

KERN GLOBAL+

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Advantage ... through information!



Dear Readers,

Machine translation is taking on an increasingly prominent position in the language services industry. In this newsletter, we will inform you of how you can achieve even better translation results by using a specialist, customer-specific machine translation engine.

On top of that, we'd like to tell you about the advantages of online interpreting, which serves to improve communication in virtual conferences; this is something that has become even more prominent during the coronavirus pandemic.

Learn more about our professional transcription services that can be purely automated in nature and about the awards that we have recently been presented with!

Best regards,

Dr. Thomas Kern
Member of the board

MACHINE TRANSLATION⁺

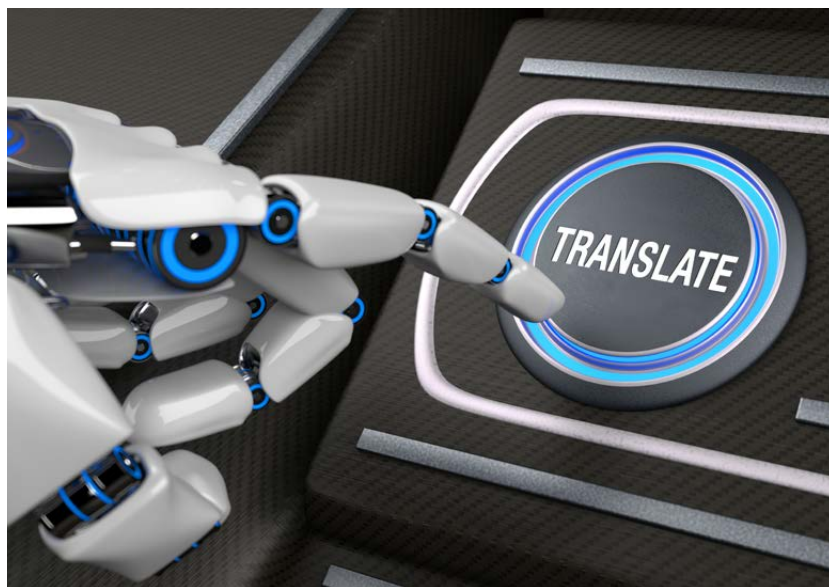
Specialist, customer-specific MT engines for exact translations

Machine translation (MT) is taking on an increasingly prominent position in the language services industry. MT solutions are now so advanced that specially trained MT engines can provide high-quality translation results.

The machine translation solution **MT4client™** that KERN developed itself is based on the latest developments in artificial intelligence (AI) as well as rule-based, statistical and neuronal approaches. The software is tuned to the individual requirements of the customers, meaning that their specific terminology can be taken into account during the translation process. The engines are trained for this - they don't simply swap out terminology, but rather they consider the subject and customer-specific requirements and language style.

Is machine translation the right solution?

The fully automated translation of texts already happens in various areas - for example in social networking, the provision of support texts on the web or the acceleration of internal corporate communication: For short-lived texts such as emails, where a quick response is most important, the use of machine translations can be sufficient. In such cases, simply conveying the meaning is enough. Grammatical and orthographical correctness only plays a minor role.



Conversely, catalogues, product descriptions, instruction manuals and industry-specific texts and documents must have exactly the right content and precisely explain the way the product works. Therefore, such texts require a translation which is correct and exact in terms of both language and content. This is achieved via machine translation and an additional intensive post-editing process.

Which options are there to use MT4client™ in an effective manner?

1) Pure mechanical use:

MT4client™ enables the rapid creation of high-quality translations. This process can be individualised through the use of further language resources (e.g. terminology databases). Since the system is based on neural networks, these can be trained with a range of implicit rules to precisely meet individual requirements. The AI experts of KERN regularly improve the machine translation solution and implement current developments in the area of MT. Furthermore, MT4client™ is adjusted for specific industries and text forms by our AI experts (known as specialised MT).

2) Integration of human translators into the process:

The quality and effectiveness of machine translated texts can be further optimised through post-editing. A human translator with the relevant subject area expertise is responsible for this. The machine translation is seamlessly integrated into the working environment of the translator, so they can concentrate on the most important thing: optimising their texts in the foreign language.

