USU

White Paper

Simplify and Streamline Your Knowledge Management

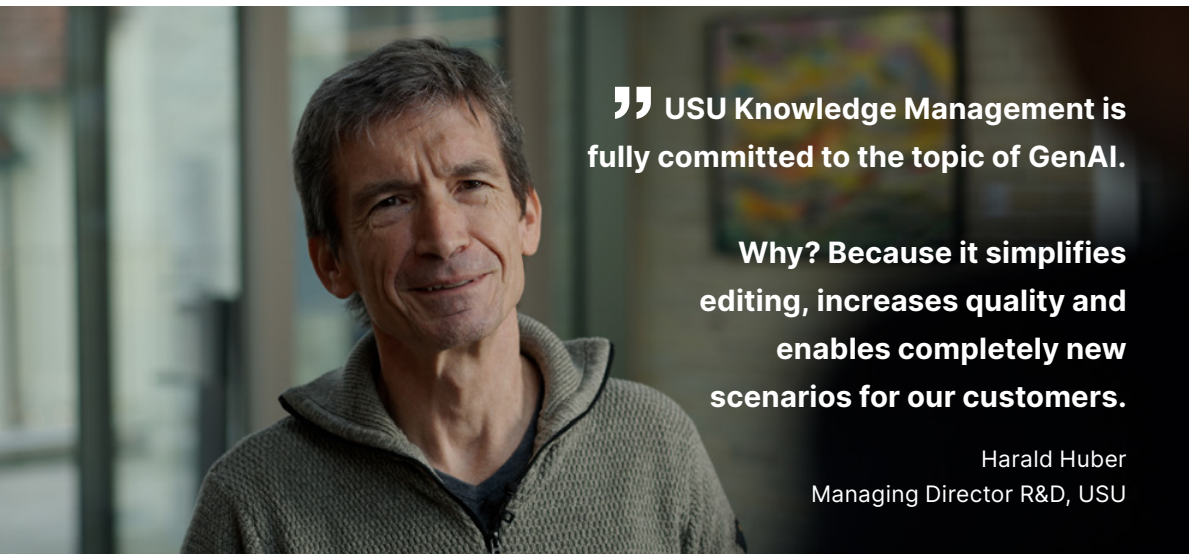
How GenAI takes USU Knowledge Management to the next level

Content

Introduction

Since the introduction of groundbreaking Generative Artificial Intelligence (GenAI) like ChatGPT, we've witnessed some truly game-changing transformations in customer service and beyond. While embracing GenAI into our daily routines has opened up a world of new possibilities, let's clear up a common misunderstanding: the idea that knowledge databases might become less important or even unnecessary. That couldn't be further from the truth. GenAI, especially in modern chatbots and assistance systems, thrives on top-notch data quality and accessibility – something that's only possible with a well-maintained knowledge database.

Here at USU, we get how vital a robust knowledge database is in the age of GenAI. By combining the power of GenAI with our comprehensive knowledge base, we're not just raising the bar in customer service; we're setting a whole new standard. The future of customer service is all about blending technology with human expertise seamlessly – a mission we're passionate about here at USU.



Curious about what GenAI actually does in USU Knowledge Management and how it benefits everyone involved? Wondering about the added value it brings to different user groups? Or are you contemplating whether you even need a knowledge database anymore if you're using GenAI? We've got you covered! Dive into these burning questions with us in our latest white paper. Let's unravel the mysteries together!

Previously

With the arrival of ChatGPT and the rise of Large Language Models (LLMs), the AI scene has definitely taken a giant leap forward. Customer service is buzzing with excitement thanks to this cutting-edge tech, opening up a whole new world of possibilities.

Check out some typical scenarios:

01 | Automated customer communication

GenAI's knack for automating customer conversations has turbocharged efficiency in customer service

02 | First-touch interactions

GenAI makes those initial customer contacts instant and spot-on, boosting satisfaction right out of the gate

03 | Personalized support

With GenAI's flexibility, we're talking about personalized responses tailored to each customer's unique needs and situation

04 | Spech and text analytics

GenAI's got some serious skills in speech and text analysis, diving into customer feedback to uncover insights and sentiments, helping us understand our customers better than ever

Now, let's be honest – while GenAI brings tons of perks, it's not all smooth sailing. Sometimes, information accuracy can vary, and answers might not always line up perfectly with the facts. That's why we're all about quality data. A rock-solid knowledge database is the solution, laying the groundwork for GenAI to shine its brightest. We've got our eyes on the prize – top-notch service powered by the best of both worlds.

