**ATTITUDES OF HUFLIS STUDENTS TOWARDS THE CAT TOOL’S MODULES IN THE CHATGPT ERA**

**Abstract**

CAT tools are regarded as an essential device used by most translators and interpreters in the world’s translation commnunity which has significantly affected the quality, speed and cost of translated documents. Due to the increasing needs of the translation industry, studies on CAT tools always become of great concern for students from the University of Foreign Languages and International Studies (HUFLIS), Hue University, Vietnam, particularly, in the increasingly developing period of ChatGPT. This paper presents the attitudes of the senior students majoring in English interpreting and translating at HUFLIS towards the modules of CAT tools’ application in their translation work, especially in the ChatGPT era. Qualitative and quantitative approaches are used in this study to analyze the questionnaire given to 117 participants and the interview of 10 students in order to survey their needs and attitudes towards this module generally and particularly under the ChatGPT impacts in the future. From the results obtained, we offer some suggestions to deal with the challenges of the ChatGPT influences on the translating and interpreting work for students majoring in English and other foreign languages as well.

**Keywords:** CAT tools, ChatGPT, translating and interpreting

**1. Introduction**

 Nowadays when Chat GPT becomes a controversy issue for those who are working in all the domains relating to technology, translating and interpretating, one of the most influenced industries, is not an exception. In fact, it is common that many translators and interpreters often use CAT (computer-assisted translation) tools when translating or interpreting a document or speech from one language to another. Meanwhile, the appearance of ChatGPT, a smart innovative artificial intelligent (AI) language model, has remarkable impacts on those whose jobs are related to the most powerful technological CAT tool. A series of questions have been raised by students and lecturers majoring in translating and interpreting as follows: How can a translator or an interpreter cope with the AI development in his translating or interpreting job? In what way should the courses on CAT tools be designed to adapt to the new needs of learners?

It is impossible to deny the importance of computer technology and the Internet’s advancement in the translation industry, which has not been taken into consideration by many linguists, translators, and interpreters in general. First, many linguists and translation experts (Stephen, 2016) state that technological advances have led to unprecedented changes in translation as a means of interlingual communication, especially two major technological developments in contemporary translation including CAT tools and machine translation (MT), which have increased productivities and quality in translation but these tools also represent significant challenges and uncertainties for the translation profession and the industry. In highlighting the need for increasing awareness and technological competences, the training courses on the CAT tool applications have offered students majoring in translating and interpreting a variety of opportunities to access the advanced facilities supporting their study such as cloud-based and non-cloud-based CAT tools. Furthermore, the rapid AI development of a more and more popular ChatGPT product has provided both learners and lecturers with a wide range of benefits and challenges. In a positive way, ChatGPT can bring the translators and interpreters some benefits in terms of the time and labour reduction and the highly increasing quality of translation work. However, it makes them redundant or unemployed in the job market due to the obvious replacement of smart machines.

 What is more, when CAT tools and MT have been widely used by practitioners and students majoring in translating and interpreting, they are still learning how to adapt to the technological changes so that they can find the most useful and efficient way to do their translation work. Making suggestions to improve the quality of CAT tool courses remains essential and urgent in the tertiary education system, including colleges, universities and institutes at the present time in order that the facilitators or lecturers will be able to change the module’s contents properly to meet the real-life occupation requirements.

 Finally, since there haven’t been any studies on these latest issues of AI and CAT tools in the translation domain in Vietnam so far, this study becomes vital and crucial for the translation community generally and students and lecturers majoring in translating and interpreting. While some previous studies on CAT tools have been carried out in recent years, there is a lack of research on ChatGPT and its impacts on CAT tool training courses.

 For the reasons mentioned above, we have conducted this research on the students’ attitudes toward the CAT tools’ courses by responding to the following questions:

1/ What are the attitudes of students majoring in translation and interpretation towards the courses on CAT tools?

2/ What are the impacts of ChatGPT on the CAT tools’ modules?

3/ What suggestions do students make to improve the quality of these courses in the Chat GPT era?

