USU

Generative AI in Customer Service

How to use GenAI today for sustained relevance tomorrow

Content

Introduction

Artificial intelligence has long been utilized in customer service, primarily through AI-driven text and data analysis. This includes AI assistants, automated routing of customer inquiries, and the generation of up-selling and cross-selling suggestions. Traditionally, these approaches require substantial data training to achieve reliable real-world performance.

The introduction of ChatGPT by OpenAI in November 2022 heralded a new era of AI-driven workflows with generative AI (GenAI), capable of autonomously generating texts, images, ideas, or data. Distinctly, GenAI is built on pre-trained models (GPT = Generative Pre-Trained Transformer), allowing for immediate application without initial data training, presenting novel opportunities in customer service.

In this white paper, we delve into different uses of GenAI in customer service, explaining how you can tap into GenAI for instant advantages. We also cover why it's essential to adopt this technology quickly despite its rapid development. Building a strong foundation today is vital for future readiness and sustainability.

The Advantages of GenAI

GenAI offers vast potential in customer service with two primary benefits:

Savings in Service Areas

01 | Reduced editing work:
GenAI reviews your documents for consistency and quality, summarizes them for various applications such as FAQs, training documents, and instructions. It also adapts and refines the content to cater to different audiences, including customers and service agents, and offers translation into multiple languages. This significantly saves time for editors.

02 | Improved communication:
GenAI significantly surpasses previous AI models in understanding language and the intent behind communications. This enhancement allows for optimized and often automated customer interactions. Additionally, agents can now access the information they need much faster than before, greatly reducing their workload and saving time.

03 | Automated service processes:
GenAI can autonomously access external IT systems during user interactions to initiate remote service processes. Common transactions like data inquiries, orders, or contract renewals can be fully automated. This automation significantly reduces the workload for service staff, saving them considerable time.

Increase in customer satisfaction

GenAI's round-the-clock operation, exceptional dialogue capabilities, and automated request processing markedly elevate customer satisfaction.

More detailed GenAI application scenarios in customer service are discussed in the white paper **Simplify and Streamline Your Knowledge Management.**

KAI provides support in these areas

Editors & Service Teams
- Answering user queries
- Revising/rewriting documents
- Translations
- Execution of services

Quality Manager
- Identification of quality problems
- Management of QA tasks

Architects & Software Developers
- Integration of external data sources
- External AI-based search functions
- Quality optimization of external RAG concepts

Management
- Support with problem solving
- Management of workflows
- Management of authorizations
- Creation of reports

Talent Developer
- Creation of tests
- Preparation of coaching sessions
- Implementation of tests

Prerequisite: A Solid Knowledge Base

The benefits of Generative AI can be fully realized only when it operates on a foundation of high-quality information.

While Generative AI can identify inconsistencies, gaps, and contradictions within documents, it falls to service staff to verify the accuracy and currency of the content, as well as to ensure appropriate terminology. Conse-quently, a centralized, quality-controlled knowledge database is crucial for underpinning Generative AI.

The quality standards for documents vary based on their application. When information is disseminated to customers through Generative AI, or must adhere to legal standards, a high quality is imperative. This is also true when Generative AI synthesizes answers from multiple documents, as inaccuracies can only be detected through a comprehensive review of all source material.

Why Start Now?

In view of the rapid development of generative AI, you may be asking yourself whether now is a good time to get started. After all, the technology could be obsolete in just 1-2 years.

However, we think now is the right time to get started. Here are the reasons:

- Enormous benefits are already being realized today. So why wait?
- The learning curve is still steep today and the time to productive use is short. The longer you wait, the more difficult and time-consuming it will be to get started later.

The use cases for Generative AI are as unique as your company's business operations, indicating that one-size-fits-all GenAI solutions do not exist. Instead, each company must acquire know-how to be able to use the technology correctly. GenAI is controlled via so-called prompts. Complex instructions, for example for checking the quality of documents, can quickly run to several pages. Although we as the manufacturer supply templates, you still need to gain experience in prompt engineering yourself. And this experience will enable you to identify new potentials of GenAI.

