



Business challenge

Sopra Steria's customers needed an AI chatbot solution. Finding an intelligent virtual assistant that went beyond the simple chatbot hype to actually solving customer issues was critical.

Transformation

As a European leader in digital transformation, IBM Business Partner Sopra Steria wanted to deliver the best AI virtual assistant for help desk inquiries. After evaluating 15 solutions, Sopra Steria chose IBM® Watson® Assistant technology and enhanced it to create an intuitive AI platform for rapid deployment across a range of industries.

Results

Expands customer support hours

to provide around-the-clock service without adding customer service agents

Processes 80% of customer inquiries

in one big production environment

Frees customer service representatives

to focus on complex, nuanced and high-value customer issues

Sopra Steria

Delivers intelligent, turnkey virtual assistant powered by IBM Watson technology

IBM Business Partner [Sopra Steria](#) is a European leader in consulting, digital services and software development. It helps its clients to benefit from the tangible and sustainable impact of their digital transformation. By providing end-to-end solutions to make large companies and organizations more competitive, Sopra Steria combines in-depth knowledge of a broad range of business sectors and innovative technologies with a fully collaborative approach. Headquartered in Paris, the Group employs 45,000 people and operates in 25 countries. Its 2018 revenue was EUR 1 billion.

“We conducted a thorough evaluation of 15 AI virtual assistant solutions and found Watson Assistant to be the best and most accurate.”

—Patrick Meyer, Technical Director, Artificial Intelligence Senior Architect and IBM Champion, Sopra Steria.

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Search for the right AI platform

As a leading digital transformation service provider, Sopra Steria is committed to making the best use of advanced technologies to resolve its customers' most complex and critical business challenges. This includes integrating AI, blockchain, Internet of Things (IoT) and cloud to add intelligence to legacy systems and create more agile and adaptable business processes. In 2015, Sopra Steria was the first IT service company in Europe to join the IBM Watson Ecosystem program, and the company frequently embeds AI in customer solutions.

Today, Sopra Steria works with customers in a variety of industries who want to deploy chatbot solutions to automate responses to common inquiries. Additionally, the company operates level 1 help desk support centers providing basic support and troubleshooting, and it views virtual assistance as the key to the future success of these centers.

“Actually, we wanted more than a chatbot,” explains Patrick Meyer, Technical Director, Artificial Intelligence Senior Architect and IBM Champion, Sopra Steria. “Our clients need an intelligent virtual assistant that can go beyond answering questions to actually solving customer issues.”

Sopra Steria looked for an intelligent virtual assistant that could build conversational interfaces into any application, device or channel, and that could run on any cloud. Additional requirements included the ability to provide around-the-clock assistance, increase the productivity of customer support teams and reduce operating costs. Security and the ability to manage complex dialogs were also key considerations.

After conducting a thorough evaluation of 15 AI virtual assistant solutions, Sopra Steria chose the Watson Assistant offering. “We created a training set of more than 2,000 sentences commonly used in chatbot inquiries,” notes Meyer. “Then we tested the ability of the 15 solutions to correctly recognize and classify those sentences. Watson Assistant was the most accurate and it also met the rest of our requirements.”

Enhancing the solution for rapid deployment

Sopra Steria chose Watson Assistant, IBM Watson Language Translator, IBM Watson Natural Language Understanding and IBM Watson Text to Speech solutions as the AI foundation for its intelligent virtual assistant accelerator engine. Most chatbots try to mimic human interactions, which can frustrate

users when a misunderstanding arises. Watson Assistant technology is trusted by thousands of businesses because it knows when to provide an answer, when to ask for clarification and when to direct the question to a human agent. The Watson Language Translator solution helps to translate foreign languages, while the Watson Natural Language Understanding offering supports the extraction of complex information from the query. Watson Text to Speech technology works with the Watson Assistant solution by converting written text into natural-sounding audio in a variety of languages and tones.