GenAI: As Strong as the Knowledge Database it Accesses

When it comes to getting the most out of GenAI, it's not just about the AI itself – it's all about how the content it taps into is put together and organized.

When GenAI gets its hands on top-notch, quality-checked knowledge, it really shines as a virtual customer service champ. It steps up to the plate, giving service agents a breather by dishing out verified company intel and retreiving information from the web when needed.

Of course that also means if the content it receives is unclear, it won't succeed. GenAI's only as sharp as the data it's fed. Without a solid knowledge database to draw from, it runs the risk of producing inaccurate and incorrect results.

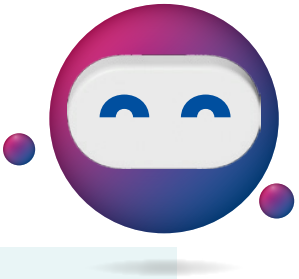
The rise of GenAI has changed the game on the role of the knowledge base. Now, USU Knowledge Management gets a makeover with GenAI in the mix. Content creation isn't just made by and for humans anymore – it's a team effort between humans and GenAI, for humans and GenAI alike.

Introducing KAI: Your AI-Enhanced Knowledge Partner

Introducing KAI

We have integrated GenAI into USU Knowledge Management in the form of a virtual assistant to make our knowledge database even more service-oriented. Knowledge AI, or KAI for short, supports the writing and organization of content and performs specific actions.

KAI is not an isolated feature, but a comprehensive tool. KAI supports editors, quality managers, developers and management. KAI provides quality-assured information based on our knowledge database and optimizes the content so that GenAI can provide support in more and more areas.



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

Revolutionary Use Cases

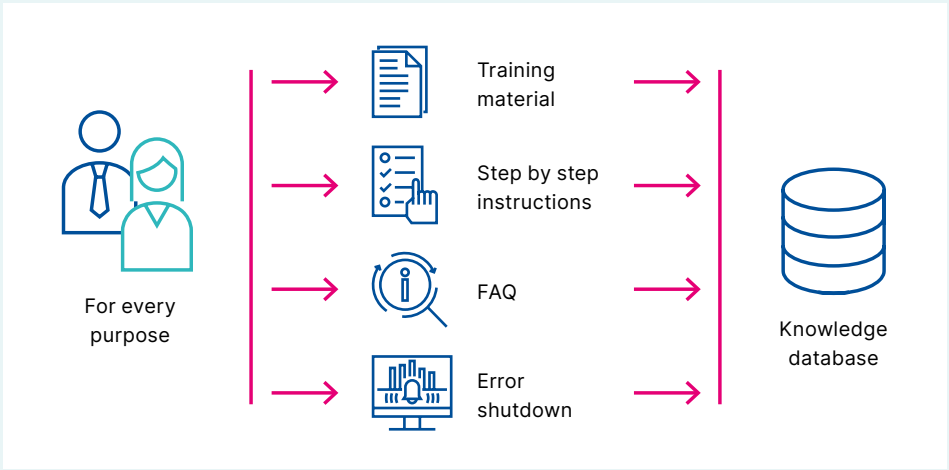
Editors and service teams

The way content is created will change permanently. GenAI understands texts differently to humans, and in order to be able to process them effectively, they must be structured and formulated in a certain way. Functionalities must be formulated in detail, dependencies and causal chains must be worked out. Once this basis has been created, KAI can autonomously suggest and implement improvements.

Editorial process

Classic knowledge provision process

Organizations often need different documents like training manuals or internal guidelines for various purposes. While the content stays the same, they might look a bit different depending on their use. Each one is customized to fit its audience and purpose, ensuring clear and effective communication. This helps maintain a friendly and professional approach while meeting everyone's needs efficiently.



