

## THE PHENOMENON OF TRANSLATION CLOUD

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**Abstract.** The text of the article deals with the current translation cloud, paying special attention to its particularity and usage within the work of not only experienced translators but also beginning ones.

**Keywords:** IT infrastructure; The translation cloud; Specialist texts; Translators.

### Introduction

Translating specialist texts just like acquiring foreign languages contributes to breaking down language barriers since scientific and technical universalism clash almost always with the variety of natural languages [1: 272].

Working in Cloud is nowadays an everyday activity of contemporary translators. At present it is used by almost everybody - by mobile phone operators, providers of office packages, even organisers of huge events - and it is often up to them to order the translations, which is why both the beginning and experienced translators reach for the solutions from the cloud computing area. Thanks to working with clients all over the world, they know that to succeed in accomplishing an ambitious translation task it is necessary to have a solid foundation in the form of an efficient IT infrastructure. The key aspects are here reliability, short time to complete the translation assignment and availability of the solutions offered by us - translators.

### Analysis

Cloud is the tool which can streamline the work of translator teams. In the contemporary world business requirements change so fast that it results in an extremely dynamic development of various types of applications. We are also witnessing the progressive digitalisation of more and more sectors of the economy. Consequently, it poses new challenges to the IT environment. The solutions found in cloud are becoming more and more popular and our translators' offer tries to keep up with the next new challenges.

According to the specialist dealing with cloud, one of the greatest advantages of Private Cloud is its flexibility. It provides translators with a vast choice of configuration and enables adjusting the Cloud to our own requirements by configuring separately its individual parameters, i.e. the number of processors, the amount of memory as well as the amount and type of disc

space. The translator is also able to alter the resources allotted at any time and to use precisely such amount of memory and space as is required at the moment by the particular translation assignment. All this offers a great freedom of choice how to scale the efficiency of the application [2].

Cloud comprises the applications and the IT infrastructure that is provided as an Internet service. It supplies the solutions with which the translator has the continuous possibility to adapt the technology and the tools to the current needs.

The term *cloud* [3: 72] is a metaphor referring to the architecture of the services offered in this way. The calculations do not take place on the user's computer but are done by many servers located in the servers' centre of the service provider. It is also on them where the software is installed - the user can see only its interface. The package of services operated on by the user can consist of various services provided by one or several companies which somehow frequently communicate with one another in a certain way. Even more dispersed are the 'fringes' of the cloud which comprise the users' computers on which no data is collected but which simply provide an access to it. If we tried to present such type of connections in a form of graph - indeed, the result would somehow resemble a cloud. The whole Internet could be shown in a similar way.

The concept of making programs and services available in this way is absolutely not new - it goes back to the beginning of the digitalisation era. It was then when all the calculations were made on central units. It was the loading units which were used to feed and read the data, and quite often they were deprived of any computing power. Several years later, in times when PCs became common, it is mostly economical and work organisational considerations that made the users and those who order the services come back to the old model.

However, cloud computing cannot be called in any way an archaic concept - the technology and the ideas it implements in such services are most often the newest achievements of IT... and economical thoughts [4: 137]. Not connected with one another, or sometimes even the companies which compete with one another, process and store their data on the same servers belonging to the same provider of the services. Far smaller staff is needed to run the servers standing in one place, as compared to the situation where each company were to keep its own. The same IT specialist can work alternatively, for example for a courier company, furniture producer and a chain of children toys' store. All the three companies pay for the possibility to create files but they have to buy neither the hardware nor the software or even employ IT specialists. The client is not even interested where in reality the machines he uses are.

In the world, which more and more relies on technology, services on demand present a new model of creating and providing IT resources. This

model offers the flexibility which is necessary to implement the tasks of difficult to predict workload and to scale and estimate the temporary needs for resources and expenses which could be met by a typical business person interested in using such services.

The terms: cloud, cloud computing or services upon request are so wide that describing them demands juxtaposing them with one another in various categories, and each category is worth at least a brief explanation.

First of all, there is an abundance of offer that can be provided to the user of cloud computing. According to experts in the field the most common is the software and the applications in the form of services (SaaS). They include, among others, such popular applications as commonly used Twitter or LinkedIn, which one neither has to make an effort to install, nor to worry about its versions or updates in order to be able to exercise their benefits. The offer which has the biggest potential to revolutionize the IT departments in companies is the infrastructure as the type of service. IaaS provides the users with the online access to all the available sources in the form of space for storing data and computing power on the servers usually equipped with operation system and the virtual platform to enable the users the virtualization of their application. The virtualization is the basis in cloud for all the infrastructure services which give the access to the numerous virtual applications or virtual machines on which the shared server space can be found [2].

