IMPLEMENTATION OF COMPLEX SOLUTIONS 
IN THE PROCESS OF USING CAT SYSTEMS

Abstract. The article analyzes the state of the problem of system development and implementation CAT systems. The purpose of the article is to analyze the possibilities of modern information technologies used in the professional activities of future specialists, in particular translators, to investigate the features of the corresponding software. The work examines information processes, types of information, methods of information transmission; software tools for the effective use of computer information technologies, the possibilities of the main resources of the global network are considered.

Keywords: CAT systems, information systems, information technologies, software.

Introduction

The rapid growth of the amount of information in all spheres of human activity requires the formation of new abilities, skills and qualities in future specialists to meet their professional needs for information and the use of information technologies during professional activities. In order to ensure translation activity at a high professional level, future translation specialists must possess modern information technologies, the emphasis of using which shifts to the area of collective work on the performance of complex translation tasks.

The strengthening of the growth of the processes of European and world integration into the educational space indicates the need to find new, more advanced approaches and technologies for the professional training of translators, which would ensure the achievement of high results, which leads to the need for increased attention to various aspects of their professional training. The development of the higher education system of Ukraine is conditioned by the processes that take place in European areas and actualize the need for human preparation for life in the conditions of the information society.

Harmonious entry of the state into the world community based on the principles of equal cooperation and information openness is impossible without the introduction of information technologies in the educational sector. The need for radical transformations is not driven by individual information technologies, but by the need to spread scientific knowledge, which becomes the most important component of the cultural, socio-economic and ecological development of society and the formation of its moral and spiritual values.

Analysis of recent research and publications. A number of publications are devoted to the issue of analysis of the development and implementation of CAT systems. O. Panchenko, L. Lopko, G. Khodorenko investigate the main tasks of CAT systems, as well as their advantages and disadvantages [1]. In particular, it is about the analysis of the problem of choice and efficiency of software use. Thus, E. Dolynsky and K. Skyba believe that special software allows to automate the relevant processes in translation activities and improve the quality of the result [2, 9]. The place of software as one of the determining factors in quality professional activity is noted by A. Hafiiak [8]. The main task of future specialists, according to K. Skyba, is the ability to use the Internet as a global database and source of information; use Internet resources in future professional activities; use electronic dictionaries; translate texts using machine translation systems; use translation memory programs [9].

The presented results of the specialists’ research allow us to affirm the relevance of the task of researching the corresponding software. We believe that there is a problem of studying and applying CAT systems in the information space, in particular during the modern development of the informatization of translation activities.

Main part

Given the intensive development of the information society, the main thing place in the list of competencies that a modern translator should have, takes informational competence. A high level of its formation will allow future translators to use information technologies for the effective solution of professional tasks that take on new forms.

Complex solutions in this aspect are the application of systems automated translation. CAT programs (Computer Assisted Translation) use translation memory technology in their work. This technique is particularly useful when you need to translate uniform, similar texts, such as legal documents, technical instructions, statistical or economic translation, etc. You can save a third of the time compared to the traditional translation method. The implementation of new directions is based on the application of these systems activities of translators, in particular, localization of software products and web sites directly related to internationalization processes and globalization. This requires mastering modern forms, methods, and tools for carrying out professional activities [3, 4, 5].

In the context of implementation of translation projects, special attention CAT systems deserve. They combine a complex of technologies and tools to ensure:
documentation translation, management terminological bases, creation of translation memory bases, control of terms performing translations and checking their quality, creating translation documents projects and the distribution of roles of translators during their implementation, etc.

The more texts you translate with the help of CAT programs, the richer their memory becomes, which means that the work is more efficient and faster. After all, with each additional task, more and more new sentences and phrases and their translations are stored in the memory of the program. And they will be encountered more and more often in further texts, especially if you have to deal with one topic.

But the main advantage of such programs is to ensure constant translation accuracy. Especially when it comes to monotonous texts with complex topics. If you need to translate an article in a scientific journal, and use other words for the same phenomena, but using CAT programs will help you avoid them. Today, there are many such programs. The most popular are Trados, Wordfast, memoQ, Transit. Most of them are commercial products. The use of such systems is effective, first of all, during translation agrarian, technical, financial, legal and other documentation, characteristic for which there is a saturation of industry terminology, and which has a high degree repetition of texts [5-7].