**2. The CAT tools’ modules and ChatGPT**

**2.1 The modules of CAT tools**

Concerning the curricula for training English language bachelors at HUFLIS, there are three modules relating to technology application such as computer-assisted translation system, online resources for translators, and technology-assisted interpreting. Those modules help students raise awareness of the crucial role of the CAT tools’ application in their translation and interpretation work to meet society’s requirements. In addition, learning how to use some popular CAT tools is one of the main purposes that students desire to obtains when they attend these courses. With the specific targets of achieving good knowledge, competence and responsibility, these courses have also offered students various opportunities for the professional development and experience exchanges in the translating and interpreting domain. Students are provided with the techniques of using different CAT tools like OmegaT, Wordfast, Déja Vu, MemoQ, MemSource, SDL Trados, SmartCAT, MateCAT, etc. in their translation practice.

 Besides, they are brought many opportunities to conduct some individual and group-work projects of creating their products including translating and subtitling films, cartoons, games shows, music performances, etc. and translating and designing posters and brochures for advertisements, and building parallel corpora on various themes for their professsional translation work. It is evident that CAT tool modules have been powered by the AI; hence, they have been significantly influenced by the AI products’ development. Among those AI’s products, ChatGPT regarded as a language model has offered some considerable changes to those modules relating to the translating and interpreting domain.

**2.2 ChatGPT**

**2.2.1 What is ChatGPT?**

 ChatGPT (Generative Pre-trained Transformed) is defined as an innovative artificial intelligence (AI) language model developed by OpenAI, one of the leading AI research organizations in the world (Impact of ChatGPT on Payments in 2023). According to some IT experts, it is recognized as an advanced deep learning system that has been built to understand, analyze and generate human-like language, making it one of the most powerful conversational AI tools available at the present.

 The development history of ChatGPT has begun since 2018 with the release of the first version, GPT-1, followed by GPT-2 in 2019, GPT-3 in 2020 and GPT-4 in 2023. According to the AI weblink statistics, GPT-1 contains 0.12 billion parameter, GPT-2 has 1.5 billion parameters, whereas GPT-3 has more than 175 billion parameters, and GPT-4 is rumored to have more than 1 trillion parameters (GPT-1 to GPT-4: Each of OpenAI's GPT Models Explained and Compared). With the exponential increase in the GPT’s size, it has played a crucial role in the technology world such as natural language processing, artificial intelligence, computer science, etc., as well as the social sciences and humanities like history, psychology, economics, and so forth.

**2.2.2 Chat GPT’s impacts on employment**

 According to the researchers’ findings since March 2023, approximately 80% of the U.S. workforce could have at least 20% of their work tasks affected by the GPT’s introduction, while around 19% of workers may see at least 50% of their tasks impacted (Tyna, Sam, Pamela, & Daniel, 2023). In Vietnam’s journal of education, there is an article indicating that a variety of occupations relating to social science and communications will be drastically influenced by the ChatGPT’s release, especially teachers, designers, journalists, and so on (Anh Trang, 2023). That is to say, the GPT’s appearance and its lightening development have a significant influence on labour resources around the globe.

 It is evident that ChatGPT has numerous applications in various industries, including customer services, education, healthcare, and entertainment. It can be used in chatbots and virtual assistants to provide personalized and responsive customer support. It can also be used in language translation, content creation, and social media analysis. With the great support of ChatGPT, all the employees’ missions can be implemented fast and effectively in the shortest time, which leads to the redundancy of labourers.

**2.3 Previous studies**

ChatGPT, one of the latest technological achievements, has been taken into great consideration by many IT experts. Until now there have been some studies concerning the ChatGPT impacts on the translation and interpretation in general and CAT tools in particular. Take the example of the project by Wenxiang et al. (March, 2023), who reported a preliminary evaluation of ChatGPT for machine translation, including translation prompts, multilingual translation, and translation robustness. With some translation experiments, they find that ChatGPT performs competitively with commercial translation products (e.g., Google Translate) on high-resource European languages but lags behind significantly on low-resource or distant languages. With the launch of the GPT-4 engine, the translation performance of ChatGPT is significantly boosted, becoming comparable to commercial translation products, even for distant languages (Wenxiang et al., 2023). Therefore, ChatGPT has already been regarded as a good supporter for translators and interpreters.

 Moreover, another group of researchers have carried out the translation experiment of radiology reports using ChatGPT and GPT-4. According to the evaluation by radiologists, ChatGPT can successfully translate radiology reports into plain language with an average score of 4.27 in the five-point system with 0.08 places of information missing and 0.07 places of misinformation (Qing et al.,2023). Besides, ChatGPT also presents some randomness in its responses with occasionally over-simplifed or neglected information, which can be mitigated using a more detailed prompt. Hence, ChatGPT can signifcantly improve the quality of translated reports (Qing, L. et al. 2023).

