



Machine Translation vs. Human Translation

There are multiple ways to translate content to reach a multilingual audience. Learn the critical differences between human and machine translation and which solution may be best for your business.

Introduction

When you think about translation, what comes to your mind? It may be the Google Translate window on your phone or someone poring over books to compare translated materials. These images describe two innovative types of translation processes. Machine translation (MT) and human translation are different methods to reach the same goal - translated content - but with varying results.

Machine Translation

Machine translation systems are applications or online services that use machine-learning technologies to translate large amounts of text to and from supported languages. The service translates a “source” text from one language to a different “target” language.

Historically, the primary machine learning technique used was Statistical Machine Translation (SMT). SMT uses advanced statistical analysis to estimate the best possible translations for a word given the context of a few words. However, the development of Neural Machine Translation (NMT) caused a radical shift in translation technology, resulting in much higher quality translations. This translation technology started deploying for users and developers

in 2016 when Google debuted its Neural Machine Translation system - aka “Google Translate.”

How Does Machine Translation Work?

Neural Machine Translation is the most advanced form of automated translation software available today. Although the concepts behind neural machine translation technology and its interfaces are relatively simple, the science and technologies behind it are incredibly complex. They bring together several leading-edge technologies, including deep learning (i.e., artificial intelligence), big data, linguistics, cloud computing, and web APIs. Machine translation technology uses various algorithms, patterns, and large databases of existing translations to produce large quantities of translated texts without human involvement quickly.



Neural Based engines are the most modern approach to machine translation. With recent advances in self-learning AI, deep learning, and big data, NMT systems essentially “learn” new languages using Recurrent Neural Networks. Recurrent Neural networks are designed to mimic how the human mind learns and gains more knowledge over time. In addition, these engines seek to understand the context of what is being translated to correctly predict the correct word choice.

Neural-based machine translation engines are much more capable of capturing and understanding a sentence’s intent or meaning. The idea here is not just swapping one word for another based on a rule or phrase. Instead, the NMT engine works to understand your content’s intent to maintain and retain that particular message and tone in translation.

Factors to Evaluate

There are several factors to explore when deciding whether to utilize machine or human translation for your translation needs. the same goal - translated content - but with varying results.

Translation Quality

Translation quality refers to assessing how well translated content satisfies the source language’s meaning, intent, and tone, as well as the regional and cultural factors of the target audience. In one sense, quality refers to whether the translation is acceptable. In general terms, a translation of satisfactory quality is:

- Accurate (reflects the meaning correctly)
- Effective (has the intended effect on the reader)
- Appropriate (meets project parameters)

In another sense, different quality levels could be needed for a given translation. For example, a document that will serve as evidence in a trial or represent a company to its clients requires a perfectly polished translation—sometimes known as “publication quality.” On the other hand, other translations may only be needed to get the gist of the content for internal use—sometimes known as “informational quality.”

Research has shown that consistently high-quality content is essential for a business - otherwise, lower-quality translations can “bring down” the content. However, in this regard, translation quality can differ significantly between machine translation and human translation. Certified human translators and editors help maintain a multi-stage review and editorial process to ensure the translation is always high quality, while machine translation may not deliver precise results.

Translation Speed

Computer-driven translation software is often marketed to highlight the speed of delivery, explaining that human translations will take much more time to complete. However, computers have an advantage over humans regarding speed, especially when a company needs to translate large amounts of content.

Online human translation services, however, have significantly reduced turnaround time for translation projects. Furthermore, the margin of error is so much smaller that it saves customers wasted time on corrections or from using weak or incorrect translations. On the other hand, a significant drawback in machine translation is a loss of accuracy when a computer is translating instead of a native speaker of the target language.

The need for translation speed to market is genuine, as well. In many industries, adding website content daily or multiple times a day is not unusual. Every day your global customers do not know about a change in your business, or your local salespeople can not support the customers in-market, you risk losing customers and money. Ideally, new or updated content, regardless of medium—such as text, images, interactive applications, etc.—should be identified for translation, translated, edited, QA'd, and published in about one business day.

