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COMPARING THE PERFORMANCE CAPABILITIES OF WORKING IN THE COMPUTER-ASSISTED TRANSLATION SYSTEMS SDL TRADOS AND SMARTCAT

Abstract: nowadays automated translation systems are actively employed by specialists in the translation environment as a useful auxiliary tool for solving specific problems. The most popular ones are SDL Trados and SmartCAT systems. However, when prioritizing over a particular CAT-system, it is necessary to remember that each programme has its own strengths and weaknesses. In this article, we offer a universal algorithm for comparing the performance capabilities of working in computer-assisted translation tools. This paper draws a distinction between the two systems - cloud SmartCAT and desktop SDL Trados. The following evaluation criteria were distinguished: a set of functions, the price of the product, the mobility of the system, technical support and feedback, and the availability of acquisition facilities for new users.

Key words: Translation Memory, CAT-tools, machine translation, cloud computing, IT, linguistics, SmartCAT, SDL Trados.

Over the past decade, the requirements for the work of a translator have undergone tremendous changes. Today it is not enough to translate the text, using computer as a character-by-character printing mechanism. The customer expects the composition and design of the translated document to correspond to the original as accurately as possible, and, at the same time, answer the standards accepted in the country. The translator also requires the ability to efficiently use previously completed assignments on the same theme, and the employer, in turn, expects a noticeable time and cost saving in translating similar fragments of the text.

These rigid, often contradictory, requirements can be met only if the translator not only perfectly knows native and foreign languages and has

thoroughly studied the chosen subject domain, but also feels confident in modern computer technologies and translation systems.

Nowadays automated translation systems are actively employed by specialists in the translation environment as a useful auxiliary tool for solving specific problems. Computer-assisted translation or CAT is a form of translation wherein a human translator translates texts using computer software designed to support and facilitate the translation process. Computer-assisted translation is sometimes called machine-assisted, or machine-aided, translation. Some advanced computer-assisted translation solutions include controlled machine translation (MT) [8].

Computer-Aided Translation (CAT) tools are software applications that assist in translating content from one language to another. They usually include several component technologies in a single integrated workbench, such as document editors, terminology management, and translation memory. The tools have evolved along with the computing and networking industries, first as stand-alone software to be used on a single computer, then client-server tools to be used on a company network, and most recently to cloud-based tools delivered via Internet [9].

Translation memory is a database containing a set of previously translated texts. One entry corresponds to a "translation unit", or a sentence, in most cases. Most translation memory systems, at a minimum, support the creation and use of personal dictionaries, new databases on parallel texts, and semi-automatic extraction of terminology from original and parallel texts.

Zvereva N.S. and Terekhova E.V. [1, 4] agree that the advantages of using CAT-systems are as follows:

- possibility of a preliminary translation of the entire text;
- complete re-translation of the modified document is practically excluded;
- complex mathematical mechanism for searching similar expressions and terms makes it possible to find more variants, for example, without case endings;
- uniformity of the translation is ensured, thereby reducing the time spent on editing, and the editing process makes a quantum leap;
- automation of all routine operations (for example, automatic replication of similar fragments of the source text) significantly reduces the labor costs of translators and allows to pay more attention to the translation as such;

– minimal labor effort for the execution of work within the time limit.

Despite the fact that programmes using translation memory technology are called CAT-systems, they are not to be confused with machine translation programmes – translation memory does not translate anything by itself, it only helps a human translator, while the machine translation is based on generation of translations according to the results of grammatical analysis of the source text [9].

The most popular CAT-systems by now are SDL Trados and SmartCAT. The SDL Trados system belongs to the family of the very first desktop CAT-systems based on the Translation Memory technology, originally developed by the German company «Trados GmbH». This programme consists of modules designed to translate texts of various formats, as well as to maintain terminology databases. The latest version of SDL Trados today is SDL Trados Studio 2017.

SmartCAT is the first cloud system in Russia, created for complex automation of translation processes, as well as for improving convenience and efficiency of translators' work. At the same time, SmartCAT does not require installation: one can work on any computer connected to the Internet.

However, when choosing a particular CAT-tool, it is necessary to remember that each program has its own strengths and weaknesses. We have developed a cross functional algorithm for comparing the performance capabilities of working in computer-assisted translation systems. This paper draws a distinction between the two systems - cloud SmartCAT and desktop SDL Trados. The following evaluation criteria were distinguished: a set of functions, the price of the product, the mobility of the system, technical support and feedback, and the availability of acquisition facilities for new users. Having analyzed the functionality of these systems according to the selected criteria, we came to the following conclusions.

The criterion of price. An obvious advantage of the SmartCAT system is that it remains free for freelancers. Commercial additional functions of SmartCAT are, for instance, connection to the system of recognizing scanned documents, more powerful machine translation resources, which may be necessary for a translator with the growth of his/her professional experience. The license to use the SDL Trados system

requires payment. An entry-level user may need more time to repay the cost of a license than an experienced and sought-after one.

The criterion of training. A distinctive feature of SDL Trados is the certification program, which allows obtaining an official document confirming the skill level of the system - excellent opportunity to increase one's competitiveness in the translation market. SmartCAT was originally developed with the simplest interface possible and expectation that a translator will spend minimum time to learn the functions of the system and start working in the cloud system almost immediately. In addition, there is an integral system of tooltips.