**3. Methodology**

**3.1 Participants**

 The participants in this study are 117 senior students majoring in translation and interpretation at the Department of English, HUFLIS. The group of students consists of 101 females and 16 males who were chosen with regard to their convenience and volunteered to participate in this study. Among these 117 students there are 10 chosen randomly to be interviewed in person.

**3.2 Research design**

 This study focuses on both qualitative and quantitative research approaches in revealing the needs and attitudes of students towards the CAT tool modules in general and the ChatGPT impacts in particular. Along with the questionnaires given to students, the face-to-face interview is used to obtain a more profound understanding and specific concerns about the ChatGPT’s influence on their future translation work. Thus the qualitative approach in this study is completely appropriate. Furthermore, the analysis of 117 questionnaire responses requires a quantitative approach to provide statistics on students’ needs and thinking about CAT tool courses generally and in ChatGPT in particular. Hence, the combination of these two approaches could offer reliable results.

* 1. **Research instruments for data collection and analysis**

 The data were collected by means of the following procedures: 1. Questionnaires designed and administered to students include four main parts: A. personal information; B. understanding of the CAT tools’ modules ; C. attitudes towards the CAT tools’ modules; D. the ChatGPT’s impacts on the CAT tools’ modules (see Appendix A); 2. Follow-up interviews (see Appendix B) were used to ask for more details in order to clarify findings obtained through questionnaires. Multiple-choice questions were analyzed by percentage. Those findings were further demonstrated on charts and tables. For the 5- Likert scale (1-Not at all well, 2-Not very well 3-Somewhat so well, 4-Very well, 5-Extremely well or *1-Strongly disagree, 2-Disagree 3-Neutral, 4-Agree, 5-Strongly agree)*, a descriptive statistics using the percentage was employed.

1. **Results and discussion**

**4.1.Students’ understanding of CAT tool modules**

 Concerning the second part of the questionnaire for 117 students, there are 7 questions raised to find out the students’ understanding of the CAT tools modules. The findings show that 82 students (70%) have taken the course "Computer- Assisted Translation Systems" before while 35 students (30%) haven’t yet (Q1). The majority of students state that from this course they have learned the following CAT tools: Omega T, Wordfast, Déjà vu, CafeTrans Espresso, Smart CAT, MateCAT, MemoQ, and SDL Trados when being asked Q2 *“Which CAT tools have you learned from this course?”* Relating to Q3 *“Which CAT tools have you learned by yourself or been introduced by your friends/lecturer?”,* the participants mention various CAT tools such as Fluency Translation Suite, Redokun, Across, Meta Texis, Textunited, Xbench, Phrase, Memsource, Localise, Fluency Now, Transifex, Swordfish, and so on. However, 96% of students prefer using Wordfast and SmartCAT in their translation.

 Question 5 *“What is your product conducted by applying the CAT tools in this course?”* has received the highest rate of replies concerning the product of videos (films, cartoons, documentaries) (52 %), then the entertainment programmes (talkshows, gameshows, and Vlogs) with 22%, comic book (10%) , brochure or advertisments (9%), and other products (7%). To conduct these projects, the participants have used different CAT tools like Wordfast, Localise, Swordfish, Redokun, Across, Metatexis , Memosource, Phrase, Crwodin, etc. when answering Q6 *“Which CAT tool have you used for making your product?”* In addition to CAT tools, students have used a range of software to implement their products including Downsub, Format Factory, Subscene, Subtitle Edit 3.6.7, Capcut, Subtitle Edit, Sub Editor, Adobe Photoshop, Aegisub, Camtasia, and so forth. That is to say students have some knowledge of CAT tools and technology supporting the translation industry during and before their attendance at those CAT tools.

**4.2 Students’ attitudes towards the CAT tool modules**

The second finding relating to students’ feedback on the CAT tool modules indicates their attitudes towards this course, as shown in Table 4.1.

