



Enhancing machine translation quality

Through a combination of expert evaluation, tailored training, and meticulous maintenance of multilingual glossaries, Alpha CRC's MT specialists offer a robust solution to the challenges faced by organizations seeking to implement or improve their machine translation capabilities.

Metrics



10 - 40% improvement of **BLEU Scores**, with particularly notable improvements for Traditional Chinese.

Outcomes



- Significantly **improved** MT output quality
- **Reduced** the need for post-editing
- Generated considerable **cost savings** when creating multilingual assets
- **Improved** client engagement with international customers

Use Case description

Alpha CRC's MT specialists have the expertise to evaluate and score MT engine output and to train MTs in order to improve the evaluation scores.

We help clients maintain and create multilingual glossaries, which are key to MT output quality. We carefully prepare clients' own data obtained from Translation Memory systems and other sources and convert this data into a usable format for training the MT system of choice.

Once the MT has been trained our MT specialists carefully evaluate data. This process is repeated over time to ensure that output continually improves. Training Machine Translation systems systematically significantly reduces the post-editing effort and reduces the cost of creating and maintaining multilingual content.



• Improve and enhance MT output

Challenge



The importance of machine translation is well recognized, to the extent that numerous organizations are implementing their own machine translation systems as part of their internal translation processes.

Efficient translation processes are crucial in supporting global operations and communication in any setting. While machine translation has the potential to significantly reduce translation efforts, this can only be achieved when it is carefully trained and maintained by experienced professionals.

Solution



Alpha CRC's MT specialists can step in to address this challenge. The solution involves a multi-faceted approach:

- 1. Evaluation and scoring:** Alpha CRC's specialists evaluate and score the existing MT engine outputs to establish a baseline for quality and identify areas for improvement.
- 2. Glossary creation and maintenance:** Recognizing the importance of domain-specific terminology, Alpha CRC assists the client in creating and maintaining comprehensive glossaries. This ensures that the MT engines can accurately translate key terms and phrases, maintaining consistency across all translated materials.
- 3. Data preparation:** The client's existing Translation Memory systems and other data sources are meticulously prepared and converted into a format suitable for MT training. This preparation is crucial for leveraging the client's own data to enhance the MT system's learning.
- 4. MT training:** With the prepared data, Alpha CRC's specialists train the client's chosen MT system, tailoring it to better understand and process the client's specific linguistic needs.
- 5. Careful evaluation:** Post-training, the MT outputs are carefully evaluated to assess improvements and determine if further training cycles are necessary.
- 6. Continuous improvement:** The MT training process is designed to be iterative, allowing for continuous refinement of the MT engine over time. This systematic approach ensures ongoing enhancement of the MT output quality.