Cost of Translations

Many people believe they can only use Google Translate or other free translation services because human translation services are too expensive. However, human translation projects are not as fast to complete as machine translation and can be more expensive. Several factors should be considered when evaluating the costs of translation services that illuminate additional expenditures that affect your budget and the business:

- Costs to your brand and reputation
- Workforce costs
- Translation workflow costs
- Costs of comprehensive translation
- Coordination costs

In addition, for any company planning a translation project, it is vital to monitor the metrics and measure your return on investment (ROI). The potential for ROI increases as the volume of translations, number of target languages, frequency of updates, and the ability to use predefined workflows increase. Some statistics to measure ROI include:

- Website traffic
- Conversion rates
- Downloads from your landing page
- Unique visitors from foreign countries

Ability to Localize Content

At times, machine translation provides superior quality to human interpretation, predominantly due to the consistency in wording and style, which is where machine translation exceeds expectations. However, during the localization process, the development and application of messaging to a new and specific demographic, human translators can massage your content to capture it. Hence, it resonates more deeply. Machines often fail when localizing content because machines can not judge meaning based on context. Human interpretation shines where machine translation can struggle.

Localizing content should always be kept top mind while translating content. Each culture has its values woven into the language, so when translating professional content, it is crucial to be sensitive to different cultural norms and values. In addition, localizing content means your business is taking the time to connect respectfully with your target audience.

Finally, localizing your online presence is not limited to what customers can read on your website. With the correct translation solution, images, keywords, social media, and metadata can be localized to improve global SEO efforts and drive engaged global traffic to your website. Once there, multicultural and international customers will benefit from an enhanced user experience and content that speaks directly to them.



Which Translation Method Should You Use?

How do you know what the ideal translation method for your needs is? Human translation is the necessary choice for specific industries and use cases. Linguistic or technical accuracy, cultural nuances, and persuasive communication can only be guaranteed by using human linguists. These include content for:

- Medical and health/science industries
- Financial sectors
- Luxury or high-end sectors where a consistent brand voice is critical for business
- Legal content
- Website cart/conversion paths involving currency changes

Machine translation may work for your organization's more repetitive content that doesn't need cultural interpretations. This type of content can include:

- Technical texts that often contain simple sentences with specialist terminology repeated throughout
- Product specifications
- Localization of images, multimedia, web applications, and third-party content
- Charts and tables
- Instant translation for chat or email applications

A Hybrid Approach to Translation

Both machine translation and human translation have their benefits and drawbacks. Machine translation is faster than its human counterpart, but in terms of quality, it is not always the most reliable translation method. If you need high-quality content, you will need to use human translators who understand the subtleties of both languages.

Many website translation companies offer a hybrid approach, which uses more costly human translation for high-profile pages such as homepages and technical content, and less-expensive machine translation for less brand-sensitive content. The human/machine hybrid translation approach is excellent for cost-conscious organizations because it minimizes the amount of human translation applied to a localization project.

The hybrid approach is reflected in the entire translation process. For example, machine translation should be checked and edited by a post-editor who will proofread and correct machine-generated text to fix any grammar and spelling mistakes and possible misinterpretations. Post-editors can also modify stylistic elements to ensure the correct terminology and tone of voice are used consistently.

Conclusion

Thanks to modern advances in machine translation and talented linguists, a brand experience can be brought to life in whatever language you choose. Depending on your desired goals and intentions with a project, you have two options for translating your content: machine translation and human translation.

MotionPoint is a professional translation service that understands your business goals and budget and can properly define the scope of your project. MotionPoint learns about your content needs and translation goals to determine what areas of your site may benefit from human translation and which can be easily handled through machine translation, thereby offering you the best of both worlds for a competitive advantage in-market.



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