What does machine translation mean?

In machine translation, texts are translated automatically with computer software so that a human translator does not directly participate in the process. The relationship between human translators and machine translation systems has been that the machine translation engine has been trained with translations created by human translators. The undisputed strength of machine translation is the speed of the translation process. Customers can get the translations they need in minutes.

What are the  most prominent milestones of machine translation?

Machine translation can be used in a large variety of situations. In the following, we will go through some scenarios where machine translation can help with a company’s daily operations.

**Internal emails and other written communication**

If a company is operating in several countries or on several continents even, communication becomes more difficult to manage. The language skills of employees can vary a lot. Machine translation can help decrease or even eliminate the language barrier in communication. A translation of the text can be obtained quickly and in a form that enables the recipients to understand the core content of the message.

**Documentation and instructions**

Companies operating in different industries can accumulate considerable amounts of documentation on products, services and operating models. Often, all relevant information is recorded for future reference, either for development actions or just for maintenance. Machine translation is an excellent choice in situations where having the materials translated by a human translator would be too large an investment. Machine translation can also be used to translate PowerPoint presentations, intranet bulletins, and other similar documents. The need to translate them is often urgent.

**Texts with a short life cycle**

A good example of texts with a short life cycle is that of product review texts at online stores. From them, customers may get information crucial to their purchase decision that cannot be found elsewhere. A written review provides valuable information both to the company and customers visiting the company's website. When an online store is operating in multiple countries, using machine translation for translating reviews can be an excellent way to serve customers. Product reviews can be easily translated into another language. Customers of the online store can read the review in their own language.

What are the basic features of modern MT? Give an extended answer.

For a quick high-level view, and to provide further context of how MT will fit into your business' strategy, let's take a closer look at the two major distinctions in modern MT -- Statistical and neural Network based engines.

* + Statistic Based engines learn through statistical analysis of a bilingual text, generally provided by the developer or user. These engines essentially develop an understanding of existing rules to determine the unique relationship between the source language and target language.
  + Neural Based engines are the most modern approach to MT. Neural networks are designed to mimic how the human mind learns, gaining more knowledge over time. These engines seek to understand the context of what is being translated to properly predict the correct word choice.

Neural based machine translation engines are much more capable of capturing, and even understanding, the intent or meaning of a sentence, and therefore have been quickly replacing older statistical models. The idea here isn’t just swapping one word for another based on a rule or phrase.

Instead, the NMT engine is working to understand the intent behind your content in order to maintain and retain that particular message and tone in translation.

[How can content managers  incorporate MT into their translation process](https://www.smartling.com/resources/101/when-to-use-machine-translation-webinar/)?

When the product catalog of an online store is extensive, machine translation is quite commonly used for translating product information. In these cases, it is a good idea to classify products into more and less important ones, so that human quality assurance can be added for the translations of the most important products, if necessary. For less important products, the quality of machine translation may well be sufficient, for instance, if the product description only includes a couple of sentences.

When an online store is operating in multiple countries, using machine translation for translating reviews can be an excellent way to serve customers. Product reviews can be easily translated into another language. Customers of the online store can read the review in their own language. Here, machine translation helps customers with their purchase decisions.

Integrated machine translation systems are commonly used in social media services where the posts of users can be translated into the reader’s own language with a single click.

Are modern engines now capable of competing with human translators? Give good grounds to support your point of view.

Translation is much more complex than learning isolated words in a language. From one language to another, the grammar, order of words, and metaphors are different.

A language is always linked to its culture, so no matter how perfect a translation is, if the cultural elements of the language aren’t taken into account, the translated text will fail to communicate to the readers in the same manner as the writer intended.

**Good writing is more than just writing. It’s a very complex and unquantifiable thinking process that machines cannot copy. Machine translation provides a dictionary equivalent, but not a quality translation.**

**Can machines really replace human translators? Why do you think so?**

**Machines cannot replace human translators because** there is no way you can program a machine to understand culture. Different cultures in the world have different lexical items that are unique to that specific culture. Translators are soaked up in the culture and are able to pick slang and nuances in the text that machines cannot detect. In the different languages, there are words with dual meanings and this can be a significant problem for the machine translators. These words have to be related to the context to help determine their true meanings and only a [human translation](https://speakt.com/human-translation/) can do this.