Using Automated Translation in a Corporate Setting

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Company introduction

Océ Technologies is a manufacturer of copiers, printers, plotters, design & engineering equipment and supplies. It has operating companies in 30 countries and is active in 80 countries. Océ employs 17000 people worldwide; 3000 are based at the head office in Venlo, the Netherlands.

Implementation of automated translation

After prototyping an MT system at R&D to demonstrate its feasibility, a commercial MT-system (Logos) was introduced in 1995 for translation of documentation. The main reason was initially to reduce the increasing translation costs. Additional considerations were quality and shorter release cycles of the product documentation.

The introduction of MT required preparation of terminology, adaption of the use of the English language in the manuals, and a modification of the workflow to incorporate MT. It was especially important to establish a consistent and complete terminology database, a basic requirement for MT.

It was a corporate decision that service documentation was to be translated only in four languages handled by the commercial MT system. User documentation is being translated in an increasing number of languages (currently 10 to 15).

Soon after the MT system started 'production' it was combined with a Translation Memory system (XL8) which was replaced early last year by a TM-system more suited to our needs (Trados Workbench). By now, MT has migrated into automated translation: the combination of MT and TM, two complementary technologies.

Problems encountered

A lot of effort had to be put in the integration between MT and TM, as well as in the integration of MT in the documentation workflow. Although MT and TM come as end-user products, quite some tooling had to be developed at all levels, in order for automated translation to work efficiently.

Once the MT/TM combination started translating, several other problems had to be solved: different document formats, sheer size and numbers of documents, lack of functionality in the MT or TM system and ,of course, network and disk space problems. Synchronised management and distribution of terminology for reference and MT purposes appeared to be a problem as well.

The source text quality of the Technical Service Manuals, written in English by Dutch technicians varied from author to author. In order for the MT system to work efficiently, the source text must be grammatical and must follow certain writing guidelines.

The pre-translation of documentation also required changes in the interaction with translation agencies who had to shift their activity from full translation to edit translation. We had to find a way to monitor the efficiency of this new way of working.

Positive factors

On the other hand, the combination of MT and TM could be employed successfully because of factors such as an existing central documentation department. This made it much easier to influence important issues such as the writing process, document structure and formatting and provided the possibility to adapt existing workflow and methods for the benefit of automated translation.

Result

After almost two years of automated translation, Océ now has achieved effective re-use of translations, and made some progress towards improved quality of both source and translated documentation and a distributable terminology database.

Volume problems caused by the number of FrameMaker files to be translated, was reduced by combining the text into a single large .rtf file that is sent out for translation editing. The files are rebuilt upon return.

If time permits, the source text is corrected, but more often problems are still corrected in translation editing.

Translation requests need to be scheduled to allow for terminology work, review of the source text and consideration of the copy editor's workload.

A number of tools have been developed to automate the translation process as much as possible. They vary from C-programs, shell scripts to Word-macro's and serve to improve integration between different programs, perform format conversions, protect text passages etc.

As a consequence of the growing share of software in our products, the release time has shortened. Nevertheless the scheduling of translations has kept pace.

And last but not least: Océ managed to reduce the cost of external translations by about fifty percent on all documentation handled by MT/TM.

Conclusions

Automated translation by MT and TM can be successfully implemented in a corporate setting under certain conditions.

It was important to start with a manageable and scalable pilot project to establish feasibility.

The translation process must be integrated with the documentation authoring and review process. A central documentation department can serve as a coordinating point for translation. It can issue guidelines, keep a terminology database and ensure proper review.

Considerable technological and linguistical expertise is required in the documentation department.