Easier, faster communication in international teams
Lower translation costs with controlled language checking

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Introduction

In 2008, Konica Minolta introduced controlled English and Japanese into their authoring and editing processes in order to make documentation more consistent. They are using the controlled language checker acrolinx IQ™.

Organization of a multinational company

Konica Minolta is a multinational company that authors technical documentation in Japan, Germany, Australia, and the United States. This documentation is translated into more than 30 different languages. Konica Minolta headquarters are located in Tokyo and coordinate activities across the world, including the translation of documentation that was originally authored in English and Japanese. In Europe, the documentation group oversees translations and modifications for the European market. The baseline for all translation is high-quality English documentation.

This documentation group was the driving force for standardized, understandable communication and information. The Japanese headquarters assumed responsibility for the project and built up a global project team. This team develops target definitions and every regional headquarters adapts and implements these targets.

Worldwide, Konica Minolta documentation is based on a clearly defined style guide and XML and FrameMaker applications. Konica Minolta uses Star Transit for its translation memory as well as external translation agencies. For service information and communication, Konica Minolta relies on its own knowledge management and communication system that is based on Consona and Hummingbird technologies.

The right time to initiate a project

Konica Minolta Service started a project on Natural Language Processing with the following subprojects:

1. Machine translation

2. Summarization

3. Search

4. Automatic Sentence Creation (e.g. FAQ)

In the preparation phase of the first subproject, Konica Minolta struggled with its English content. The quality of the English text was too low and not standardized enough to use it for translation systems. Additionally, after a more in-depth study, we found out that misunderstandings in daily communication stemmed from poor

quality and inconsistency in writing.

We therefore introduced a measurement system for our machine translation system and tried to analyze the cost of the misunderstandings in communication and information.

The cost was too high. There was a burning need to improve the quality of the English documentation and communications.

The impetuses mentioned above and discussions at tekom fairs about controlled language converged at the perfect moment. Two new Natural Language Processing projects were born:

1. Controlled Language

2. Terminology

Increasing efficiency in technical communication and information

The targets for a controlled language application are:

- A communication system for service news had to be quickly implemented for Japanese and required high-quality English

- User documentation in Japanese and English as a base for translation in very good English.

As a next step, Konica Minolta defined the measurements for the project result and the schedule for implementation.

Konica Minolta then realized, however, that the language rules for its special use of languages had to be carefully defined. To find an agreement across the world for a common Konica Minolta English required substantial effort and flexibility on the part of the project team. Extensive knowledge transfer also took place between project members and acrolinx.

acrolinx undertook an initial feasibility study of Konica Minolta guidelines showing that many rules could be implemented using acrolinx software. Some of the rules were already contained in acrolinx style rule sets; others needed to be added. An extensive analysis of Konica Minolta data supported these findings.

Alongside the controlled language project, Konica Minolta started another worldwide project called "terminology". During its discussions about the acrolinx rules, Konica Minolta realized that there was also a drastic need for a well-prepared terminology. In order to standardize usage of English in its documentation and communication, it had to create a terminology based on prohibited and preferred terms.

As a first step in setting up terminology, acrolinx ran a Term Extraction on a large number of documents that identified term candidates. acrolinx aggregated these candidates for the team in Hannover so that they could evaluate inconsistencies in their documents and validate terms.

The Japanese team now became increasingly interested in the project. The English

rules in acrolinx IQ™ were presented in Tokyo and people were impressed. Two factors were important for the further development of the system: support for non-native English and support for Japanese documentation. Like the German group, the Japanese group writes documentation directly in English. However, non-native English can entail different issues for speakers of different native languages. acrolinx identified and supported these issues. Furthermore, in Japan, a substantial amount of documentation is written in Japanese. As a result, acrolinx also had to support Japanese writers.

A coherent process had to be established for providing non-native English support to both the European and Japanese writers. Further, Konica Minolta and acrolinx cooperated to develop linguistic resources and rules for Japanese authoring support.

Testing and training global teams, acceptance across the world

Konica Minolta provided training with acrolinx IQ for its editors and technical specialists and helped them understand the rules. Konica Minolta wanted the software to serve as a daily support tool and personal trainer, not as a rigid supervisor.

The creation and refinement of the rules improved Konica Minolta documentation substantially. On the one hand, the software has helped ensure the high quality of English documentation. On the other, the editors have internalized the rules for English.

Initial project results:

- Konica Minolta was able to reduce translation costs (5-15% higher reuse rate)

- Konica Minolta has a terminology database and can check terminology in different file formats

- Konica Minolta receives positive feedback from the field regarding the quality of its English

Unfinished business:

- The project is ongoing and requires a time commitment

- Konica Minolta does not have experience with a long-term implementation with the software or final results. However, the software has motivated many departments to think more about the quality of their information and communication. This intriguing side effect has contributed to Konica Minolta's success around the world.

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