

# MT training for business people and translators

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## ABSTRACT

The objective of this paper is to promote the usage of MT as a tool for training translators and Japanese business people who have to read English documents every day. The motivation of this study stems from the author's experience as an in-house translator at a private manufacturing company. This paper identifies types of documents which currently require translation in the company and also it addresses any issues arising. Finally, a training idea is proposed.

### Background of the study

Machine Translation software (MT) is readily available to PC users these days. In fact, when a PC is purchased in Japan by an individual user, it is not surprising to find an MT already pre-installed in the PC. For instance, an NEC laptop called LaVie comes with an MT software, 'Honyaku Adaptor II'. Despite the fact that the availability of MT is high, the features of MT are not well communicated among users. Therefore, many people still believe that MT can only produce low quality translation.

The author has been working for Epson Telford Ltd. for four years, translating documents and interpreting meetings from Japanese into English and English into Japanese. The company has been manufacturing ink cartridges for consumer ink jet printers, and all manufacturing methods and procedures come from the Headquarters in Japan. Senior positions are occupied by Japanese staff from the Headquarters, some of whom require assistance in communication. Documents

are originally written in Japanese, and about 50% are translated into English before being sent from Japan. However, as the product life cycle has become shorter and shorter these days, translation requirements cannot be met most of the time. The demand for translation from Japanese into English is fairly high, and British engineers have to wait for the translator to finish translating numerous amounts of documents.

In 2000, The author was approached by Dr. Saraki, a developer of a newly developed MT called PAT to carry out an evaluation. During the evaluation, the author was convinced that she could use this for translating documents in the manufacturing domain.

For a translator, MT can be used as a reference tool. Some specialist MT such as PAT can provide a standard translation. PAT has been developed recently in Japan, and this is a specialized MT, translating both Japanese patent documents into English and vice versa. Patent documents often use long sentences and peculiar wording. Since there are not many commercial MT on the market which can deal with long sentences with higher accuracy, PAT can be used for training translators. It is common to work as a freelance translator, and improvement of translation skills is always an issue. Most freelance translators do not usually have enough resources or time. The high-end MT could become an easy solution for the training issue. Since the evaluation result shows that PAT can also be used for non-patent documents, the paper will show the method of using PAT for training translators.

Many translators are still reluctant to promote MT, but Gaspari's (2001) study and the author's experience illustrates that the more the trainee translators became familiar with MT, realising its reasonable potential and current limitations, the less afraid they become.

For business people, especially in Europe, it is often the case that English is not the only language being used in the commercial world. For instance, a recent EU Directive has forced many companies to attach multi-language caution sheets to their products. ••Epson has recently complied with this and produced a caution sheet in 25 different languages. Although sales companies in Europe use English for communication, the requirement for multi-language from the market increases. If business people understand how to make the most of MT, they will be able to maximize the market opportunity.

In this paper, a training proposal is described for business people and engineers. However, a trainee translator can also refer to this because the fundamental elements of MT have to be shared by both translators and non-translators in order to make the most of MT.

The evaluation results from PAT prove that it can be used for enhancing translators' productivity, yet it is not a perfect tool (Saraki, 2001). PAT is a commercial MT which was originally designed to translate patent documents. The author joined the evaluation project with the developer of PAT in 2000, and findings show that about 44% of the sentences were translated well enough to be used without post-editing. Although the result of the evaluation may sound good, it still may not be practical for a trainee translator or business person to use PAT without having any aid from a trainer or PAT developer. The trainer must understand the strengths and weaknesses of PAT if it is used for training. PAT also carries specialist dictionaries and is able to translate different types of documents.

The evaluation results may be used for

training as well. For instance, trainees may pick up sentences which score high marks and study them. The trainer can teach the strengths and weaknesses of MT by studying evaluation results for future utilization of MT.