Trainable engines - subject and customer-specific MT engines

KERN is constantly using specialised and customer-specific MT engines to expand MT4client™. With the help of proprietary language data corpora as well as intelligent data filters, the AI experts at KERN can optimise neural networks for the translation of specific text types.

With subject-specific MT, multilingual technical communication is given a modern and powerful technological basis. This allows you to transfer complex, industry-specific texts into the required language with consistency and the appropriate style, as well as with terminological and technical accuracy.

We offer a choice of neural engines in various language combinations for numerous industries and subject areas:

- Agricultural economics
- Mechanical engineering
- Finance
- Business
- Tourism
- IT
- Law
- Life sciences
- Medicine

When does it make sense to use customer-specific MT (Custom MT)?

If you already have substantial translation datasets, and have a high need for translations of a specific text form or domain, specialised MTs are a good option. These are also advantageous with narrowly defined text types and subject areas.

The advantages of Custom MTs at a glance:

- The highest standard of machine translation
- Can be individually fine-tuned
- Can be enhanced with data from KERN if required
- Customers can benefit from them for years to come
- Constant optimisation of the engine
- Coverage of various sectors
- Comprehensive analyses of text characteristics by experts and optimisation of the engine based on these characteristics

Overview of the various MTs:



Generic

- e.g. For general-purpose texts or high error tolerance
- Large number of language combinations



Additional resources

- TMs or glossaries for even more accuracy
- Good for product names, addresses, customer-specific terms



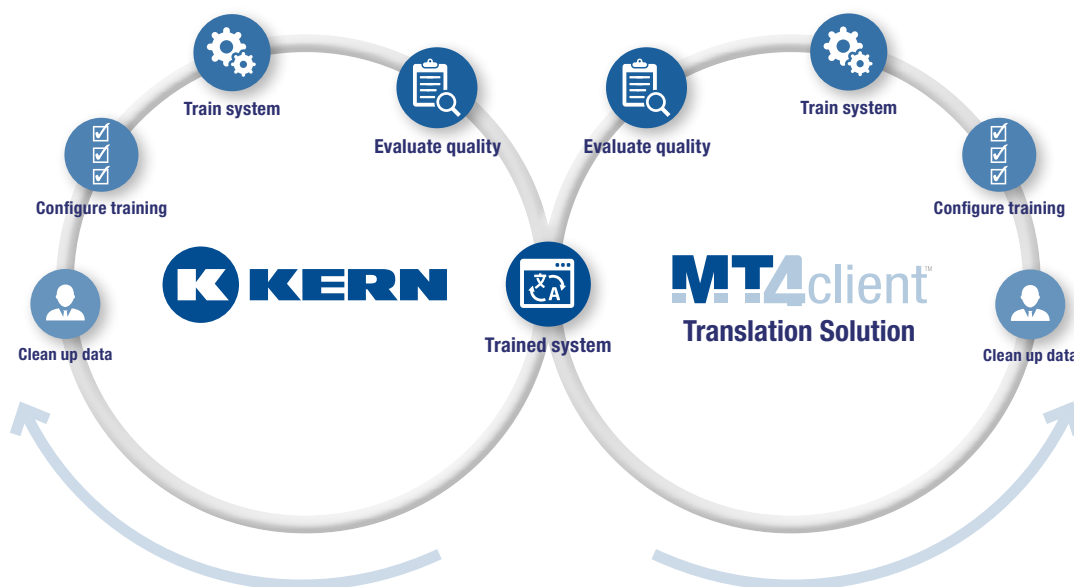
Specialised MT

- Directly available for translation
- In the finance, IT and hardware industries, among others
- For frequently demanded languages



KERN Custom MT

- Based on customer-specific data
- Can be enhanced by data from KERN if required



ONLINE INTERPRETING FOR VIRTUAL CONFERENCES⁺

Flexible solutions

The coronavirus pandemic has also changed the field of interpreting. Many international conferences or business meetings that require physical presence can no longer take place. To enable multilingual interpreting also for online conferences, there are various options for online interpreting. Using digital technology enables simultaneous and consecutive interpreting for conferences that take place virtually.