To accelerate deployment across a range of customer industries and environments, Sopra Steria enhanced the Watson Assistant technology. “Our solution can be deployed much faster than Watson Assistant or any other AI chatbot or virtual assistant on the market,” comments Meyer. “We created a very intuitive graphical user interface, so once we set up the system and do some training, users can start creating dialogs immediately. When potential clients see it for the first time, they get very excited because it’s so simple to use.”

Sopra Steria also added an orchestrator and a front-end interface to manage dialogs, established connectivity to external systems and brought in save and restore features and machine translation. “Most of our users speak French and English,

so the same dialog has to be available in both languages,” says Meyer. “And we have special requests. For example, tourism and police departments need us to support Chinese, Japanese, Russian, Korean, English and French to accommodate visitors. So we added a translation engine to the system that translates inquiries into English to be processed by Watson Assistant and then translates the responses back into the user’s native language.”

The intelligent virtual assistant accelerator engine runs on IBM Cloud™ and can also run on premises at customer locations. “Locating the solution on premises allows us to easily connect the dialogs with the client’s internal systems like billing, human resources and information management. Even if the solution is completely on premises, it can be accessed anywhere because it’s multicloud, both private and public,” adds Meyer.

Sopra Steria uses Red Hat OpenShift technology to build and deploy applications for the company’s employees. This leading multicloud Kubernetes platform offers automated installation, upgrades and lifecycle management throughout the container stack on any cloud. The Red Hat OpenShift platform empowers developers by offering innovative tools and applications along with sandbox environments to experiment and test new concepts.

And the solution's automated provisioning, management and scaling of applications free Sopra Steria's developers to focus on writing code for groundbreaking solutions like the company's virtual assistant.

To support the instances of its intelligent virtual assistant solution and other managed services, Sopra Steria can use Red Hat OpenShift technology to provide automated, around-the-clock assistance, incident resolution, rapid deployment and enterprise-grade, security-rich features.

Improving customer service throughout Europe

Sopra Steria sells its end-to-end, turnkey and intelligent virtual assistant solution to customers throughout Europe. The first implementation supports the central digital billing portal for purchases made by the French government and other public authorities. During the first month, the solution handled more than 75,000 conversations, which produced 340,000 requests to the Watson Assistant solution.

Benefits include around-the-clock support for customer inquiries and reduced operating costs.

Today, the billing portal solution processes 80 percent of inquiries through to resolution. Further enhancements will script and model as many incident types as possible. The system will offer more and more self-care functionalities, which will continue to reduce the number of new support tickets that go to customer service representatives.

"The billing portal supports 600 scenarios, and 100 of them are complex. We started by supporting 450,000 users, and now we support more than one and a half million. In 2020, the system will grow to support three million users without adding more customer service agents," comments Meyer.

Sopra Steria took advantage of the developer-friendly tools available with Red Hat OpenShift and Watson Assistant technologies to tailor its solution for a range of industries, including insurance, retail and government. Today Sopra Steria's intelligent virtual assistant is in

production at 10 customer sites. The company also uses it internally for human resources and sales proposal development applications.

Choosing Watson Assistant technology to power its intelligent virtual assistant accelerator engine has enabled Sopra Steria to deliver industry-leading AI technology to its customers. "Our customers need cloud-based AI solutions that can handle complex scenarios and are easy-to-use and deploy," concludes Meyer. "We're exploring more enhancements such as IBM Watson Real-Time Personalization to help deliver the right content to each visitor. We're looking forward to the future of Watson and Red Hat OpenShift and how we can take advantage of them to help our clients take their businesses to the next level."

"This is just the beginning. Many companies are looking for an AI virtual assistant that really works and we have the best solution powered by Watson Assistant. When people see it, they are amazed at how easy it is to use and they get the value of it right away. It's just a matter of letting companies know that our solution is available and ready to be deployed in their environments."

—Patrick Meyer, Technical Director, Artificial Intelligence Senior Architect and IBM Champion, Sopra Steria

Solution components

- IBM® Cloud™
- IBM Watson® Assistant
- IBM Watson Language Translator
- IBM Watson Natural Language Understanding
- IBM Watson Text to Speech
- Red Hat OpenShift

Take the next step

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