The use of GenAI is certainly also a good argument for recruiting new specialists. GenAI is also changing the world of work in customer service. In many areas, tasks are changing from "do it yourself" to "provide the basis and instruct GenAI". Being at the forefront of this development and not lagging behind can be a decisive argument when recruiting new employees.

No Risk of Vendor Lock-in

There are already many GenAI providers, such as OpenAI with ChatGPT, Google with Gemini and LaMDA or Anthropic with Claude 3 Opus. And more are sure to follow. In this dynamic environment, it is impossible to predict which providers will win the race in the long term.

While the specifics of prompt formulation may differ across tools, the underlying principles remain consistent.

Thus, experience in prompt engineering will always be advantageous, no matter the tool you utilize in the future.

Consequently, switching between GenAI tools can be done swiftly. However, maintaining a quality-assured database as the core foundation of your knowledge base in customer service is essential for stability.

Future-Proof Tool Landscape

Efficient and future-proof GenAI use in customer service requires:

A centralized knowledge database

that serves as a quality-assured information source for GenAI processing.
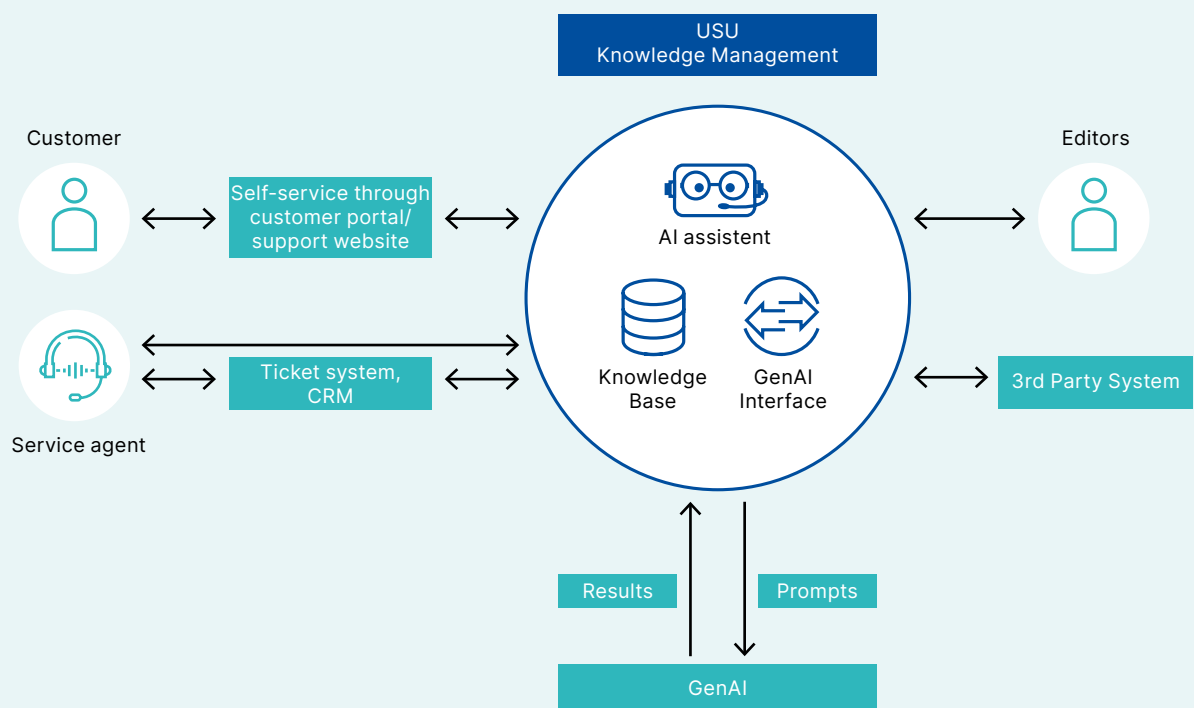
A flexible GenAI interface

designed for seamless interaction with generative AI, easily reconfigurable for different providers.