Advantages of online interpreting:

- Digital implementation of multilingual conferences and/or events
- No tiresome equipment organisation on-site
- Remote deployment of simultaneous interpreters
- Works irrespective of which country the participants are in
- Several interpreters can take part at the same time via various audio channels
- Efficient and uncomplicated
- International exchange with participants who speak different languages
- No long journeys
- The interpreters do not need to be paid expenses for travelling
- Works irrespective of location



KERN offers two options for online interpreting:

Video remote interpreting (VRI) – can be flexibly used

Video remote interpreting (VRI) allows interpreters to be added in when using various tools. Various audio channels for different languages are available for this. Multilingual participants can hear the interpretation and they themselves will be interpreted for when they speak. This means that multilingual video conferences and international exchanges by video are no longer a problem!

- Interpreting within an existing video platform
- Flexible integration of interpreters in common video conferencing tools
- Interpreters can also be integrated via an additional audio channel
 - Requirements for the audio option differ depending on the video conference supplier (therefore observe the requirements associated with additional audio channels)
 - Zoom for example, offers several audio channels for simultaneous interpretation

- Compatibility with all video conference providers (e.g. Microsoft Teams, WebEx, Zoom, Skype, etc.)
- Option of consecutive or simultaneous interpreting

Remote simultaneous interpreting (RSI) – can be used regardless of the participants' location

KERN offers an efficient option for integrating interpreting services in online conferences with remote simultaneous interpreting. The interpreter either works from a (temporary) RSI hub or using a cloud-based solution (interpreter platform) and can thereby provide interpretation fully independent of location.

- Organising an RSI hub through our technological partners
- Using a cloud interpreter platform as needed
- Integrating high/quality simultaneous interpreting equipment (booth and interpreting console)
- Simultaneous interpreting

PROFESSIONAL TRANSCRIPTION SERVICE⁺

Using automatic speech recognition in a successful manner

Recording, editing, publishing online - creating media content has never been so easy. Alongside media production, audio and video content is playing an increasingly important role in business communication. However, these new possibilities also confront companies with new challenges. Often, they need to obtain a quick overview of what has been said to enable them to make the correct decisions.

KERN offers a professional transcription service to create written records of German or foreign language audio or video material. During this process, spoken word texts and discussions are written down from audio or video recordings. The variety of texts which need to be recorded in writing ranges from video conferences, telephone interviews as a data collection strategy and interviews for films and television productions to series of lectures. To transcribe these, there is now machine transcription, which makes this process considerably easier.

Automatic speech recognition (ASR): Machine transcription

With the machine transcription from KERN, we can create a raw transcript in just a few clicks. The subsequent human editing process allows us to create an even more exact result.

What are the prerequisites for automatic transcription?

ASR creates especially good results when the audio quality of the recording is good, when there are not too many interfering background noises and when the persons speaking do not have a strong accent. As such, the transcription of professionally produced media is generally more successful than the transcription of a piece recorded with a mobile phone where the speaker is talking in a foreign language.

When is human editing needed?

For transcripts that need to be translated and which may be used for things such as subtitling, human editing is recommended. Alongside the required foreign language, the subtitles must include the time code so that they appear at the right moment. The length of the text is of critical importance here and the highest level of precision

is required during translation. The translators and transcription specialists of KERN are trained for this and have many years of experience in the area of subtitling.

The KERN team would be pleased to advise any interested parties as to whether machine transcription is an option for your project.



KERN RECEIVES SEVERAL AWARDS⁺

Leading language service provider worldwide

In this year's rankings from Nimdzi and Slator, KERN Global Language Services was once again rated as being one of the leading language service providers:

Nimdzi:

In the ranking that was recently published by the international market research company Nimdzi, which focuses on the language sector, KERN Global Language Services was listed under the top 100 in the world again this year. This means that it belongs to the largest and most successful German language service providers in terms of revenue. The worldwide comparison showed that KERN Global Language Services was listed among the top 35 language providers.



Slator:

The independent company, which concentrates on the international translation market and the technological advances in this area, struck a balance in its LSPI this year as well: KERN Global Language Services again secured a top stop in the worldwide ranking of the most successful language service providers in terms of revenue and was ranked way higher than its German competitors in the Germany-wide comparison.



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