



Deutsche Telekom Enhances Internal IT Support with Rasa CALM

Overview

“Since the chatbot based on Rasa CALM can process around 50% of service desk inquiries independently, we reduced the need for human agents by approximately 30%. Thanks to the excellent backend integration capabilities of the Rasa solution, we quickly implemented the chatbot's self-service features.”

Roland Csibi

Service Hub Owner -
User Support Service Hub,
Deutsche Telekom

[Deutsche Telekom](#), a global leader in telecommunications, redefined its internal IT support by implementing its next-level chatbot. Made for Deutsche Telekom's internal teams, the chatbot addresses workplace IT issues, offering employees a faster and more effective alternative to traditional phone hotlines. With **bilingual support** in German and English, the chatbot provides **24/7 assistance**, delivering immediate resolutions to basic queries while escalating complex cases to human agents when needed.

The backbone of this transformation is Rasa's [CALM \(Conversational AI with Language Models\) framework](#). This advanced conversational AI approach combines the flexibility and fluency of large language models (LLMs) with the precision and control of structured business logic. CALM allowed Deutsche Telekom to deliver a scalable, secure, and user-centered digital assistant that addresses technical and employee needs.

Challenge

Deutsche Telekom faced significant challenges in modernizing its internal IT support system. Routine inquiries overwhelmed the phone hotline, diverting resources from addressing complex issues. Legacy systems lacked the scalability and flexibility required to support a rapidly evolving workforce, while traditional NLU-based methods demanded substantial manual effort to maintain intents and entities.

Additionally, supporting German and English-speaking employees highlighted the need for a strong multilingual solution to deliver consistent experiences across languages. The chatbot's limited ability to integrate with backend systems hindered its potential to automate workflows and provide personalized, efficient support.

“Rasa CALM is a product that helps you build chatbots with complex dialogue structures and integrated backend actions easily and quickly, making it more advanced than RAG-based chatbot solutions.”

Slavomir Lihan, Value Stream Lead, Deutsche Telekom

Solution

24/7

bilingual support:
German & English

Integrated RAG
solution for precise
query handling

Deutsche Telekom partnered with Rasa to develop an advanced conversational AI chatbot solution powered by **CALM** to meet the organization's unique IT support needs.

[Rasa Studio](#) empowered non-technical teams, such as IT service desk subject matter experts, to design and refine intricate conversational flows, enabling faster iteration and reducing the reliance on technical staff for every update. The chatbot accessed user-specific data by integrating Rasa's action server with Deutsche Telekom's internal REST API gateway, enabling efficient interactions.

The solution incorporated Deutsche Telekom's Neural Information Retrieval (**NIR**) engine with a retrieval-augmented generation (**RAG**) approach, allowing the chatbot to deliver precise, contextually relevant responses to *"How-Do-I"* inquiries.

The chatbot also introduced proactive support features, such as opening incident tickets, involving human agents in active chat discussions for unresolved issues, and operating on personal devices without requiring internet access.

CALM's modular architecture allowed continuous refinement, ensuring the solution adapted to real-world scenarios while maintaining robust performance and reliability.

Results

50%

of inquiries resolved
autonomously

30%

reduction in
agent workload

Rasa **CALM** transformed Deutsche Telekom's approach to IT support, delivering measurable improvements across multiple areas.

The chatbot resolved **50%** of inquiries autonomously, reducing agent workloads by **30%** and significantly lowering personnel costs. Employees benefited from immediate responses to routine queries, avoiding hotline wait times and accelerating resolution speeds. Its multilingual capabilities ensured consistent and effective communication in both German and English, enhancing accessibility for diverse employees.

Proactive support features further streamlined workflows, enabling the chatbot to address issues on personal devices. By shifting conversational design responsibilities to domain experts using Rasa Studio, developers and data scientists concentrated on strategic projects. The chatbot is widely used across the company, assisting 10K+ employees whenever they encounter IT and workplace-related issues.

Deutsche Telekom's implementation of Rasa **CALM** redefined its IT support strategy. It delivered scalable, efficient, and multilingual conversational AI that elevated the employee experience across the organization.

Streamlined
dialogue creation
with Rasa Studio

Accessible via
personal devices

Conclusion

Deutsche Telekom's CSD Next Level Chatbot highlights how **CALM** simplifies and enhances internal IT support. By integrating advanced LLM capabilities with structured workflows, Deutsche Telekom created a scalable, efficient conversational AI solution for employee needs.

Looking ahead, Telekom plans to enhance the chatbot's dialogue quality, expand its reach to additional regions, and fine-tune custom language models to support more advanced use cases. Telekom has set a new benchmark for internal IT support with Rasa, proving that innovation, efficiency, and user-centric design coexist in enterprise AI solutions.

Want to get these same results for your business? [Contact us today to see how easy it is to get started.](#)