The trainer can also teach when to use MT, and the importance and necessity of pre- and post-editing. When translating English texts into Japanese using MT, spelling and grammar have to be checked before inputting texts into MT. In fact, some companies create documents without considering that they are to be translated into another language, therefore, they do not spend a long time in checking texts. There are many occasions where only employees who work for that particular company can understand the original text. For instance, one translation document which the author has translated recently contained too much original company terminology (most of which is not found in a dictionary), so creating a user's dictionary in MT would take as long as translating documents without using MT. Hence MT was not used. This pre-editing stage is when a translator can decide whether or not MT can be used for faster delivery to his/her customers.

### **Explanation of document types**

Please refer to Appendix 1 where different types of documents are described.

Engineering instructions are sent from the headquarters in Japan very often. Most of them are already translated into English. Only a few are sent in Japanese. They are urgent requests or changes, so immediate translation is required.

Work instructions are sent from Japan, half of which are written in Japanese.

Sample documents have to be entered into the system to translated.

Since the company is building its own robot and a machine for producing ink cartridges, the machine user guides are being written by the engineer involved, as are the machine-check procedures. The trend in manufacturing is towards making more

models in smaller quantities. Product life cycle is much shorter compared to the year 1990, when the first model of a consumer ink jet printer was introduced into the market.

A parts table is a list of parts which are used for producing ink cartridges and assembling machines. The list is translated fairly quickly as they are simple word by word direct translation.

Presentations are made for important visitors (i.e. often senior board members) from Japan. They require thorough translation before being presented.

Minutes of meetings are required to be translated, especially when they are related to personnel issues such as disciplinary and grievance issues. Again, they require thorough translation to avoid any misunderstanding.

A proportion of the large volume of e-mail correspondence, from British managers or engineers to Japanese staff, requires thorough translation because of its important notice. General information from the General Affairs department includes communication about company events and information, which is generally simple and straightforward because the addressees are all members of the company.

Since the strength of MT is in short sentences, the parts list and general information can be ideal documents for MT (Narita et al., 1994).

By entering the correct terminology, creating a parts list is a fast straightforward operation using MT. This is an instant process, so only a basic MT operation training is expected. Once the parts list is completed, translation of other technical documents can become easier because the names of parts are now in the MT system. As [Narita et al 94] said, it is often the case that translating English into Japanese by MT is more successful than the other way round. Many Japanese staff feel it time consuming to read e-mails in English from General Affairs, so they may be able to use MT to translate them.

### **Training for managers and engineers**

Here is a basic plan devised for Epson Telford Ltd. This idea may be applied to any manufacturing company.

First of all, use PAT to try out samples from different types of documents. Since MT has an advantage in repetitive and short sentences, a parts table will be the first target which everyone can try out.

Enter company specific terminology in the user's dictionary. For instance, EPSON engineering terminology can be entered into the system.

Give trainees a brief background of MT. Both strengths and weaknesses have to be communicated. This is a crucial part of the training. If this is not done, no one would be willing to use MT.

Use the documents often sent in Japanese from Japan. Let trainees have a go, and ask them to save the translated documents. Each individual may bring different types of documents. Some may bring engineering related documents, and other may bring documents relevant to production planning.

Now the general rules about using MT should be presented. Ask them to follow the rules and see if they can pre-edit the original sentences to make more 'MT friendly' sentences.

Visit each trainee and they check the outcome together. Ask each trainee to make a memo while pre-editing the original sentences. The trainer checks each translation and judges the result. Before creating Epson 'know-how' sheets from these memos, the trainer can use a table of rules devised from the author's experiment. Please refer to appendix 2 (Fukutomi, 1999).

The rules in appendix 2 are basic ones and new rules can be added by the trainer after findings from the training are analyzed.

### **Importance of pre-editing and post-editing**

For any MT users, it is often pointed out that pre-editing is the most important stage. However, if pre-editing takes longer than translation itself, not many people are

attracted to MT. It is crucial for MT researchers and makers to communicate with potential or existing MT users that document preparation before using the MT affects the quality of translation dramatically.

