analysis, enhancing productivity.

- ChatGPT-4 processes text, images, and complex data, making it a versatile AI tool for customer interactions, research, and creative tasks.

- Different categories of GPTs (writing, productivity, programming, and research) cater to specific business needs, streamlining workflows in marketing, branding, software development, and research.

- Generative AI drives innovation across industries, enabling workflow automation, sales and marketing optimization, software development, product research, data analytics, and customer service enhancements.

Additional Resources

- [Top Generative AI Tools: Boost Your Creativity](#)