





Making service knowledge globally available in multiple languages

Read our case study of fully automated translation of knowledge base articles for Endress+Hauser to discover how using STAR MT technology in the service department helped the company to overcome linguistic obstacles and produce synergy effects.

The company

Endress+Hauser is a global leader in measurement instrumentation, services and solutions for industrial process engineering.

The company delivers process solutions for flow, fill level, pressure and temperature measurement, for analytical measurements as well as measurement registration and digital communication, while also optimising processes in terms of economic efficiency, safety and environmental impact.

Endress+Hauser's customers work in wide-ranging sectors, including chemical sciences, energy and power generation, raw materials, metals and mining, food, life sciences, oil and gas, and water/waste water.

More about Endress+Hauser



The starting point

A global team of technical experts at Endress+Hauser provides in-house assistance as well as support tailored to end customers on a wide range of technical issues. This is where the **Salesforce** Knowledge system comes into action. This acts as a shared platform for the decentralised Support Team, and contains knowledge base articles (KBAs) that are written in the mother tongue of the expert responsible.

Processes and solutions should be documented using the KBAs in order to reduce the work of the Support team and to notably boost efficiency. The objective of the project should be to ensure all Support staff can quickly and efficiently access the specialist knowledge contained in the KBAs, no matter what language they speak.

The concept: A solution based on machine translation (MT), which can automatically translate the KBAs from set source languages into set target languages. The objective of the project, known internally as "Service 4.0": To facilitate seamless communication and provide access to the 5000-plus existing KBAs and the 800 or so new articles added each month, in all the languages required, for up to 600 active contributors and more than 5000 internal and external "read-only" users.

STAR solutions

STAR was tasked with finding potential solutions for Endress+Hauser's ultimate objective. After several selection rounds and a proof of concept, STAR was able to start implementation. Following numerous customer-specific adaptations, the system went live. A few components had to be developed, and processes defined and tested before the fully automated process was ready.

The Salesforce connection to STAR CLM is the result of close collaboration with the Salesforce team and is established via the SF2CLM connector, which packages up the information to be translated in Salesforce and transfers this to downstream systems. A middleware, in the form of a bridge API developed by STAR, then prepares the incoming packages in a COTI-compatible format and passes this on to STAR CLM, which is used to control the MT translation process. Project setup, receipt and delivery of the translation packages are fully automated by means of predefined workflows.

KBA texts are machine-translated using neural MT engines that are trained by STAR specifically for Endress+Hauser. Unlike generic systems that only take their training material from publicly available data sources, Endress+Hauser engines are primarily based on customer-specific materials, resulting in a tone and terminology application that is better adapted for this use case.

Through rounds of feedback with the Endress+Hauser contact partners, the initial quality of the MT engines was established and continually improved through a series of re-training measures and acceptance processes. There are now nine languages available in total, which can be combined with each other however needed. Depending on the language combination, English may be used as what is known as a pivot language in order to increase the translation quality in languages that have fewer resources available.

As soon as the translation is approved in the knowledge base system, a KBA is published in other languages in the background by means of a fully automated process. With a single press of the button, the source text enters the workflow, is translated and then published in the relevant target languages.

Using the performant system, the lead times are reduced to just a few minutes, making the KBAs accessible to Support staff and other users quickly. All formatting, such as paragraphs, links or images, is retained.

The system was initially prepared by STAR on a SaaS basis before later migrating to an on-premise solution at Endress+Hauser. As well as using the system for automated translation of the KBAs, the engines are also available for other subject areas through CLM-based workflows.

STAR in action

STAR Software products:



- STAR CLM
- Transit NXT
- TermStar
- STAR MT Engines

Customer testimonial

Thomas Ziesing, Technical Content & Translation Process Manager Endress+Hauser

"Without STAR CLM, we could not have kept up with the translation volumes in the face of the ever-growing wealth of information to be translated"

Further information

We would be happy to provide you with additional information about our testimonials. Write to us or arrange a meeting.

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