

PRACTICAL EXPERIENCE IN THE APPLICATION OF MT SYSTEMS

Gerhard FREIBOTT

Krupp Industrietechnik GmbH
Franz-Schubert-Str. 1-3
4100 Duisburg 14, Bundesrepublik Deutschland

1 INTRODUCTORY REMARKS

As early as the nineteen-sixties, an MT system passed its practical test in the famous Apollo-Soyouz Project. Normally this would have meant that the product "MT system" would have emerged from the prototype stage and entered full-scale production. This was not the case!

Has machine translation (MT) now "finally arrived"? Is it really the case, that "MT systems are now on the market for use on personal computers and at a realistic price"? Can MT systems now really be seen as a "cost-effective alternative to translation by traditional methods"? (Quoted from: "Machine Translation: A Technology Assessment", R.W. Balfour).

Recent publications have tried to create the impression that MT systems have become a marketable mass-product: "hundreds (!) of companies are already doubling the productivity of their translation departments with MT systems."

I doubt it!

In fact, comparatively few MT systems have been installed in industry. Practical experience in industrial applications is very limited. Why have MT systems not caught on in industry as well as had to be expected given the state of maturity that they have reached? What has to be done to increase the translators' and the employers' readiness to accept MT systems as an operable and useful working tool?

It is my intention in the following to discuss the question of practical experience in the application of MT systems from an economical point of view.

2 REASONS

Have the developers and suppliers of MT systems - in the wake of the ALPAC report - retreated more or less to the basic research of linguistic theories neglecting their previous commitment to practical implementations on a broad basis?

Fact: in industry more than in any other area where electronic data processing is applied, reactions to MT systems are decidedly sceptical.

Marketing of the product not market-oriented?

Fact: advertising slogans are often far removed from actual practice, e.g. "the system will render the services of external translation offices unnecessary", or headlines like "in the middle of the night, when the translator is fast asleep".

This may have frightened off translators as potential users who are, after all, the very people "affected" by these developments.

Fact: exaggerated advertising claims about possible reductions in staff ("it will double your productivity") and translation prices ("now we can offer you translations at 1/10 of our previous price") have caused an atmosphere of insecurity and brought the credibility of the product into question.

Changes in the translation market itself?

Fact: MT systems can be employed most efficiently in large organizational units. The general trend, however, is towards decentralized organizational units, shifting internal services to external translation companies, which, on the other hand, are being amalgamated into larger units. For many of these businesses, however, the level of investment for MT systems is still too high. The risk involved simply cannot be predicted.

3 MT SYSTEM IN OUR COMPANY

Working environment:

- Possibility of influencing the source text so that system-related and translation specific criteria can be taken into consideration
- Specific text types, specific grammar and domain-specific constructions
- Concentration on domain-specific documents (LSP)
- High quota of repetitive components
- Data to be translated are available in machine readable form.

Selection criteria for the MT system:

- expected improvement in efficiency
- interfaces for existing applications (data bases, word/document processing)
- integration with existing EDP environment, use of available hardware

Outcome:

After lengthy and detailed studies a specific MT system was selected.

For the time being, however, for economical reasons a commercial MAT system (dictionary look-up, pattern matching) has been installed which will be replaced in the near future with an MAT system of our own design.

Our intention, however, remains to install an MT system that will ensure better results building on the existing applications of the MAT system.

4 CONCLUDING REMARKS

The crucial argument remains the question of profitability, i.e. the question of efficiency and how quickly the investment pays for itself.

Other significant factors, such as 1) translation quality and 2) speed, can be regarded as a function of 1) the quality of the MT translated text and the post-editing volume and 2) the speed of the machine translation process and the number of staff involved in pre- and post-editing, and thus also come under the profitability factor.

In order to be able to assess MT systems fairly, it is time that objective criteria are found for measuring their efficiency and limitations.

This means that clear and logical criteria must be established in addition to existing linguistic evaluation criteria to enable us to assess the suitability for integration and profitability of MT systems.