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Building the Customer Base
Panel Discussion

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Abstract

The principal rationale affecting a decision to use machine translation software is the reduction of postediting time through a quality of machine output which can reduce costs and increase productivity. Other key decision factors include system customization, input time, maintenance of text processing codes, and ease of use.

Introduction

The panel will present the conference a candid presentation of the key factors contributing to decisions regarding the use of machine translation. Participants will discuss issues involving quality of machine output, input, ease of use and customization of the machine translation system.

1 Output

A. Does the quality of raw output lead to cost savings and productivity increases?

Quality of machine output and post editing time required are the key issues regarding the use of machine translation. Most systems have greatly increased translation speed but have failed to bring the quality of raw output to an acceptable level. The higher the quality attained, the lower the cost and higher savings.

B. How much effort must be devoted to customizing a system in order to achieve a satisfactory degree of output? Is this effort included in productivity calculations?

Effort devoted to customization depends on the quality of the original dictionaries provided with the system. Customization should be an on-going process designed to tailor the system in order to assure ease of improvement as well as user friendliness and customer satisfaction. Such an effort is particularly costly in the initial stages in terms of time and expertise and should consequently be accounted for in productivity calculations. To expect each customer to develop its own domain seems necessary and counterproductive at the same time. A possible solution to this problem is a system where vocabularies pertinent to different domains are available for sale by those who took the time to develop them in the first place.

C. How important are measures of output accuracy?

To a corporation or institution using machine translation, measuring output accuracy which in turn determines post editing time, is often the only evidence available to calculate effective cost savings and productivity increases, Unfortunately, to date, there is no specifically designed industry-wide standard capable of measuring output accuracy.

2 Input

A. How important is the ability to input documentation with text publishing codes intact?

If machine translation systems are to fulfill expectations of reduced post editing and increased savings, they must allow text to be entered with word processing formats intact. As the world moves towards standardization of document formats and then to standards in text publishing codes, the machine translation industry will inevitably be required to integrate publishing codes as a natural part the translation process.

B. Importance of scanning and OCR, as well as other media.

An ideal machine translation solution should provide all means necessary to minimize human intervention during the input stage. This solution should include OCR, telex, fax, voice, and all magnetic media. If text is entered manually, the time saving capability of an automatic system is diminished, the margin for error is increased and the purpose of machine translation in general is defeated. Most translation material continues to be received by bureaus and translators as hardcopy (80% hardcopy vs. 20% floppy).

3 System Use

A. Ease of use of a system.

Ease of use is a key factor as a long training time (learning curve) for an employee adds to the cost of the system. The "friendlier" the system, the greater the number of users within a office who can be trained in a relatively short period of time. Ease of use also contributes to employee/translator satisfaction and reduces the fear of management/decision-makers,

One example of ease of use would be a system where functions are menu driven and require few steps, and dictionary and lexicon changes can be done inhouse without additional coding from the manufacturer.

D. Ability of the user to manipulate the system, to include changing dictionaries, lexicons, syntactic structures, semantic coding, grammar, and/or other tools.

The user should be able to alter the system and to enter her own specific terminology at will. However, the potential for problems runs high if the user attempts to change grammatical attributes and syntactic structures without the benefit of appropriate linguistic expertise.

C. Importance of dictionaries and other system knowledge modules being mature in advance of installation.

For the most part, at installation, both dictionaries and system knowledge modules should be mature. The better the initial quality of these components, the better the quality of the machine output. This way, the user will have to spend less time fixing dictionary and coding errors and will achieve desired gains in translation quality and productivity. In some instances where a very specific terminology domain is required by the customer, the maturity of "general dictionaries" becomes somewhat less relevant. A possible solution to this question could be to develop industry-specific terminology data banks enabling the customer quick access to restricted domains.

D. Importance of user interface.

User interface considerations are directly tied to the length of the user's learning curve, cost savings and productivity increases of any system. The critical importance of ease of use becomes apparent when translation systems are put to the test in real-time real-world circumstances.

E. Importance of multi-lingual capabilities in a single system.

A universal system capable of translating all languages in all directions seems the best possible solution. However, not everybody would necessarily benefit from such a complete system. In the case of a translation bureau where volume in one language is never enough, language pair modularity is crucial. But with large corporations as well as with International Organizations the ability to translate a single document into several languages simultaneously is very important.

F. Importance of hardware considerations.

Hardware should first and foremost be powerful enough to support the application. Massive memory is required to accommodate large dictionaries and lexicons. Since customers are more likely to up-grade existing hardware rather than purchase new machines, the more hardware platforms a system is available on, the larger the market segment and potential customer base,

G. Availability of linguistic and system support.

Linguistic and system support is vital throughout the fife of the system since the average user can not be expected to be an expert in all technical fields. A machine translation site is always a "living system" in constant need of post-installation support, A structure from the vendor offering real-time support and yearly software upgrades presents the prospective customer with a "security blanket" that can positively influence the decision to acquire a machine translation system.