Artificial intelligence, sovereignty included

amberSearch uses an LLM serving service to create a package for companies with sensitive data

Reference project:

😋 amber Search

"With the Open Telekom Cloud and the LLM serving service from the AI Foundation product family, we've found an elegant answer to the strict requirements our customers face – especially in regulated industries – about data sovereignty when using our AI services."

Bastian Maiworm, Co-founder, amber Tech GmbH

"Just where did I put that information I really need right now?" That's a typical everyday situation for many office workers. Searching for enterprise information robs them of nearly a halfhour of working time on an average – every day. In such scenarios, artificial intelligence (AI) can truly contribute to higher employee productivity.

This is where amber Tech GmbH comes in, with its amberSearch service. "It's our mission to break up the status quo of outdated B2B software solutions and give our customers the added value of ultramodern AI and an intuitive user experience in our enterprise search products," explains Philipp Reißel, co-founder and CEO of the AI specialist, which is headquartered in Aachen, Germany. amberSearch makes AI accessible even for companies that don't have giant budgets or immense IT resources. A 30-person team at the company is now working on making internal information accessible quickly and easily. "We offer out-of-the-box solutions that are fast and easy to roll out, but still generate major added value for companies," adds CRO (chief revenue officer) Bastian Maiworm.

The business concept of using AI for enterprise search – searching within a company's internal resources – is winning people over: The name of the service has become synonymous with the company's name. The AI provider has built a large customer base through various industries and different company sizes. Its customers include large companies such as Schüßler-Plan, Zentis, DB Regio, and Landmarken AG, as well as subject matter experts (SMEs) in the mechanical engineering, biotech, and financial fields. Pharmaceuticals and financial companies face stringent compliance and security requirements; such companies are very careful to make sure that their internal data remains internal. The key phrase here is "data sovereignty".



At a glance

- amberSearch, the leading AI-based enterprise search service
- Cloud foundation for the business model
- Need to satisfy customers' demands for data sovereignty
- Cover peak loads
- Provide amberSearch from the Open Telekom Cloud
- Cloud bursting via the LLM serving service to mitigate peak loads
- Serves data sovereignty demands from sensitive customers in regulated industries
- · Guaranteed high-quality AI services
- No fixed costs, needs-based usage
- Selection of different LLMs for enhancing the service
- Access to Telekom's large partner/customer network
- The Open Telekom Cloud is a trusted European cloud with ready-to-use LLMs
- T-Systems stands for data protection-compliant, secure, trustworthy AI

T Systems

Reference in detail

Customer pain points

"Setting up our own infrastructure management and hosting was out of the question – we wanted to concentrate on our customer projects and the evolution of our AI solutions, and avoid unnecessary fixed costs," says Maiworm. With this in mind, amber Tech quickly decided to go with the cloud. "The Open Telekom Cloud is a reliable platform that gives us the freedom to run our business. It scales with us and saves us from having to procure and run our own resources." This also includes demands for GPU resources, to train and run their AI services. At the same time, however, the company is facing increased demands for data sovereignty: AI users, particularly financial firms, want to ensure that amberSearch has no way to access their data, even theoretically.

😳 How T-Systems solved it

"The Open Telekom Cloud gives us a simple, elegant solution to this as well," explains Maiworm. In 2024, Deutsche Telekom launched the LLM serving services in the AI Foundation product family, a pool of ready-to-use large language models (LLMs) and embedding models that can be integrated seamlessly with customer AI applications through an API key. In this approach, leading open-source models from Meta or Mistral are hosted in the Open Telekom Cloud, while closed-source models from OpenAI, Google, or Anthropic are provided through third-party platforms. Each customer manages their API keys in a portal, where users are also administered and token usage can be displayed. "This is very convenient for users of the Open Telekom Cloud like ourselves. We can use these services as burst capacity through our own installation," says Maiworm. In other words: Normally, amberSearch serves customers from within its own installation. In response to specific inquiries or high loads, this installation is extended seamlessly through the Open Telekom Cloud – and not only at the level of simple infrastructure resources (laaS). When can this become necessary?

To understand, remember that amberSearch consists of two components. The original component is the model for searching and rating enterprise information, developed by amber Tech. The second part acts as the user interface: An LLM processes the queries and formulates an answer from the search results.

Maiworm states, "The LLM serving service from Deutsche Telekom gives us access to the LLM pool, which is staged directly in the Open Telekom Cloud. When our customers have increased demands for security, they get the corresponding LLM services directly from the Open Telekom Cloud – with which they have already concluded an agreement for commissioned data processing. As a result, even amberSearch has no theoretical way to access the data." This means amberSearch users can satisfy even the highest requirements for data sovereignty.

♂ Business impact

amberSearch is an example of a perfect interaction between cloud computing and AI. The company is building and developing its AI business model with the LLM serving service based on the Open Telekom Cloud, fully scalable and with adaptive costs. The Open Telekom Cloud also delivers another factor: "The LLM serving service means we can also meet our customers' demands for high levels of security and sovereignty for their sensitive data." says Maiworm. In addition, amber Tech has the possibility of experimenting with different LLMs, to ensure that their AI services are always of high quality. Last but not the least, amberSearch benefits – beyond the cloud and use-based LLMs – from Telekom's customer and partner network.

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