

Interactive Intelligence

Case Study



Overview

This case study demonstrates how an MT-PE workflow can reduce localization costs, and increase project efficiency without compromising language translation quality. The results:

- ➔ Proved viability of MT-PE for Interactive Intelligence help files
- ➔ Demonstrated significant cost savings and improved productivity compared to traditional workflows
- ➔ Ensured quality and consistency
- ➔ Expanded solution to encompass further language sets

The challenge

Interactive Intelligence Inc. is a global provider of unified business communications solutions for contact center automation, enterprise IP telephony, and business process automation. When it came to localization in 2009, the company's focus centered on practical user experiences for their contact center software; on their user interface, audio prompts for interactive voice responses, and reports. Although they recognized that there was a need to localize the help files for their software solutions, this type of content was considered low priority due to budget considerations. Previous attempts to find an agreeable solution to this conundrum had been unsuccessful.

The increasing hype over machine translation (MT) from the localization industry over the past few years caught Interactive Intelligence's attention: Could configuring customized machine translation engines into their existing workflow provide a cost-effective solution for localizing the help files? And could a machine translation and human post-editing (MT-PE) solution deliver the required language quality?



We wanted to have practical experience with MT in order to find out its ability and possibility. Milengo approached with an idea of mutual trials; at that point in time, Milengo wanted to know what MT could provide to their customers, and we as a client hoped to learn about MT in a practical way.

Kazuo Suzuki
Director – Globalization
Interactive Intelligence

It was clear that there were too many unknown variables for Interactive Intelligence to launch straight into deploying MT into their localization operations without a period of testing and evaluation. However, at that time their localization department consisted of two project managers, three localization and six test engineers, and one internationalization test engineer. This meant that it was unfeasible for them to devote much time towards this particular research project considering their existing project commitments. At this point the Director of Globalization at Interactive Intelligence, Kazuo Suzuki, began to look externally for help in gaining the knowledge of how MT could work for them.

The pilot project

Milengo offers companies who fulfill certain criteria a free pilot project as a means of evaluating whether machine translation and post-editing solutions could enhance their localization operations for certain content types. Discussions with Kazuo helped clarify the scope of the project: To evaluate whether MT-PE could provide significant costs-savings and increased production efficiencies for the localization of high volume help files content for Interactive Intelligence software products.

The first part of the pilot would be to demonstrate the language quality of machine translated and post-edited content for German, compared to human translations of the same sample content

- ➔ Interactive Intelligence would provide available translation memories for the customization of the Interactive Intelligence MT engine
- ➔ Milengo would assume responsibility for hosting the engine, its maintenance, performance monitoring and fine-tuning
- ➔ Milengo would source additional relevant bi- and monolingual content to provide wider language coverage for the training corpus
- ➔ Milengo would treat the assembled training corpus to rigorous data cleaning operations in order to optimize the content before engine training
- ➔ Milengo would prepare carefully selected testing and training sets in order to fine-tune the customized engine during training iterations, and to provide industry-standard quality scoring of machine translated content using metrics such as BLEU
- ➔ On completion of the engine training cycle, Milengo would process Interactive Intelligence sample content via the engine and submit for post-editing
- ➔ Once all completed language samples were prepared, Milengo would deliver the following:
 - ➔ Non-MT: Translated, edited, and proofread (TEP) sample.
 - ➔ Non-MT: Translated and proofread (T+P) sample.
 - ➔ Machine translation and light edit sample
 - ➔ Machine translation and full edit sample

These samples would enable Interactive Intelligence to verify whether either of two MT-PE samples could deliver the required language quality expectations, and to precisely compare them against the equivalent human only translations.



From the client point of view, the process to make MT ready was very smooth. Milengo has done most of the part. The actual project itself from my perspective went very smoothly, as smoothly as with a normal translation project.

For the German online help translation project, we were able to make 27% cost-saving and 34% time-saving against the conventional human translation process. We are pretty happy about those numbers. And we expect more savings in the future.

Kazuo Suzuki
Director – Globalization
Interactive Intelligence

Interactive Intelligence had a German linguist examine the samples from Milengo and was able to confirm that the MT and full edit sample would be perfectly acceptable for such customer-facing content.

With this decided, we moved into the second part of the pilot which was to deploy the configured workflow into a typical Interactive Intelligence localization project workflow for help files. The files for localization consisted of HTMs, HHK and HHC files which would then be compiled into a CHM build for Interactive Intelligence customers. This part of the pilot project would identify any areas for improvement for the workflow before it could be deployed for large volume projects, and whether Milengo could comply with the end-to-end requirements for Interactive Intelligence's projects.

Lessons from the pilot phase and full-scale production

There was one key issue for improvement: At the time of the pilot project, there was no watertight method for ensuring that once content had been processed through machine translation systems, the formatting, tags, and links within the content were preserved. Once Interactive Intelligence had reviewed Milengo's delivery, two formatting issues had gone undetected by Milengo's post-editors. It was therefore decided to implement additional QA rounds before delivery to ensure that this issue would never occur again.

Overall, Interactive Intelligence were very satisfied with the results of the pilot and were now prepared to deploy the improved workflow for a large volume project. This involved managing the localization of the latest updates to the CIC help files which amounted to around 185,000 words in total. Thankfully, due to the lessons learned throughout the pilot project process, Milengo was able to deliver good quality localized content, ahead of schedule and most importantly, at significantly reduced costs.

The aftermath

Following the successful completion of the first large scale MT-PE project for German, Milengo has now expanded its MT-PE language set for ININ to include International Spanish, Brazilian Portuguese, Italian, and French. We have localized the help file content for Interactive Intelligence's software products such as Interaction Scriptor Client, Interaction Supervisor, Interaction Dialer Manager, and Interaction Fax Cover into these languages since 2010.

Advancements in machine translation technology since the successful Interactive Intelligence pilot project have also meant that Milengo is now able to offer far more comprehensive and evolved MT-PE solutions. With a tiered pricing structure aimed at long-term cooperation, Interactive Intelligence are now making further savings on their localization projects.

➔ To learn more about Milengo's machine translation services, please contact sales@milengo.com