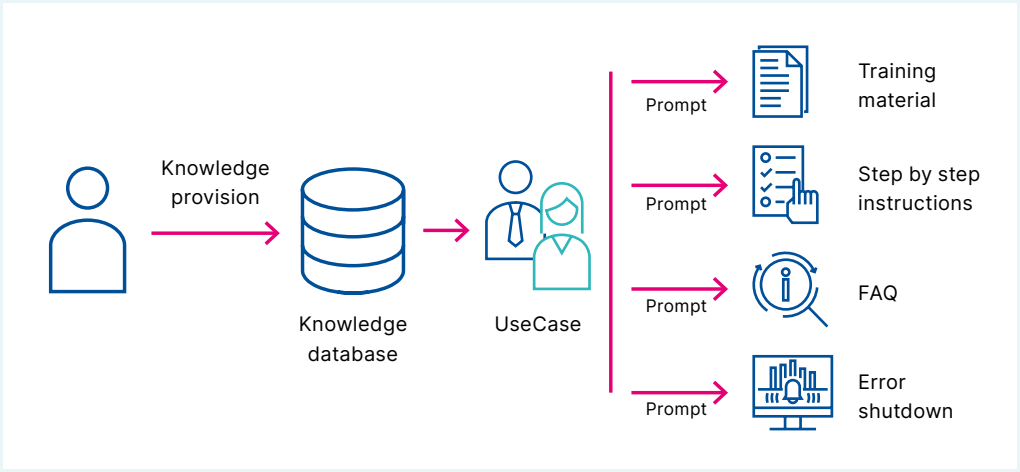
- Context-free presentation
- Findable/author anticipated Usage situation
- Consistent formulation
- Uniform editorial status

Figure 1: Classic representation of the knowledge provision process

Knowledge provision with KAI

Content is only created once, but in more detail than before. Dynamic or fixed prompts are used to create several documents for different purposes from one document. This significantly reduces the editorial workload.

The creation of FAQs will no longer be necessary. KAI will no longer concentrate only on the top 10 FAQs, but will be able to cover up to 100% of the questions in a fully formulated situation.



- The expense for the provision will be significantly reduced
- Changes can be incorporated very quickly be incorporated
- An extension from answers to actions can be easily

Figure 2: Knowledge provision process with LLM

Answering user queries

In a customer service scenario, a customer asks on the phone: “What warranty options does your company offer?”

Classic process

Traditionally, a service employee answers the query by retrieving the available warranty variants from memory, a manual, an FAQ list or an internal system. This process can be time-consuming and is prone to errors, especially with a high number of inquiries or less experienced employees.

Process with KAI

A Large Language Model (LLM) takes the customer’s telephone inquiry and converts it into text. This text information is then forwarded to our AI system KAI, which analyses and categorizes the inquiry and identifies the relevant topics. All relevant information on the warranty options required by the customer is then automatically suggested to the service employee.

Revising/rewriting documents

A customer contacts customer service with a question about setting up a newly purchased smart home device. The support team receives the information in an extensive, text-heavy document. This format is not ideal for customers looking for quick and easy instructions.

Classic process

Traditionally, a service employee would have to go through the extensive document, extract the key steps and create a step-by-step guide for the customer. This process is time-consuming and can lead to delays, especially with complex requests.

Process with KAI

By using the prompt “Create a step-by-step guide for setting up the smart home device”, KAI can convert the extensive document into a clear guide. KAI analyzes the original text, identifies the key information and structures it in a user-friendly format.