Depending on the company needs, it can benefit from various cloud options in many ways. First of all, it achieves greater scaling ability together with the flexibility which are indispensable in the dynamically changing call for resources. And since the traditional server centre does not handle such options, it can be the infrastructure in the shape of cloud which may come to the rescue enabling the allocation of service space between virtual machines according to the current need. What is more, the user will pay only for the resources he or she has really been using. As far as it concerns another benefit, it is the economy that is mentioned due to the lack of need to invest in the equipment. And because it is the service provider who is responsible for providing and installing the elements of the infrastructure, instead of investing, the user usually pays a monthly service fee out of the operating budget. The third advantage is the improvement of quality and the contents of the application, thanks to the possibility of testing them in a full-scaled environment and the possibility of implementing standardization in the applications according to the needs. All of these ensure certain requirements in the company; for example the ones concerning safety. It is worth noticing that another important feature is limiting the time necessary to create a new application from several days or weeks to just minutes. When the developing platform in cloud is integrated with the services of the infrastructure the developers can use ready-made formulas and tools in order to avoid the need to perform monotonous routines, speeding-up the process of creating the appli-

cation, testing them and bringing out the new ones. Using cloud causes the transfer of the duties connected with the maintenance of the infrastructure to the provider of the service. The resources can be submitted to the user in various modes: from generally accessed virtual space, from the company data centre or from the combination of the above ones [2].

The subject literature holds the opinion that public cloud is a hosted environment which has a shared server and net infrastructure. The users place their applications in the data centre of the cloud provider as a virtual machine. The crucial benefit for the company is the flexibility which features the applications designed for cloud. Configuration of public cloud's real servers is shared by the users in such a way that the applications of various companies having access to it can work on this particular server. Generally, the access takes place through the Internet or API [5: 60].

Another choice for business resources is an inner cloud. This term refers to both hosted environment and the one created in translators' own server centre [6: 63]. Hosted from the outside, the cloud makes up such an environment where the physical server and additional equipment are dedicated to one company, which is its user. All the virtual machines on the particular physical server belong to the very same company. The definition of the inner cloud focuses on the resources kept in translators' own database centre of a company and managed by it with the help of hypervisor, platforms and management software and physical server of high density. Cloud providers can optionally offer also some dedicated services.

The most flexible solution, however, not always possible to implement nowadays due to legal restrictions, is so-called mixed model, i.e. hybrid cloud. In such configuration, a single application can be implemented for various environments. It concerns, for instance, marketing applications, which are hosted in public cloud, a good example of which is the font visible by the user and on the other hand is the processed data stored in the database centre found physically in the cloud of the private company.

Despite continuous improvement of the solutions which are based on the concept of the resources being available on the demand (so called customized service), there still exist certain concerns about the safety, availability and proprietorship rights of data. Since they are becoming more and more commonly accepted as a platform providing applications and services, it is assumed that their position on the market will strengthen.

It is worth noticing that all this undoubtedly brings translators certain benefits, among which special attention should be given to:

- Good translation - the system helps to control the quality and coherence of the translated texts and assures the proper circulation of the translated materials within earlier defined verification cycles.

- Considerable reduction of costs - an automated function of managing language materials, which are currently updated, identifies the contents

which have been changed and which were previously accepted. The translator receives directly only the new contents.

- Easy processing and updating - the activities which previously required several hundreds of working hours have been reduced to a few easy tasks. Nowadays managing translation resources, tasks assignment to the approved providers and updating together, with storing the translation memory in cloud, takes place up-to-date round-the clock on all the days of the week.

- Possibility of scaling - simple price plans within subscription mean that there is no need to claim high expenses in order to buy the software. Due to the cloud system the translator is paid only for the real usage which can be easily modified according to the requirements.

- Serving many subcontractors - based on cloud, the solution enables the access to the assigned tasks and using the translation memory which is being currently updated. Thanks to this solution, translators and editors can cooperate with various branch experts provided by the site who ordered the service in order to ensure the high quality of the translation. It is especially helpful in case of translating IT texts.

- It is very easy to extend the cloud system using non-standard scripts. Its well-documented interface of API programming allows non-standard integration and adjustments to the requirements of the ordering site.

- Flexible operational environment - the flexibility means in this case that the product is still being enriched in new functions. All the users implement the newest version and there are no problems with either the check-up version or costly updates [2].

In recent years, there has been a tendency to combine the benefits and technological possibilities of automatic translation systems with the applications based on translation memory. As Lagoudaki [7: 262] writes the hybrid systems enable offering a translator some solutions right at the moment where the translation memory cannot cope with the problem. Lagoudaki shows the results of research on the users' (translators') satisfaction connected with the use of systems based on translation memory and with elements of technology of automatic translation.