Ideally, pre-editing has to be done by the writer of the text rather than by a translator. The writer knows exactly which anaphora indicates what. A translator may not have technical knowledge, so he/she cannot judge which translation is more appropriate if more than one translated word is found in the dictionary. It is worth noting that post-editing is closely related to pre-editing; the quality of the input affects the quality of the output. Consequently, poor input has detrimental effects on the translation results. Hence, the time spent on post-editing may be reduced if those sentences which comprise the input are carefully pre-edited.

The notion of pre-editing and post-editing have not been widely communicated among users in the company, therefore, these two stages have to be included in the MT training. It is important for users to understand that MT often generates low quality translation because the original text is often poorly written or not written in an 'MT-friendly' way. The paper focuses on a study done at Makita Manufacturing Europe Ltd., and Epson Telford Ltd., (which do not have the resources needed to develop their own MT system), and evaluates the translation of sentences from those companies by commercial MT software. The study is also backed up by another evaluation result in which US patent documents were used for the sample.

The use of controlled language (CL) in source texts is also regarded as a way to improve translation quality (Hutchins & Somers, 1992). The idea may be discussed during the training. However, introducing the idea of CL to the company can be waited until trainees feel confident about MT.

#### **Monitoring and Follow-up**

It is always essential to monitor and follow up after a new tool is introduced. Trainees who have finished the training ought to

create a memo which consists of their findings from the training. The collection of memos will eventually become MT 'know-how' sheets within the company. This will help novice members of staff learn how to use MT. With the creation of know-how sheets, the training can be completed.

The person responsible for the project is required to carry out a survey from time to time to assess the current situation and users' requests.

#### **Summary**

This paper describes the first phase of in-house MT training for one company. Although the basic knowledge about MT (i.e. strengths and weaknesses of MT) is communicated without customization to a company, every company has its writing style and terminology. Therefore, each specific rule has to be generated company by company. It is worth noting that acceptable levels of translation may vary depending upon the requirements of the user. The trainer may be able to help trainees identify what their acceptable levels are.

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## APPENDICES

### Appendix 1: Types of documents used at the company (Japanese to English)

Dept.	Types of documents	frequency	Example documents
Engineering	Engineering notice	Every 2 weeks	How and where to apply a new label
	Work instruction	Every 1-2 weeks	How to check production robots
	Custom-made machine users guide	Every time a new machine is introduced (every 6-12 months)	inner pressure checker laser adjustment manual
	Machine-check procedure	Every time a new machine is introduced (every 6-12 months)	Hot runner procedure
	Parts table, list of operation process	Every time a new model is introduced (every 3 months)	Process memo
General			
	Company-wide presentation	Every 2-3 months	Small Group Activity presentation, Current company project
	Quality Award application form	3-4 times a year	Quality Efficiency Award application form
	Meeting minutes	Once a month	Meeting minutes with external companies
	Personnel interview	Every 6 months	Appraisal form

(English to Japanese)

Dept.	Types of documents	Volume	Example documents
Engineering	e-mail	everyday	Message on quality issues

Production	e-mail	everyday	Production figures
	e-mail	everyday	Message on quality issues
	e-mail	Every month	Monthly report
General Affairs	Company policy	1-2 times a month	HR policy
	e-mail	2- 3 times a week	General information

**Appendix 2: The Rules for Document Preparation**

Instruction: in order of effectiveness	Explanation
1) Add any omitted subject or object to the sentence.	Do not omit the subject or object of a sentence, and do not input a fragmented sentence into the MT system.
2) The correct kanji characters should be used. - If necessary, consult a dictionary to check that the correct kanji characters are being entered the CMT system.	A source text may contain the wrong kanji characters which may result in wrong translation.
3) Input the full sentences.	Fragmented sentences are likely to turn out to be meaningless translation.