**Table 4.1: Students’ feedbacks on the CAT tool course**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Questions** | **1** | **2** | **3** | **4** | **5** |
|  | Percentage |
| Q8. How effective are these courses for your major improvement? | 0.6 | 7.8 | 21.6 | 51.2 | 24.3 |
| Q9. How easy do you feel when attending these courses? | 12.4 | 3.5 | 43.1 | 26.8 | 14.2 |
| Q10.How happy are you when you participate in these courses? | 1.3 | 4.6 | 19.9 | 53.3 | 20.9 |
| Q11.Overall, are you satisfied with these courses? | 0.6 | 8.0 | 22.4 | 58.1 | 10.9 |
| Q12. How likely are you to recommend these courses to other students? | 1.4 | 4.5 | 23.1 | 56.8 | 14.2 |

*Note: 1-Not at all well, 2-Not very well 3-Somewhat so well, 4-Very well, 5-Extremely well*

 In fact, the majority of students (51.2%) explore the effectiveness of these courses in enhancing of their translation capacities, and 43.1% of them feel somewhat at ease when attending these courses. It means that they have to make great efforts to achieve their high qualifications in translation domains with technology support. Interestingly, the highest proportion of participants feel happy when participating in these modules and the same rate (58.1%) become satisfied with the courses. Therefore, most students would like to recommend these modules to other students in order to improve their translation qualifications.

 However, there are still many obstacles to deal with the preferred CAT tools in their translation. From the responses in the questionnaire and interviews, we find out some challenges relating to techniques or programme errors, the quality and effectiveness of translation tools which require considerable human intervention. Sometimes it takes a lot of time for beginners to learn how to use some software due to its complicated instruction or their lack of IT knowledge. According to Student S1 (interview), although there are numerous CAT tools, each one has certain weaknesses, such as the absence of a free version, the inability to export bilingual files, or a lack of a non-cloud-based version. Student S2 says that some software has too many steps to proceed which can be confusing for beginners. That is to say the use of CAT tools requires good knowledge of IT and frequent practice to become familiar with these new devices.

 To answer question 14 *“What challenges have you coped with when conducting your project?”*, many participants state that when they translate subtitles and put them into a long video it's still quite awkward in the process of getting used to these applications, and the translation speed is still slow. Furthermore, creating a video requires carefulness, and high concentration so they need to be patient to accomplish the project. Some CAT tools do not have enough TM capacity for a huge amount of texts.

 Concerning the question 15 “*What experience have you obtained from conducting your project to share with other people?”*, both interviewees and questionnaire participants mention the valuable lessons on the methods of using some CAT tools such as Wordfast, CafeTran Expresso, Smart CAT, MateCat, etc. and other software supporting the conduct of many projects like videos, films, music shows, and comic books’ translation as well. Since then, their technology expertise has been improved dramatically. For instance, they have raised their awareness of getting subtitles from YouTube or inserting subtitles into the videos with Wondershare Filmora software. Although there is a support webpage named Downsub, the webpage's correct probability is about 85%, so they have to cope with some solutions for using these tools more effectively. Besides, in the process of making videos or films, Aegisub is one of the most popular and efficient tools used to create and export the new subtitles but not to upload the subtitles into the video, thus it requires another app called Format Factory to conduct this project.

 Finally, for the question 16 *“What are benefits of building your corpus in translation work?”*, the majority of participants agree that it has helped them create a glossary of the terms related to the domain of which they are interested in translating documents. Furthermore, this corpus has supplied a large number of materials translated which are very useful for them in translating and interpreting work. What is more, the challenges of using CAT tools and other technological devices have been taken into great consideration in the era of ChatGPT since its development dominates many fields, in particular the translating and interpreting industry.

**4.3 The ChatGPT’s impacts on CAT tools’ modules**

 This study’s findings completely indicate both positives and negatives influences on CAT tool module. First, it cannot be denied many benefits Chat GPT has brought to the translation and interpretation work. According to the Questionnare on the ChatGPT’s positive impacts on CAT tool modules, 53.7% of participants agree and 34.3 % of them strongly agree that ChatGPT helps to increase the translating speed and improve the translating quality. This finding is similar to the interview responses by Students S2, S5, and S6 since ChatGPT is much better at processing the natural languages and analyzing the context in comparison with the traditional CAT tools.

 Second, it can save time, labour work (46.8% participants agree and 34.2% strongly agree) and offer high assistances in teaching and learning CAT tools due to its huge amount of data/resources in most of domains (46.8% participants agree and 34.2% strongly agree). Furthermore, students can refer to ChatGPT's translation method, for example, which can understand the content of a passage, new words or phrases, etc. of translation products. Truly speaking, ChatGPT supports a considerable increase in translation and interpretation speed and quality.