A modern translator cannot compete in the market of translation services without mastering translation information technologies. Computer Aided Translation includes the following basic computer technologies: installation of general linguistic and specialized dictionaries on a computer (offline); automated translation systems; translation memory systems; online (network) specialized and explanatory dictionaries; Internet search.

Systems of automated (machine) translation can be used for fast translation from different languages, large volumes of text on special topics taking into account their specificity, after editing, such translation approaches the quality of manual translation. Translation memory systems significantly increase translation productivity without sacrificing quality. During team work on the project, such systems allow to use the collective experience of translators and ensure unity of terminology, which significantly increases the quality of translation.

As a basis for the study of the software component of information technologies under the SDL software product is assigned to the implementation of translation projects Trados. The task of which is creation, filling and use of terminological bases using SDL MultiTerm software module; creation of memory bases of translations on based on previously translated texts using the SDL Trados module WinAlign; formation of translation projects and implementation of translation texts with the connection of terminological databases, translation memory databases, and a dictionary AutoSuggest using the SDL Trados Studio module.

The results of the conducted research indicate a high level of formation of the information competence of future specialists. The modern development of the information society determines the place of informational competence in the list of competences that a modern translator should possess, as one of the defining ones. This will allow future translators to use information technology for the effective solution of professional tasks that take on new forms. It is confirmed by the current state of distribution of the translation services market, with of which 68% is technical translation, 20% is localization, 7% is oral translation, 5% – translation of audio and video materials, looks as shown in Fig. 1.

![Fig. 1. State of distribution of the market of translation services](image)

An additional way to get rid of errors in translated texts and save more time is to use translation quality control programs - QA-programs (QA-quality assurance). Their application is the next stage after working with professional translation programs, when the text has already been compiled into a bilingual (bilingual) file. QA programs analyze it for the presence of the most common errors based on formal features. Let's figure out what errors we are talking about.

The program checks the correct placement of punctuation marks, non-compliance with the case of the first word, spelling errors, etc.

If the source text contains numbers and abbreviations that are not in the translated text, this will not go unnoticed.

QA programs get rid of the "space problem": they detect them at the end of a paragraph, before punctuation marks, and also find double spaces.
That is, they analyze and mark as "suspicious" those inconspicuous errors that the human eye may simply not pay attention to. Quality control programs can do even more. If the meaning of a term does not match the official interpretation, or if the translated text turns out to be too short or long compared to the original, be sure that the program will notify you. Specialized quality checking programs, such as Xbench, Verifika, Error Spy, provide more efficient analysis of texts and help to detect errors more thoroughly. But, armed with software algorithms, the most correct translations will be created automatically. After all, the translator must check and control each stage of software processing of texts.

The programs we talked about cannot do all the work instead of a translator. In addition, the result of the program does not guarantee the correct translation. If all the formal signs of a correct text are observed, then the program algorithm can accept a random set of words as "truth". CAT and QA programs were not created to replace professional translators.

They are their assistants, and are intended only to simplify and speed up the translation. It is the translator who gives the finished look to the translated text, deciding which prompt of the program to use and which to discard.

Everyone benefits from the use of automated translation software and its quality control.

Customers will be able to save money, translators will fulfill more orders, and readers will receive a quality text. And the more texts you translate in such programs, the more efficiently they will make subsequent translations. So, you will save even more time and fulfill even more orders. Using automated translation and quality control programs gives you a powerful competitive advantage.

Conclusions

Information technologies in translation activities intended for mastering modern information technologies used under time of translation activity. The main focus of the research is aimed at studying specialized software, in particular, automated translation systems that can solve a wide range of tasks, typical for the process of translation in the conditions of technological processes. The article analyzes the main issues of the problem, defines the tasks and offers ways to solve them using modern software.

The practical result of the work is a study of the implementation of information systems through the use of software products, which helped not only to reduce resource costs, but also to solve a number of other tasks. It is to ensure the quality of translation activities that future translation specialists must have skills in working with modern software. The continuous development of the information society determines the need for the formation of information competence. It is she who occupies the main place place in the list of competencies that a modern specialist should possess. A high level of its formation will allow young specialists to use CAT systems for effective solution of professional tasks.

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