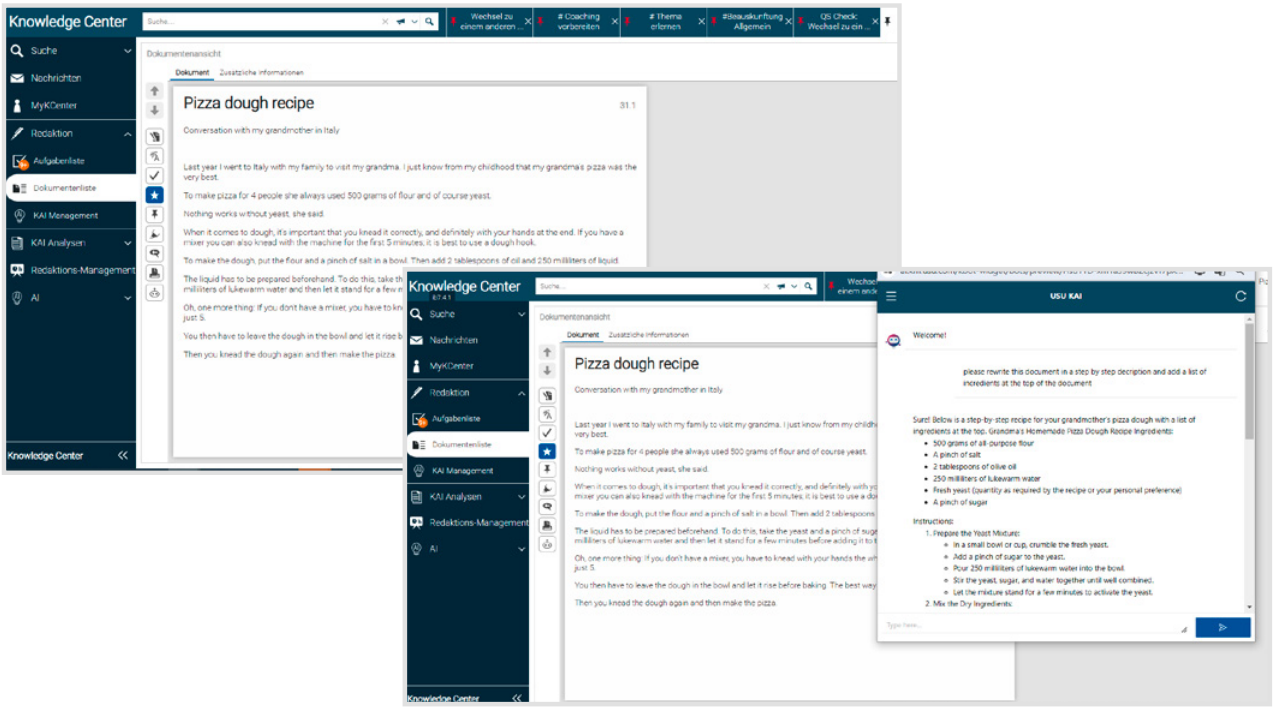


Figure 3: Example of rewriting documents

Service Execution

In customer service, frequently recurring services such as contract changes or orders are processed. In order to process these services efficiently and quickly, it is necessary to record all information quickly and initiate appropriate actions.

Classic process

Previously, the service employee had to receive the request in person, manually check the customer's contract details, look through current offers and enter the contract extension in the system. This manual process is time-consuming and carries the risk of errors.

Process with KAI

With stored prompts in USU Knowledge Management, KAI can support service agents in the processing. As soon as the customer expresses their intention to extend the contract, GenAI records the request and automatically checks the customer data and available contract offers. GenAI identifies the optimal offer, executes the contract renewal and sends a confirmation with the new contract details to the customer. The entire process takes place without manual intervention, based on the stored prompts and the linking of customer inquiries with the corresponding documents in USU Knowledge Management.

Quality manager

Inconsistencies in process descriptions

In a typical retail customer service environment, employees often have to answer customer questions about product details, return costs, delivery terms, discounts and cancellation policies.

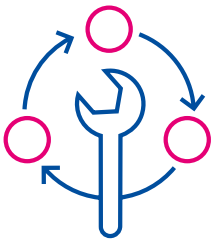
Classic process

Without GenAI, those responsible have to check all documents manually, identify inconsistencies and correct them. This is a labor-intensive process that takes a lot of time and leaves room for error. An undetected contradiction in the return costs or unclear discount regulations could lead to customer complaints and a loss of trust.

Process with KAI

KAI automatically searches the entire documentation for contradictory information. For example, KAI can be instructed by a prompt to "Analyze the return cost information in all documents and identify inconsistencies." KAI finds the discrepancies and delivers a report that shows all inconsistencies.