**Table 4.2: ChatGPT’s positive impacts on CAT tools’ module**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Questions** | **1** | **2** | **3** | **4** | **5** |
| ***Positive impacts*** | **Percentage** |
| Q17. ChatGPT helps to increase the translating speed and improve its quality compared to the traditional CAT tools  | 1.6 | 2.8 | 7.6 | 53.7 | 34.3 |
| Q18. ChatGPT can save time and labour of translation work. | 1.4 | 3.5 | 14.1 | 46.8 | 34.2 |
| Q19. ChatGPT can be easily and simply used by all the users who have or do not have the CAT tool knowledge. | 1.2 | 4.8 | 19.9 | 47.3 | 21.8 |
| Q20. ChatGPT supports the CAT tools’ users much more thanks to their understanding of CAT tools’ functions, features and interface. | 2.0 | 9.6 | 12.4 | 45.1 | 30.9 |
| Q21. ChatGPT offers high assistances in teaching and learning CAT tools due to its huge amount of data/resources in most of domains. | 0.7 | 10.8 | 14.5 | 46.8 | 27.2 |

*Note:1-Strongly disagree, 2-Disagree 3-Neutral, 4-Agree, 5-Strongly agree*

 However, using ChatGPT cannot help students solve the intercultural communication problems between the source language and the target language. ChatGPT still has certain limitations, so it is difficult to make sure it has the ability to fully convey the spirit and meaning of a message or a product. ChatGPT can still do a good job of translating popular contents, but it is difficult to replace humans in more advanced activities, like translating literary works. On the negative side, students gradually become overly dependent on ChatGPT as well as other machine translation tools, leading to lazy thinking and passivity (31.2 percent of participants agree and 44.3 % strongly disagree). Moreover, some translations require accuracy, such as specialized translations, so it is likely that AI does not fully understand the object and terminology of the translation. What is more, literary translation needs a lot of emotion and the translation must be soft and not rigid.

**Table 4.3: ChatGPT’s negative impacts on CAT tools’ module**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Questions** | **1** | **2** | **3** | **4** | **5** |
| ***Negative impacts*** | Percentage |
| Q22. ChatGPT makes users be passive and dependent on many machine systems. | 0.9 | 5.2 | 18.4 | 31.2 | 44.3 |
| Q23. ChatGPT cannot give the correct translation versions in the suitable contexts relating to the cultural elements | 0.3 | 6.1 | 22.6 | 26.8 | 44.2 |
| Q24. ChatGPT cannot give good translation versions of literature domain  | 2.9 | 6.1 | 18.8 | 51.3 | 20.9 |
| Q25. ChatGPT might reduce a large number of jobs such as translators, interpreters, educators, officers, etc. | 0.4 | 8.1 | 12.6 | 56.4 | 22.5 |
| Q26. ChatGPT requires users with CAT tool knowledge to spend much time and expenses on updating the new GPT versions all the time. | 2.0 | 11.9 | 23.9 | 36.8 | 25.6 |

*Note: 1-Strongly disagree, 2-Disagree 3-Neutral, 4-Agree, 5-Strongly agree*

Other students share their negative opinions of ChatGPT’s impacts on the CAT tool courses. Since the lecturer is always in charge of guiding students to grasp the process of using those tools in an effective way, ChatGPT merely gives instructions mechanically, or sometimes too technically for uninitiated users. In fact, ChatGPT might influence the CAT tool courses in term of applying AI to creating quick translation version and automatic feedback to translation questions while CAT tools just support users in translation work based on TM and previous translated documents to provide a better translation version. According to student S6, ChatGPT’s appearance has a special impact on the change and the way of using the traditional CAT tools, hence the instructors and lecturers should update the training curriculum, including the application of ChatGPT and similar technology in translation modules so that students are able to keep up with the necessary skills to use the new technology in the future. The most important things is that ChatGPT can improve the translation speed and reduce the time spent on simple translation versions; however, it still requires the humans’ intervention to assure the quality and accuracy of the translated documents.

 In student S7’s opinion, ChatGPT will provide some features such as automatic translation, context analysis and corpus suggestions, helping to improve the CAT tools’ translation capabilities. Moreover, ChatGPT is capable of handling complex natural languages, which increases the speed and quality of the translation process.