Standardized GenAI Scenarios:

Although GenAI enables a broad spectrum of applications, creating optimal prompt sequences for each can be time-consuming. It's practical to have the most common use cases pre-configured as functions, allowing service staff to employ them effortlessly.

The USU Knowledge Management software provides a comprehensive tool landscape meeting these criteria.

GenAI with USU Knowledge Management

USU Knowledge Management

Customer

Self-service through customer portal/ support website

Service agent

Ticket system, CRM

AI assistent

Knowledge Base · GenAI Interface

Editors

3rd Party System

Results · Prompts

GenAI

Knowledge Base:

This central knowledge database allows editors and experts to import, create, evaluate, update, and approve content for use. It facilitates document review for consistency and quality, and leverages Generative AI for translation. Additionally, the knowledge base can employ Generative AI to generate new documents from existing information, tailored for various applications (e.g., FAQs, training materials, guidelines) or audiences (e.g., customers, service agents).

AI assistent:

The AI assistent serves both customers and service agents. Assisted by GenAI, it responds to inquiries and can retrieve data from external systems – for example, to offer updates on current contract terms. Additionally, when necessary, the AI assistant is capable of executing transactions within these third-party systems, such as extending a contract.

GenAI Interface:

This interface module performs two key functions: First, it converts queries from the knowledge base or AI assistant into prompt instructions for the designated GenAI tool, and relays the responses. It includes predefined prompt pathways to accommodate standardized GenAI use cases. The second function involves interfacing with the GenAI tool through its technical APIs. Should there be a change or addition of GenAI providers, only this interface module requires reconfiguration, leaving the rest of the tool ecosystem unaffected.

GenAI:

The Generative AI market is rapidly evolving, with a wide array of providers. Some offer on-premises solutions for deployment within a company's data center, while many, including the widely-used ChatGPT from OpenAI, provide cloud-based services primarily from the USA. This diversity presents a

challenge for EU companies concerning GDPR compliance and personal data handling. One strategy to address this issue is data anonymization. For instance, a local Generative AI tool, such as MetaAI's Llama, could anonymize data before it's processed by ChatGPT. Subsequently, Llama can re-personalize the responses for the end-users.

Integration into customer portals, websites:

USU Knowledge Management features multiple web interfaces (widgets) designed for seamless integration with customer portals or company websites, enabling the direct provision of self-service options to your customers.

Integration into ticket or CRM systems:

USU Knowledge Management provides pre-configured interface modules for easy integration into agents' process systems, like Salesforce or Zendesk. This setup allows service agents to access information and services within USU Knowledge Management directly from their existing workflow environment.

Integration into third-party systems:

In customer service, third-party systems manage essential elements like customer data, contracts, and product or service details. USU Knowledge Management can interface with these systems through APIs, enabling it to read data, save updates, or initiate processes within these external platforms.
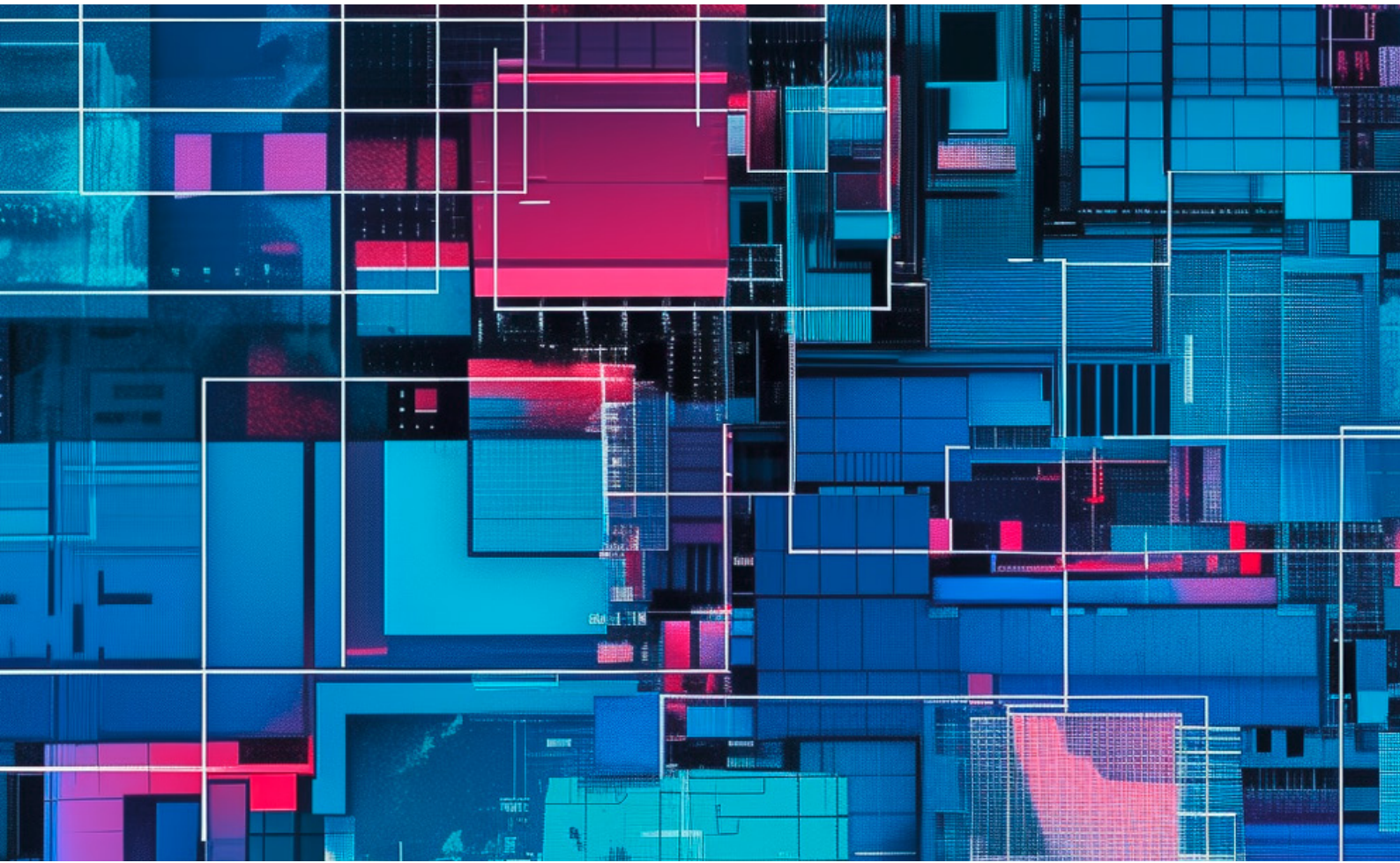
Conclusion

GenAI's market maturity significantly boosts customer service efficiency and satisfaction, making now the optimal time for service organizations to adopt. Early adoption positions organizations to stay ahead in the rapidly evolving GenAI landscape. USU Knowledge Management offers a balanced solution, ready for today's needs and adaptable for future challenges.
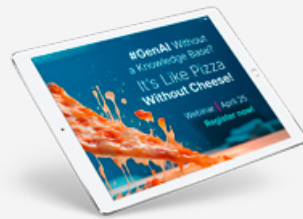
Find out more about artificial intelligence and knowledge databases

Simplify and Streamline Your Knowledge Management

Find out which tasks GenAI performs in USU Knowledge.

Download now

Webinar: GenAI without a knowledge base?

Why your knowledge database is crucial for the success of GenAI.

View now

Ultimate Knowledge Management Provider Comparison

Deciphering the best: analyzing the top 4 knowledge management software providers.

Download now

Do you need further information, a live demo, or do you have any questions?
Most questions can best be clarified in direct contact. I look forward to answering your questions and requests. **Schedule an appointment now.**

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