FIT Position Paper on Machine Translation

Machine Translation (MT), i.e. automatic translation using computers, which is viewed by some as the solution for obtaining good translations quickly and cheaply, has been gaining considerable ground in recent times. FIT, as the voice of associations of translators, interpreters and terminologists around the world, would therefore like to provide some information on this subject and draw attention to diverse consequences for the users as well as professional translators and their associations.

In the past, MT mainly used a rule-based approach, i.e. a set of rules for the language combination processed by the MT engine. This RbMT came up against certain limitations and has largely been superseded by a statistical approach (SMT), which is probability-based and relies on large corpora of source texts and their human translations. This has been made possible by the greater processing power of computers now available. In some cases, hybrid systems incorporating both RbMT and SMT or other models are employed.

The texts or other content subjected to MT may have to be treated in advance (known as pre-editing), and the raw MT output requires post-editing or some other human involvement, unless specified otherwise.

Users and their expectations

There are various types of MT users, for instance:

organisations aiming to speed up workflows or handle large volumes of content;

members of the general public who use self-service models but are usually unaware of the deficiencies;

professional translators utilising MT as part of their own specific resources for the purpose of enhancing their productivity.

It is generally acknowledged that worldwide there is a strongly growing demand for translations. MT may well be suitable for coping with some of that demand, such as translating highly repetitive content or content that would otherwise not be translated because of the cost factor.

Before starting a translation project, it is absolutely essential to specify the requirements. For example, what kind of product does the customer need (target language, audience and purpose)? What is expected in terms of the terminology to be used, delivery deadlines to be met, accuracy, fluency and style, etc.? Only on the basis of such project specifications can it be decided whether the use of MT or human translation is appropriate.

Caveats

In addition, certain issues connected with MT have to be kept in mind.

In the vast majority of cases, MT engines cannot match human translators in terms of the translation quality achievable because, for example, they lack creativity and common sense in deciding whether a piece of a previous translation applies in the current context. MT output therefore needs significant

post-editing or reworking to meet the requirements specified in advance, unless no or only light post-editing is considered adequate for the intended purpose. These products must be clearly identified as such.

Furthermore, the text corpora used should not be degraded by incorporating MT output. In particular, it has to be ensured that translators' copyright is protected in respect of the human translations contained in the text corpora.

Consequences for professional translators

Like many other sectors, the translation market is changing rapidly. Translators should seek to respond to the new developments in good time and see how to derive benefits for themselves.

MT is unlikely to completely replace human translators in the foreseeable future. Leaving aside the area where MT is a feasible option, there will continue to be plenty of work for them. Professional translators, who have the appropriate skills and qualifications, will still be needed for demanding, high-quality products, e.g. highly specialised legal and medical texts, marketing texts and confidential documents, to name but a few. Needless to say, producing high-quality translations that meet demanding requirements takes time and needs to be remunerated accordingly.

However, it is essential that professional translators supply their existing or potential customers with sound information on MT and its possible uses. In particular, they should point out where the use of raw MT output is acceptable (e.g. for gisting, i.e. ascertaining the rough content of a text in a rudimentary form) and where its use will have highly adverse consequences (e.g. when businesses send out unedited MT texts together with their products, thus seriously harming their corporate image and possibly even facing product liability implications).

Post-editing of MT output is one area of activity for translators. It goes without saying that the post-editing effort needed to produce satisfactory translation quality must not be excessive in terms of time and cost.

The role of translator associations

Against this background, translator associations have a duty to provide information to everyone concerned, not least so that users are fully aware of the appropriate and inappropriate uses of MT and professional translators can position themselves accordingly in the evolving translation market.