 In brief, ChatGPT is surely a supportive tool, but it has a considerable impact on the translator’s employment in the future. ChatGPT has influenced the CAT tools modules in both positive and negative points; nevertheless, the benefits outweighs the drawbacks that leads to its application into the CAT tool module’s development, for instance, in the enhancement of CAT tools’ functions like creating glossaries, correcting spelling and grammar structure mistakes, and so forth.

**4.4** **Students’ suggestions on CAT tools courses in the GPT era**

The findings from the questionnaire reveal that the majority of participants (31.2% agree and 26.3% strongly agree) suggest that the CAT tools’ modules should be regularly updated and improved to keep up with evolving trends and technologies. It is essential to add some parts to the module’s syllabus, for example, the introduction of ChatGPT to the translation industry, ChatGPT’s benefits and challenges in translation labour market, how to apply ChatGPT to improve the translation quality, etc. ,so that students could master this course. Hence, lecturers and/or instructors should change the contents and methods of teaching the CAT tools’ module based on ChatGPT application in the translation industry (see Table 4.4).

**Table 4.4: Students’ suggestions on CAT tools’ modules in the Chat GPT era**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Questions** | **1** | **2** | **3** | **4** | **5** |
|  | Percentage |
| Q27. The CAT tools’ module should be regularly updated and improved to keep up with evolving trends and technologies.  | 5.3 | 12.4 | 24.8 | 31.2 | 26.3 |
| Q28. This module’s lecturers should address how CAT tools can effectively integrate with ChatGPT to optimize workflow today. | 0.6 | 4.0 | 25.6 | 45.6 | 24.2 |
|  Q29. Lecturers and/or instructors should change the contents and methods of teaching the CAT tools’ module based on ChatGPT application in the translation industry.  | 2.7 | 8.9 | 19.1 | 36.9 | 32.4 |
| Q30. Learning facilities for CAT tools’ modules should be equipped with more advanced technology so that both lecturers and learners can communicate via online lessons, video conference rooms, etc. | 1.4 | 13.1 | 19.8 | 48.1 | 17.6 |

*Note: 1-Strongly disagree, 2-Disagree 3-Neutral, 4-Agree, 5-Strongly agree*

Concerning the CAT tools’ improvement, since some CAT tools have a limited TM size, the users have to divide their translation project into many sub parts. It is necessary to enlarge their TM sizes. Furthermore, some CAT tools are not allowed to be installed in the university’s computers, which disturbs students in the practical lessons; hence, the university should pay for these CAT tools’ accounts for use.

 In addition, according to other students’ opinions, in order to improve this course’s contents, it is very useful if the contents as well as the types of the projects’ products (videos, books, e-books, brochures, podcasts, etc.) are completely different. Students can obtain a variety of skills to enhance their expertise. It is essential to conduct surveys and gather feedbacks from current and previous students to share experiences and practical skills and to regularly update the course’s materials to reflect currents trends, technologies and industry development as well. Moreover, it is necessary to incorporate interactive and engage elements such as quizzes, case studies, and group projects to develop the student’s practical skills. Finally, the computers need to be equipped with more powerful network devices to access the Internet faster, and Windows software should be upgraded to a higher version for students’ convenience in using media.

**4.5. Suggestion of using ChatGPT in the CAT tool courses**

 When answering the question *“What do you suggest to apply ChatGPT to the CAT tool modules in the future?”* in the interviews, some students recommend using ChatGPT in the course on CAT tools as follows: user manual, analysis of translated documents, support for building CAT tool databases and distance teaching and learning. Others do believe that using ChatGPT is helpful in searching for a variety of CAT tools based on the lecturer’s requirements because many students often have trouble finding the right software to conduct their projects. ChatGPT AI translation technology should be introduced and applied in the traditional translation industry by providing proper vocabulary, phrases, or sentence structures. Last but not least, it is vital to hold some seminars, make discussions or provide practice sessions with translation experts and ChatGPT developers so that students can exchange and learn about different experiences of using ChatGPT in their translation work. Top of Form

**5**. **Conclusion and Implications**

 The study has been conducted in the English Faculty, HUFLIS to discover the attitudes of the senior students majoring in translating and interpreting towards the CAT tool modules, especially in the ChatGPT’s development era. The findings show their positive thinking of the benefits that ChatGPT has brought to the translation and interpretation domains such as the increase in translating speed and quality and the reduction of time and labour work; nevertheless, the challenges offered by ChatGPT are of worrying problems. Besides, gathering feedbacks from students or participants and incorporating their suggestions can greatly enhance the overall quality and effectiveness of courses, as well as contribute to improving the quality of teaching and learning facilities during this period of time.

