



Swisscom Reduces Operational Costs by 50% With Rasa

50%

Cost reduction in operational expenses

Doubled

Automation in 20 weeks

1.6x

faster development of conversation flows

INDUSTRY
Telecommunications

LOCATION
Ittigen / Worblaufen,
Switzerland

EMPLOYEES
~ 19,887

REVENUE
CHF 11,036 MILLION

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 Takeaways

- **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% cost reduction with better experience:** By optimizing LLM usage, Swisscom cut operational costs in half while dramatically improving customer satisfaction (substantial NPS increase).
- **Zero-shot capabilities eliminated manual training:** Sam can now handle diverse queries without extensive training thanks to zero-shot intent recognition, making development 1.6x faster.
- **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.

Upgrading its customer service

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.

"We aimed to create a more natural and human-like chatbot while still allowing handling complex interactions efficiently and according to business processes."

ROLF NEUKOM
Program Manager AI Service
for B2C at Swisscom

Key Challenges

Limited capabilities

Fragmented experiences

Scalability issues

"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 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 1.6x 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.

"Rasa was the perfect partner to bring our vision to life."

ROLF NEUKOM
Program Manager AI Service
for B2C at Swisscom

Key Results

Conversation flows and validation 1.6x faster

Reduced operational costs by 50%

Automation rates doubled

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.