An interesting conclusion is the statement that excessive dependence on automatic translation functionality can be disastrous. As we know in case of computer aided translation, it is the translator who makes the final decision and the system provides the supporting function that is especially emphasized by the participants of the discussed survey.

There is a huge interest in the development and the implementation of computer programs, and also in translation cloud. All this can be seen in the fact that a huge amount of money is being invested in contemporary systems supporting translators.

In the opinion of the researcher, the operation of every CAT tool is based on translation memory. It is, to put it simply, a set of pairs of the text excerpts from the source language and their translations. These excerpts are usually sentences or their shorter elements, which are collected in the form of a bilingual corpus - called segments [7: 264].

There are two methods of creating translation memory: during the translation of new documents or with the use of alignment. The first method is connected with placing consecutive new segments during the translation with a CAT tool. It can also be done in the end when the file is cleared. The second option is alignment (called by some "the process of making things parallel") of archive documents with the help of special programming. In this case the program divides documents into segments and joins them in pairs. Depending on the type of software, this process requires more or less interference on the human side.

According to experts in the field, translation memory is the heart of every CAT. The tools aiding translation derive from the resources of translation memory and prompt the segments collected in them. The user has also the possibility to use context TMs (the function of CATs Concordance) and to search for the translation of particular phrases [2].

The benefits coming out from collecting the resources in the form of translation memory cannot be overestimated. A translator will not have to translate the same contents again and again - he will simply use the previous translation. He or she will surely appreciate the fact that it will be easier to maintain the coherence in the texts translated by him/her as much as the access to the archive data. The translation offices will notice the real economy achieved by the fact that some documents given for translation will be repeated so they will pay only for new contents, not for everything. And what about clients? They gain in the quality of translation and the speed of it. Quite often they will pay less if they are charged according to the analysis of logs-in into the CAT.

The subject literature holds the opinion that the market of translation programmes is still growing - it is probably one of the fastest growing segments of software sales, which we deal with on Inscripte. Equally fast-growing are the services connected with programming, such as: various types of trainings, workshops, webinaries and implementations. You have also to add the multitude of services provided in cloud and we can boldly speak about the translation revolution. Of course, one can ask a question whether this boom is a fad only or not. Is it a necessity to use a CAT in case of translators? Probably, yes and no. Lots of translators have already been using such tools, yet there is a huge group who still hesitate and are not sure whether to use it or not [Ibid.].

Programs aiding translations are exceptionally helpful, first of all, for all agencies. Even now most of them, if they do not require but surely en-

courage their associates to use them. It is a pure profit - thanks to CATs the payment comes only for something what was really translated. Additionally, agencies gain lots of precious translation memories and terminology bases. Therefore, if students of translation studies want to work in the future for a translation agency, the use of CATs is a must for them - sooner or later they will be asked to use it. It does not have to be an unpleasant requirement since both sides will benefit from it - we will sooner accomplish our translation tasks, our translations will be more coherent, we will be in full charge of the number of translated pages and characters and it will be easier for us to deal with various layouts. All these are the results of working with professional CAT.

CATs are irreplaceable during the translations of various type of documents, manuals, contracts and agreements as well as legal codes, leaflets, brochures and diverse types of conventionalized texts, which have fixed nomenclature, a bit limited vocabulary and fixed phrases. It is also a good choice for people translating scientific and research theses whose language is as a rule formalized and repetitive. From my own practice I can say that CATs work perfectly well in translations of web pages - they help to maintain the tags and the structure of the home page as well as take care of the coherence of the permanent elements of the page such as navigation, keys, etc.

It is worth noticing that professional translators usually do not have enough time to often click many programs, to check websites and dozens of dictionaries. What counts here is the efficiency and this is provided only by CATs which have or should have all of these in one window or just after pressing a few keys on the keyboard. Of course, we have to feed our CAT well - it is necessary to supply it with many good units form of translation memory and a rich terminology base - CAT is as good as our translations [2].

It is difficult to be surprised that taking into consideration the whole catalogue of benefits mentioned before, the market of programming aiding translations is growing so fast. The requirements of contemporary world provide more and more needs for faster and faster translations. Translation tools simply help us to do it - a well prepared for work and properly configured CAT is undoubtedly translator's best friend [8-14].

## **Conclusion**

The translation cloud, similarly to the machine translation used some time ago, together with the new trends in linguistics provide the answer to the next stages of scientific and technological revolution. As Jerzy Pieńkos writes - the machine translation is restricted to certain types of texts only until the properties and the level of a raw product achieved from the computer allow to use it in particular conditions of its effectiveness [1: 163]. Therefore, cloud is an attempt to combine these two professional spheres - scientific and business ones which can be understood as a manifestation of con-

temporary thought about the humanities whose achievements can and should be utilized on the job market of both present and future translators.

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