 In addition, here are some implications provided based on the study results. First, for CAT tool courses’ learners, it is necessary for them to have not only good IT knowledge but also abilities of using these CAT tools in their translation work; thence, being active and professional at CAT tools’ application in real working life is also essential. Second, they should be aware of the ChatGPT’s impacts on many domains, among which are its remarkable influences on the translating and interpreting fields. For university learning and teaching facilities, it is vital to upgrade and enhance the university computers’ systems so that both lecturers and students won’t have to cope with the challenges of using computers connected to the Internet for their study.

 The research is limited due to the small number of participants (117 people) and 10 students joining the project; therefore, in the future, it will be developed in a larger number and scale, and not only focus on the students’ attitudes towards the CAT tool modules in the ChatGPT era, but also other courses in other languages like French, Japanese, Korean, Chinese, and so on.

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**Tóm tắt**

**THÁI ĐỘ CỦA SINH VIÊN CHUYÊN NGÀNH BIÊN PHIÊN DỊCH TIẾNG ANH CỦA TRƯỜNG ĐHNN HUẾ ĐỐI VỚI MÔN HỌC VỀ CÔNG CỤ HỖ TRỢ BIÊN DỊCH BẰNG MÁY TÍNH TRONG KỶ NGUYÊN CHATGPT**

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Công cụ hỗ trợ biên dịch bằng máy tính (CAT) là một thiết bị cần thiết được sử dụng bởi hầu hết các biên dịch viên và phiên dịch viên trong cộng đồng dịch thuật trên thế giới, điều này đã ảnh hưởng đáng kể đến chất lượng, tốc độ cũng như giá thành của tài liệu dịch thuật. Do nhu cầu ngày càng cao của ngành dịch thuật, việc nghiên cứu về công cụ CAT luôn trở thành mối quan tâm lớn của sinh viên trường Đại học Ngoại ngữ (HUFLIS), Đại học Huế, Việt Nam, đặc biệt trong thời đại ChatGPT đang ngày mỗi phát triển. Bài báo này trình bày thái độ của sinh viên năm cuối chuyên ngành biên phiên dịch tiếng Anh tại ĐHNN Huế đối với môn học về công cụ CAT trong ngành dịch thuật, đặc biệt trong kỷ nguyên ChatGPT. Phương pháp định tính và định lượng được sử dụng trong nghiên cứu này để phân tích bảng câu hỏi cho 117 người tham gia và phỏng vấn 10 sinh viên nhằm tìm hiểu về nhu cầu và thái độ của SV đối với môn học này nói chung và đặc biệt dưới sự ảnh hưởng của ChatGPT trong tương lai. Từ những kết quả thu được, chúng tôi đưa ra một số đề xuất đối với những thách thức về tác động của ChatGPT đối với ngành biên phiên dịch tiếng Anh cũng như các ngoại ngữ khác.

**Từ khóa:** công cụCAT, ChatGPT, biên dịch và phiên dịch

**APPENDICES:**

**APPENDIX A:**

**QUESTIONNAIRE FOR HUFLIS STUDENTS MAJORING TRANSLATING AND INTERPRETING TO INVESTIGATE THEIR ATTITUDES TOWARDS THE CAT TOOLS’ MODULES IN THE CHATGPT ERA**

Respondent’s code:….

This questionnaire is designed to collect data for the research “Attitudes of HUFLIS students majoring in translating and interpreting towards the CAT tools’ modules in the ChatGPT era”. It would be of great help if you could provide your information and fully answer all the following questions by putting a tick (🗸) for your choices. All the information you provide will be kept confidential and used for research purposes only. Your cooperation plays an important part in the research’s success. Thank you very much!

1. **Personal information: Please give some personal information for the following questions:**

1. Gender: 🞏 Male 🞏 Female

2. Which major are you in?

🞏 Translating 🞏 Interpreting

3. Where are you from?

🞏 Hue City 🞏 Outskirt of Hue 🞏 other provinces

Please answer the following questions by giving your own ideas:

1. **Understanding of CAT tool module**
2. Have you taken the course "Computer-Assisted Translation Systems" before?

🞏 Yes 🞏 No

1. Which CAT tools have you learned from this course?

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1. Which CAT tools have you learned by yourself or been introduced to your friends or lecturer?

