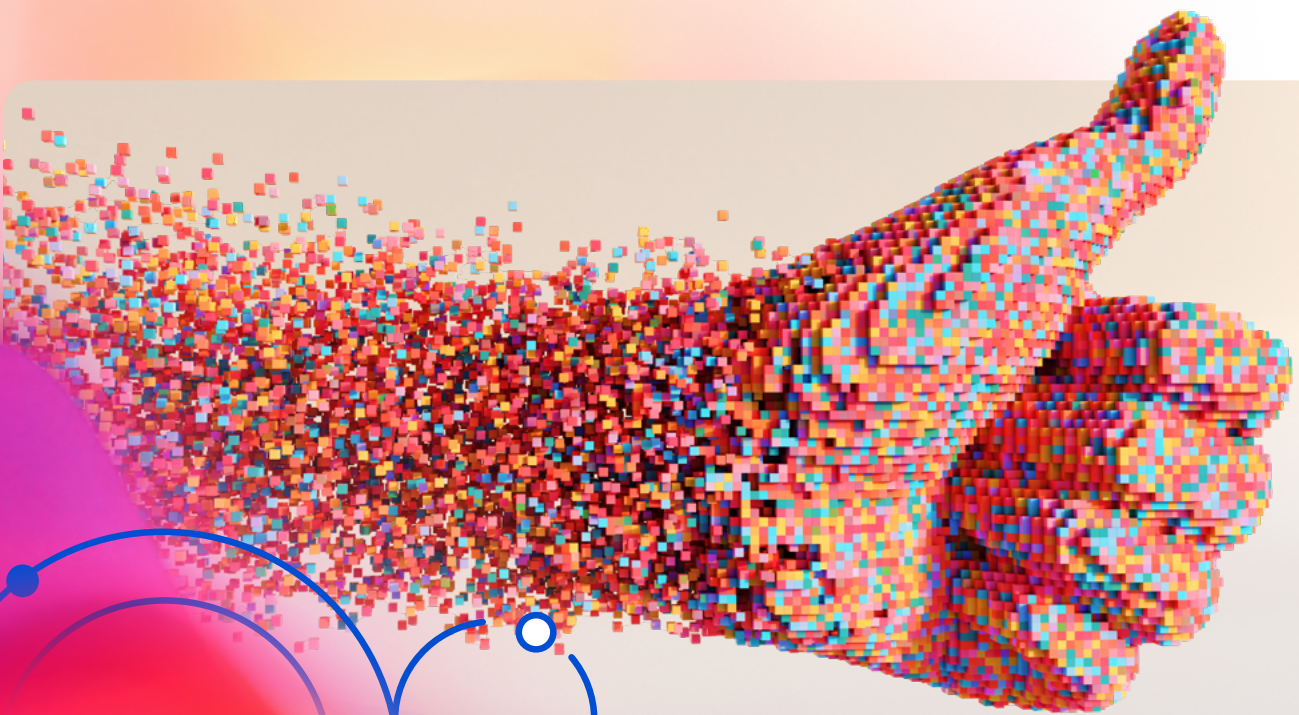


Case Study**Generative AI in Publishing:
HJR Optimises Product Offering with
Customised Question-Answer System
"rejm eLine Smart Assist"**

The Hühthig Jehle Rehm (HJR) publishing group is a legal specialist publisher for the public administration target group and is part of the specialist information division of the Süddeutsche Verlag of the Südwestdeutsche Medienholding (SWMH).

The focus of the publisher's offerings lies in the areas of labour and wage law, civil service law, equal rights law, budget law, wage tax law, administrative law, building law, and procurement.

HJR offers specialist information products in all media forms. These include more than 125 online commentaries on the digital product platform rehm eLine, loose-leaf works and books, as well as webinars and e-learning. The offers are aimed at specialists and executives in public administration.

The Challenge

In order to best serve customers and expand its own product range, HJR decided to enhance its online commentaries with a customised question and answer system „rehm eLine Smart Assist“. The goal of the project was to offer even better support in the search for solutions to complex legal issues. The answers should be extracted and generated exclusively from the current, legally secure content offered digitally by HJR. It was crucial that it was always noted from which sources the answers were each generated.

This was a completely new approach for the publisher. Until now, HJR had offered its customers a conventional, keyword-based term search. The sometimes long hit lists must be sifted through by the customers themselves for the individual, relevant text documents. With the new question-answer system „rehm eLine Smart Assist“, users are now able to ask complete questions and receive answers only from relevant text passages, rephrased with the help of generative AI, including the citation of the original sources. A huge time saving when researching legal specialist information!