Architects and software developers



Integration of knowledge management in AI-based search systems

In a dynamic customer service environment, architects and software developers need quick access to up-to-date and accurate information in order to respond effectively to customer requests. The integration of the knowledge base into external AI-based search systems plays a crucial role in ensuring seamless information retrieval from distributed data sources.

Classic process

Without the support of GenAI, architects and software developers have to manually search through data sources and merge information to generate answers to customer questions. This process is not only inefficient, but also carries the risk of outdated or inconsistent information.

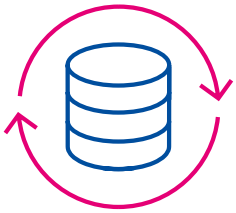
Process with KAI

With the integration of knowledge management into vector-based AI search systems, employees can submit a query and the AI automatically searches all connected knowledge bases to find the information regardless of its original source. This process utilizes the capabilities of LLMs to understand the context of the query and generate accurate, contextual answers. For example, a customer service representative may ask, “What are the current return policies?” and KAI will immediately provide the most up-to-date information gathered from various documentation.

Management

Management analysis

Time and time again, customer service managers are faced with the challenge of monitoring and improving the quality and efficiency of their knowledge base (KDB). Analyzing the editorial status and evaluating document usage is crucial to maximize the success of the knowledge base for the company.



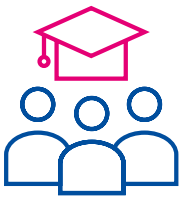
Classic process

Managers manually analyze knowledge base usage patterns to understand which documents are frequently used and which may need to be revised or updated. This process required a significant amount of time and specialized expertise in data analysis, making it difficult to quickly adapt the WDB to the changing needs of users.

Process with KAI

Instead of relying on manual data collection and analysis, management can instruct KAI directly, e.g. with the prompt: “Determine current WDB usage trends and identify documents with potential for improvement.” KAI uses powerful algorithms to search through large amounts of data, analyze usage statistics, identify patterns and provide precise recommendations for e.g. updating content.

Talent developer



Efficient employee training

The effectiveness of the customer service team of an online retailer, for example, is directly dependent on the quality of employee training. In particular, new product lines and changes in return policies require regular training to ensure that service agents can always provide up-to-date and accurate information.

Classic process

Previously, the training required extensive preparation by the trainers, who had to work out relevant scenarios manually. This involved the development of customer dialogs based on typical requests and problems. This method was not only time-consuming, but also resulted in variable training quality depending on the individual skills and experience of the trainers.

Process with KAI

The trainer instructs KAI: "Develop training dialogs based on the latest changes in our returns policy." KAI analyzes the documents and guidelines provided and generates a realistic customer conversation that covers all relevant aspects of a possible customer service scenario.

Conclusion

Quality In, Quality Out

The introduction of GenAI in USU Knowledge Management is a revolution in customer service. The technology promises exceptional efficiency and quality when supported by a knowledge database. This makes the knowledge database the central linchpin for the success of customer service. The principle of "quality in, quality out" illustrates the crucial importance of high-quality data as the basis for the successful use of GenAI.

In this transformation, where GenAI is redefining customer service, Harald Huber, Managing Director R&D at USU Software AG, reminds us: "The quality of content is not only crucial, it is the foundation on which the future of customer service is built."

At USU, we are committed to excellence, not only by driving the technology forward, but also by ensuring that every piece of information we feed into this system is of the quality required to not only meet, but exceed our customers' expectations. **We are on the cusp of a future where customer service and GenAI go hand in hand – a future that we are excited and committed to shaping.**

Find out more about artificial intelligence and knowledge databases

Webinar: GenAI without a Knowledge Base?

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

Register now

Ultimate Knowledge Management Provider Comparison

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

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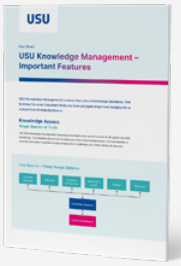

USU Knowledge Management – Important Features

Learn about the core knowledge management functions for comparing software makers.

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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Knowledge Management