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1. Which CAT tool do you prefer to use in your translation?

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1. What is your product conducted by applying the CAT tools in this course?

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1. Which CAT tool have you used for making your product?

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1. Besides CAT tools, which software have you used for implementing your product?

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**C. Attitudes towards the CAT tools’ module**

Please answer the following questions by putting a tick for your choices:

***(1-Not at all well, 2-Not very well 3-Somewhat so well, 4-Very well, 5-Extremely well)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Questions* | **1** | **2** | **3** | **4** | **5** |
| 8.How effective are these courses for your major improvement? | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 9. How easy do you feel when attending these courses  | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 10.How happy are you when you participate in these courses? | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 11. Overall, are you satisfied with these courses? | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 12. How likely are you to recommend these courses to other students? | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |

1. What obstacles have you dealt with your preferred CAT tool in your translation?

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1. What challenges have you coped with when conducting your project?

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1. What experience have you obtained from conducting your project to share with other people?

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1. What are the benefits of building your corpus for translation work?

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1. **ChatGPT’s impacts on the CAT tools’ module**

Please answer the following questions by putting a tick for your choices:

***(1-Not at all well, 2-Not very well 3-Somewhat so well, 4-Very well, 5-Extremely well)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Positive impacts* | **1** | **2** | **3** | **4** | **5** |
| 17.ChatGPT helps to increase the translating speed and improve its quality compared to the traditional CAT tools  | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 18. ChatGPT can save time and labour on translation work. | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 19.ChatGPT can be easily and simply used by all the users who have or do not have any CAT tool knowledge. | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 20. ChatGPT supports the CAT tools’ users much more thanks to their understanding of the CAT tools’ functions, features and interface. | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 21. ChatGPT offers high assistances in teaching and learning CAT tools due to its huge amount of data and resources in most domains. | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Negative impacts* | **1** | **2** | **3** | **4** |
| 22. ChatGPT makes users passive and dependent on many machine systems  | 🗌 | 🗌 | 🗌 | 🗌 |
| 23. ChatGPT cannot give the correct translation versions in the suitable contexts relating to the cultural elements | 🗌 | 🗌 | 🗌 | 🗌 |
| 24. ChatGPT cannot give good translation versions of literature domain  | 🗌 | 🗌 | 🗌 | 🗌 |
| 25. ChatGPT might reduce a large number of jobs such as translators, interpreters, educators, officers, etc. | 🗌 | 🗌 | 🗌 | 🗌 |
| 26. ChatGPT requires users with CAT tool knowledge to spend much time and expense updating the new GPT versions all the time. | 🗌 | 🗌 | 🗌 | 🗌 |

**E. Students’ suggestions on the development of CAT tools’ module**

Please answer the following questions by putting a tick for your choices:

***(1-Not at all well, 2-Not very well 3-Somewhat so well, 4-Very well, 5-Extremely well)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | 5 |
| 27. | The CAT tools’ module should be regularly updated and improved to keep up with evolving trends and technologies  | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 28 | This module’s lecturers should address how CAT tools can effectively integrate with ChatGPT to optimize workflow today |  |  |  |  |  |
| 29 |  Lecturers and/or instructors should change the contents and methods of teaching the CAT tools’ module based on ChatGPT application in the translation industry.  | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |
| 30 | Learning facilities of the CAT tools’ modules should be equipped with more advanced so that both lecturers and learners can communicate via online lessons, video conference rooms , etc. | 🗌 | 🗌 | 🗌 | 🗌 | 🗌 |

**APPENDIX B: INTERVIEW QUESTIONS**

Interviewee: ………………………Intended duration: …………..mins

University: ……………………. Interview began: …………………. Date: ……………………

Interview finished: ………………..Location: …………………. Actual duration: ………..mins

1. What do you know about ChatGPT?

2. What are the impacts of ChatGPT on the human’s society today?

3. In your opinion, how has ChatGPT influenced the translating and interpreting job in the future?

4. What can you do to deal with the ChatGPT impacts on the job market?

5. How can you apply the CAT tool’s knowledge in the ChatGPT era?

6. What do you desire to learn from the CAT tool’s modules?

7. What influence does ChatGPT offer the learners and instructors of CAT tools’ modules?

8. What do you suggest to apply ChatGPT to the CAT tool modules in the future?