SWISSCOM · CUSTOMER STORY

Swisscom reduces operational costs by 50% with Rasa



TELECOMMUNICATIONS · ITTIGEN / WORBLAUFEN, SWITZERLAND · ~19,887 EMPLOYEES

50%
Cost reduction in operational expenses

Doubled
Automation in 20 weeks

1.6×
Faster development of conversation flows

Key takeaways

Doubled automation

Doubled automation in 20 weeks: Swisscom rebuilt their agent Sam using Rasa's CALM framework, going from prototype to production in just 20 weeks and doubling their automation rates.

50% lower costs

50% cost reduction with better experience: By optimizing LLM usage, Swisscom cut operational costs in half while dramatically improving customer satisfaction (substantial NPS increase).

Faster development

Zero-shot capabilities eliminated manual training: Sam can now handle diverse queries without extensive training thanks to zero-shot intent recognition, making development 1.6× faster.

Natural conversations

From static scripts to dynamic conversations: Sam evolved from rigid intent-based responses to natural, multi-turn conversations that handle follow-up questions and feel genuinely engaging to customers.

Swisscom, a leader in Swiss telecommunications, wanted to revolutionize its digital customer service with smarter, faster, and more scalable solutions. Their AI agent, Sam, initially launched in 2018, was functional but limited in terms of scaling. With rising customer expectations and rapid technological advancements, Swisscom needed to push the boundaries of conversational AI.

Key challenges

The telecommunications giant faced clear obstacles as it set out to upgrade its AI-driven customer service. Sam relied on intent-based models that automated only a low two-digit number of customer interactions, leaving significant gaps in service. Customers often found interactions static and impersonal, reducing satisfaction. Expanding Sam's functionality required time-consuming manual updates, slowing progress. As conversational AI advanced, Swisscom needed to bridge traditional systems with modern, LLM-powered solutions.

Upgrading its customer service

"We aimed to create a more natural and human-like chatbot while still allowing handling complex interactions efficiently and according to business processes," said Rolf Neukom, Program Manager AI Service for B2C at Swisscom. The company aimed to create a smarter assistant capable of handling diverse queries, improving user satisfaction, and scaling seamlessly across channels.

In 2023, Swisscom partnered with Rasa to reimagine Sam as a dynamic AI assistant powered by cutting-edge generative AI technologies. Over the next year, Swisscom and Rasa worked together to launch a new version of Sam, a state-of-the-art conversational assistant that improved automation and elevated customer experiences.

Sam meets the CALM framework

Swisscom and Rasa joined forces to rebuild Sam using Rasa's CALM framework, blending AI's flexibility with reliability. Their approach focused on delivering faster, more personalized customer support. Using Rasa's CALM framework, Swisscom integrated LLMs for natural, human-like dialogue. New features like zero-shot intent recognition allowed Sam to handle diverse queries without extensive training, improving automation rates. These integrations enabled the agent to access real-time customer information and respond more effectively.

The development process itself became remarkably efficient. Swisscom prototyped and deployed the first version of the new LLM-based Sam to production within 20 weeks by using Rasa's tools to quickly test and refine features. Swisscom set clear goals, including response time and per-session cost, while real-time monitoring allowed them to track key performance indicators and continuously improve Sam's performance.

Swisscom's efforts produced remarkable results, redefining the agent's capabilities. Writing conversation flows and validation became 1.6× faster. Automation rates doubled, with Sam resolving a wider range of queries without human intervention. Enhanced intent recognition enabled faster and more accurate responses, improving efficiency.

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Rolf Neukom

Program Manager AI Service for B2C, Swisscom

More fluid, personalized interactions

Customer satisfaction transformed dramatically. Customers experienced more fluid, personalized interactions, leading to a substantial increase in NPS. Sam's ability to handle follow-up questions and multi-turn conversations created a more engaging experience. Optimizing LLM usage reduced operational costs by 50%, while automation freed human agents to focus on more complex tasks. Faster deployment cycles allowed Swisscom to adapt quickly to customer needs and business priorities.

The modular architecture provided the flexibility to expand Sam's functionality to voice channels and additional use cases, creating a future-ready design. "Rasa was the perfect partner to bring our vision to life," reflected Neukom, as Swisscom successfully transformed their customer service from limited automation to a sophisticated, scalable AI solution that redefined customer experiences.

About Rasa

Rasa simplifies building complex conversational AI by extending LLMs with reliable business logic. Our platform enables enterprises to build sophisticated AI assistants that handle millions of interactions securely—giving you complete control to scale automation. Trusted by Fortune 500 companies, Rasa ensures data privacy, security, and scalability for enterprises. Rasa is privately held, with funding from Accel, Andreessen Horowitz, and Basis Set Ventures.

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