For the conception and implementation, HJR decided on the AI specialist Retresco, which has already realised more than 250 successful AI projects.



The Solution

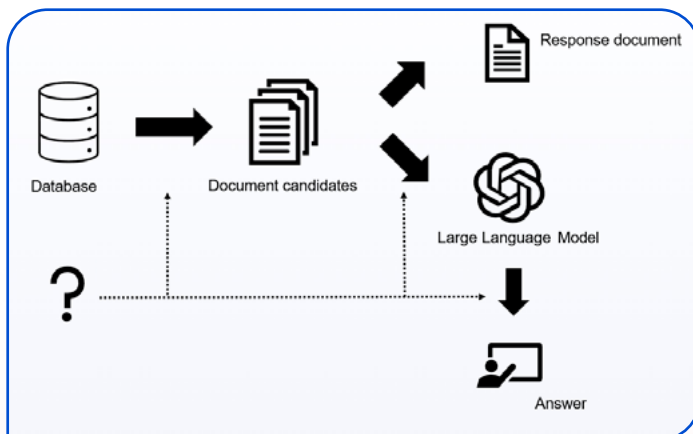
At the start of the project, a joint [AI workshop](#) was held to define the project frame, followed by a proof-of-concept to check the feasibility of the idea.

This project was not only envisioned as a pure product, but rather an all-encompassing AI solution which included scaling possibilities, self-service operation, process optimisation by using AI (AI Operations), and the development of a dashboard. A close exchange with the publisher was as natural as it was crucial for the right steps in the development of the question-answer system. In particular, the regularly obtained feedback from the publisher's legal specialists contributed to a good assessment of the chances of realisation for the project and was essential to the AI team at Retresco to ensure the functional development of the system.

This approach proved to be successful in the proof-of-concept phase, after which Retresco developed a „Minimal Viable Product“ (MVP) in a second project phase. At this time, the first customers of the publisher were also involved to test product understanding and intuitive operability.

The Q&A system developed by Retresco is based on two central technologies:

1. A combination of keyword-based and neural search is used to search for relevant content in the publisher's publications. This method helps to extract suitable information from a database consisting of preprocessed and indexed HJR works. A neural search has the ability to mathematically capture the meaning of words, expressions, and sentences. This is particularly useful for finding hits with similar meaning but different wording, such as paraphrases. In contrast, the keyword-based search is based on a match with the search terms, whereby relevant documents are mainly found through textual match.
2. On the other hand, the Q&A system is connected to a large language model (LLM) to phrase natural language answers based on the documents found. We decided on using GPT-4 from OpenAI, one of the largest providers in the field of generative AI. GPT-4 is a high-performance LLM, able to process large amounts of text as input and – instructed based on a domain-specific prompt – to present the legal information from the digital publisher's content to the users' original questions. The ability of GPT-4 to draw conclusions and argue, as numerous benchmark tests on the model show, is particularly important. In addition, the automatically generated answers are stylistically phrased as if by an expert.



The Result

The project resulted in a customised solution that accepts complete questions or even briefly formulated issues. The text-based and neural search algorithms determine the text passages from the publisher's products that are relevant for answering the question. Only this content is then received by the language model, which constructs an answer from it and enriches it with the source references.

rehm eLine Smart Assist is accessible via a clear, easy-to-use web interface. Customers have the option to rate the answer to their entered question. This obtained feedback is used for further development. Likewise, all questions, generated answers, and cited sources are recorded in a report and used for ongoing content quality assurance and optimisation.

HJR has been starting with the first AI-supported products from the areas of budget and wage tax law since December of last year. Our forecast is that this kind of assistance system will establish itself as a key service for HJR. The way customers search for information is going to fundamentally change, and we expect that in the future they will only search for information in this way. In this context, the question-answer system is to be made usable for large parts of the product portfolio this year.

"With rehm eLine Smart Assist we use the current possibilities of generative AI specifically so that our customers can access complex legal matters more easily and quickly. The great advantage is the combination of natural question formulation, no need to sift through extensive hit lists, and a summarising answer as a result. In addition, the claim to legally secure information does not have to be abandoned because the answers are based exclusively on the well-founded, current content of the publisher. Overall, we are very close to the needs of our users and change the way information is found in their favour."



Christine Fuß, Member of the Management Board / Head of E-Business Publishing Group Hühlig Jehle Rehm GmbH (HJR)

Schedule a free consultation and demo with us today

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