The criterion of functionality. In the basic version of SDL Trados Studio for freelancers, a wide range of functions and options is implemented, including the processing of almost all known formats, matching previously done translations to create new translation databases, configuring the new projects, automatic verification, the AutoSuggest function, etc. In addition, SDL Trados Studio provides the translator with an unlimited opportunity to integrate additional tools to improve productivity.

A set of functions of the basic free version of SmartCAT is being constantly supplemented by the developers of the system. To increase productivity, the translator can use the SmartCAT application store, where additional machine translation resources are available, including the new Lilt machine translation. The advantage of the SmartCAT system is the ability to search for customers on the SmartCAT platform, that can be a great help for starting translators.

The criterion of mobility. SmartCAT is a cloud system, so one only needs a browser and the Internet connection. However, the weak side of the cloud system is a failure to work with Internet connection interruptions and periodic braking of the cloud server itself.

The SDL Trados license allows a person to install the system on two computers. Thus, a translator can work in the office and at home. Moreover, a translator can continue to work in the SDL Trados system in case of Internet connection interruptions. In the latest versions of SDL Trados Studio, the function of connecting to cloud services through the GroupShare module is also implemented. Furthermore, one can access additional machine translation resources through the Language Cloud module.

Taking all the aforesaid into consideration, SmartCAT can be recommended, most notably, to novice translators who wish to quickly master and start using the CAT-tool, as well as to learn how to offer their services in the translation market. SDL Trados is oftentimes chosen by experienced translators who are engaged in the translation industry on a permanent basis, work with a variety of document formats and wish to improve their competitiveness in the translation market.

CAT-systems have become irreplaceable helpers for the translator, because they, in fact, perform all the routine work: conform the use of the terminological glossary, avoid the re-translation of the same material, herewith reducing the time required for translation. This algorithm of comparing the performance capabilities of working in CAT-systems can serve as a material for future studies on similar themes, as well as the basis for creating a comprehensive practical course on the basics of working in such systems for students.

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СРАВНЕНИЕ ВОЗМОЖНОСТЕЙ РАБОТЫ В СИСТЕМАХ АВТОМАТИЗИРОВАННОГО ПЕРЕВОДА SDL TRADOS И SMARTCAT

Аннотация: за последние годы объем переводимых документов существенно вырос и продолжает увеличиваться. Поэтому сегодня особенно актуален вопрос поиска путей для максимальной автоматизации процесса перевода, осуществляемого человеком, чтобы, с одной стороны, максимально облегчить труд человека-переводчика, а с другой – сделать этот труд максимально эффективным. На помощь приходят компьютерные технологии. На сегодняшний день системы автоматизированного перевода активно используются специалистами в переводческой среде как полезный вспомогательный инструмент для решения определенных задач.

Одними из таких инструментов являются CAT-системы SDL Trados и SmartCAT. Однако при выборе той или иной CAT-системы необходимо помнить, что у каждой программы есть свои сильные и слабые стороны. В данной статье предлагается универсальный алгоритм сравнения возможностей работы в системах автоматизированного перевода. В данной работе сравниваются две системы – облачная SmartCAT и десктопная SDL Trados. В качестве критериев оценки были выбраны: набор функций, цена продукта, мобильность системы, техническая поддержка пользователей и возможность обучения работе в системе для пользователей.

Ключевые слова: память переводов, автоматизированный перевод, машинный перевод, облачные технологии, лингвистика, информационные технологии, SDL Trados, SmartCAT.

СПИСОК ЛИТЕРАТУРЫ:

1. Зверева, Н.С. Актуальность использования автоматизированных систем перевода [Текст] / Н. С. Зверева // Вестник ун-та дружбы народов. Вопр. образования. Яз. и специальность. — 2008. — № 2.
2. Зубов, А.В. Информационные технологии в лингвистике [Текст] / А.В. Зубов, И.И. Зубова // М.: Академия, 2004.
3. Новожилова, А.А. Обучение студентов-переводчиков работе с электронными ресурсами как основа их будущей конкурентоспособности и успешности [Текст] / А.А. Новожилова, Е.А. Шовгенина // Вестник Волгоградского государственного университета. Серия 6, Университетское образование. — 2013. — №14. —
4. Терехова, Е.В. Современные тенденции развития автоматизированного перевода [Текст] / Е.В. Терехова // Научный вестник Воронежского государственного архитектурно-строительного университета. Серия: Современные лингвистические и методико-дидактические исследования. — 2006. — № 5.
5. Bowker, L. Computer-Aided Translation Technology: A Practical Introduction / L. Bowker. — Ottawa: Univ. of Ottawa Press, 2002.

6. Clark, J. Cloud computing: 10 ways it will change by 2020 / Jack Clark // Cloud Watch. — 2012.
7. Correlations between productivity and quality in a professional environment // MT Magazine. Post-editing Volume 28, December 2014. — Issue 3-4.
8. Hutchins, W. J. Current commercial machine translation systems and computer-based translation tools: system types and their uses // International J. of Translation. — 2005. Vol. 17. № 1-2.
9. Zetzsche, J. Promising new contender not quite where it should be for a fully-released tool / J. Zetzsche // Multilingual. — April/May 2015.