



Case Study

# Swisscom and Rasa: Transforming Customer Support with Advanced AI

*"We aimed to create a more natural and human-like chatbot while still allowing handling complex interactions efficiently and according to business processes. Rasa was the perfect partner to bring our vision to life."*

Rolf Neukom

Program Manager AI Service  
for B2C at Swisscom

**2x**

automation rate

**50%**

faster to production

Built for  
complex interaction

## Overview

Swisscom, a leader in Swiss telecommunications, wanted to revolutionize its digital customer service with smarter, faster, and more scalable solutions. Their chatbot, 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.

*"We aimed to create a more natural and human-like chatbot while still allowing handling complex interactions efficiently and according to business processes. Rasa was the perfect partner to bring our vision to life",* said **Rolf Neukom**, **Program Manager AI Service for B2C at Swisscom**.

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.

## Challenge

Swisscom faced clear obstacles as it set out to upgrade its AI-driven customer service:

- **Limited capabilities:** Sam relied on intent-based models that automated only a low two-digit number of customer interactions, leaving significant gaps in service.
- **Fragmented experiences:** Customers often found interactions static and impersonal, reducing satisfaction.
- **Scalability issues:** Expanding Sam's functionality required time-consuming manual updates, slowing progress.
- **Evolving expectations:** As conversational AI advanced, Swisscom needed to bridge traditional systems with modern, LLM-powered solutions.

Swisscom aimed to create a smarter assistant capable of handling diverse queries, improving user satisfaction, and scaling seamlessly across channels.

Deployed in

**20** weeks

**100+**

tasks automated

Used by millions  
of customers

*"The flexibility of Rasa's tools and Swisscom's drive for innovation allowed us to push the boundaries of what conversational AI can achieve. Sam now meets and exceeds customer expectations."*

Arun Sittampalam

Director of Product Management  
Data, Analytics & AI at Swisscom

## Solution

Swisscom and Rasa joined forces to rebuild Sam using Rasa's **CALM** (Conversational AI with Language Models) framework, blending AI's flexibility with reliability. Their approach focused on delivering faster, more personalized customer support.

### Smarter conversations:

- 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.

### Seamless integration:

- These integrations enabled the chatbot to access real-time customer information and respond more effectively.

### Efficient development:

- 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.

### Proactive performance tracking:

- Swisscom set clear goals, including response time and a per-session cost.
- Real-time monitoring allowed Swisscom to track key performance indicators (KPIs) and continuously improve Sam's performance.
- Number of interactions
- Automation Rate: How many customer requests can be solved without a transfer to a human
- Solution Rate: Customer explicitly states the solution was helpful
- Net Promoter Score (NPS)

## Results

Swisscom's efforts produced remarkable results, redefining the chatbot's capabilities.

### Time to value:

- Writing conversation flows and validation became 1.6x faster.

### Higher automation:

- 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.

### Improved customer satisfaction:

- 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.

### Cost and time savings:

- 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.

### Future-ready design:

- The modular architecture provided the flexibility to expand Sam's functionality to voice channels and additional use cases.

Voice-ready architecture

Personalized  
responses at scale

Multilingual capabilities  
in **3** languages

## Future Plans

Building on Sam's success, Swisscom plans to expand and refine its conversational AI capabilities:

- **Voice integration:** Swisscom aims to bring Sam to voice channels, enabling conversational self-service for common customer queries.
- **Greater personalization:** By analyzing user data, Sam will deliver increasingly personalized responses, improving the relevance of each interaction.
- **Continuous evolution:** Regular performance reviews and feedback will guide updates, keeping Sam aligned with customer expectations and technological advancements.

Swisscom anticipates almost all customer interactions will at least partially involve AI by 2030, providing faster, more personalized support while significantly reducing reliance on human agents.

## Conclusion

Swisscom's collaboration with Rasa made its vision for smarter customer service a reality. By transforming Sam into a cutting-edge conversational assistant, Swisscom improved efficiency, elevated customer satisfaction, and built a scalable AI foundation for the future.

This success shows the power of combining innovative AI technology with a clear strategy. Swisscom's journey with Rasa demonstrates how businesses can use conversational AI to stay ahead in an increasingly digital world.

---

[rasa.com](https://rasa.com)  
[info@rasa.com](mailto:info@rasa.com)

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.