

## **CHATGPT AND ECONOMICS STUDENTS: APPLICATION AND IMPACT**

Technologies in our world are developing extremely rapidly today, which naturally affects not only everyday life but also educational processes. One of these technological innovations is Chat GPT, software capable of generating text responses based on specified input data.

The purpose of this study is to assess the application of Chat GPT among students enrolled in economic universities, ascertain the influence of this technology on the academic environment, and evaluate the potential consequences of its use. In pursuit of this objective, the following tasks are undertaken: to consider what Chat GPT is and how it works, to study how students of economic universities use this technology, to assess the merits and demerits associated with the application of Chat GPT, to offer recommendations for students and teachers on the efficient use of Chat GPT for educational purposes.

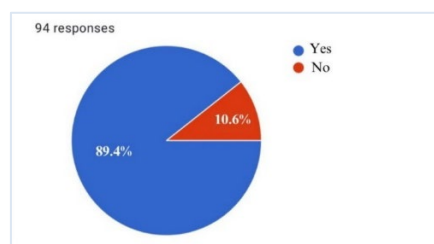
ChatGPT is an artificial intelligence (AI) chatbot that uses natural language processing to create human-like dialogues. The language model can answer questions and compose various written content, including articles, social media posts, essays, code, and emails. The model is able to remember the context of previous messages and take it into account when generating responses.

It was developed by the artificial intelligence research company OpenAI and launched to the general public in November 2022 [1]. According to the Guardian, ChatGPT's audience has reached 100 million active users [2].

ChatGPT has become the fastest growing Internet service in the world, gaining 1 million users 5 days after its launch [3]. According to Similarweb data, the visiting of the official ChatGPT website (chat.openai.com) is more than 1.7 billion visits per month [4].

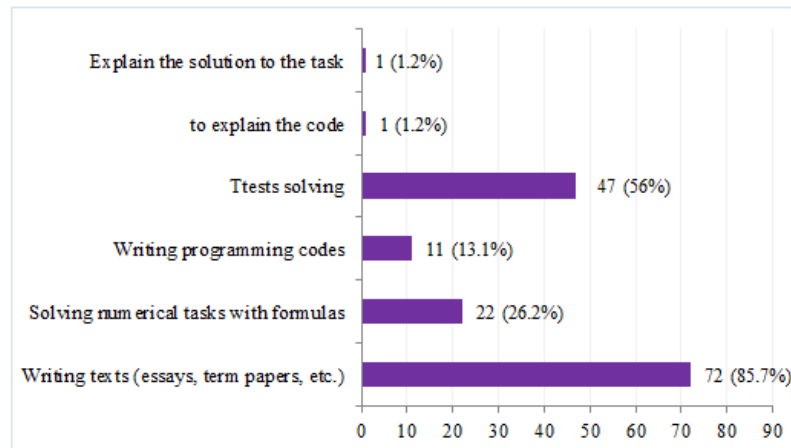
Survey data or studies that provide statistical information on the percentage of students using this particular technology were not available. To address this gap, we conducted an independent survey with a sample size of 94 students from economic universities in Belarus, including the School of Business of BSU, BSEU, and the Faculty of Economics of BSU. Our findings revealed that 89.4% of the participants reported using this technology at least once (Figure 1). Further analysis of the data indicated that the most common use cases are «Writing text assignments» (72 respondents) and «Solving tests» (47 respondents) (Figure 2).

Therefore, the primary benefits of this technology can be underscored from the perspective of students, including:



*Fig. 1. Use of ChatGPT by students of economic universities*

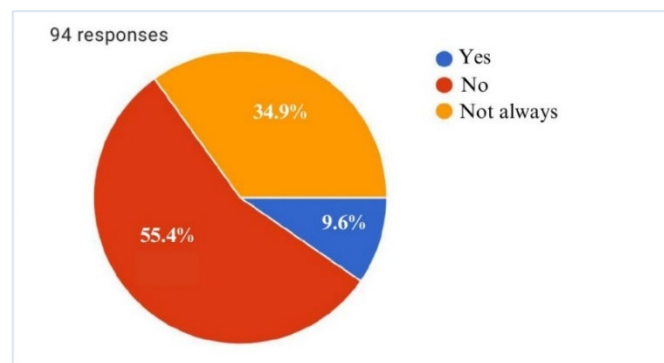
- time-saving and prompt responses;
- 24/7 availability;
- enhanced support through additional explanations and clarifications for problem-solving;
- personalized responses filling potential gaps in the educational process;
- assistance in writing text assignments;
- assistance in finding statistical data.



*Fig. 2. Reasons of using ChatGPT by students of economic universities*

Nevertheless, negative consequences exist alongside and are as follows:

- getting unreliable or unjustified answers (according to the results of the survey, only 10 per cent of the respondents double-check the information received from the GPT chat (Figure 3));



*Fig. 3. Verification of information provided by ChatGPT*

- the tendency to laziness and lack of critical thinking abilities, a decrease in the percentage of independent information searching and reflection on problems;
- over-reliance on external technology related to memory loss and procrastination;
- overreliance on generative AI tools for academic tasks, instead of critical thinking and mental exertion, may damage memory retention and cognitive functioning;
- limitation of creativity and innovation in approaches to solving problems;
- decrease in the work performance of graduate students.

In October 2023, the Belarusian authorities announced that the introduction of artificial intelligence in the CIS would be regulated by law [5]. However, today there is no legally established definition of “Artificial Intelligence” and legislative regulation of relations arising in connection with its implementation.

At the moment, two main vectors of the development of this technology in educational processes can be distinguished:

1. A complete ban on the use of GPT chat, the cancellation of assignments using it, and the adoption of necessary legislative measures. To accomplish this, it is necessary to develop a reliable, generally accepted anti-plagiarism system for detecting the use of AI in work. However, this is a controversial issue, as even such systems can never ensure 100% honesty, since GPT chat is aimed at providing answers in the user's language and sometimes it becomes impossible to distinguish it from really self-written data.

2. The integration of the technology into the educational process, both on the part of students and teachers:

- to include a separate course in the curriculum (or a module as part of a course) on working with artificial intelligence;

- to provide students with recommendations on the effective use of Chat GPT for educational purposes, to teach them how to ask accurate questions to obtain high-quality information;

- to teach about the legislative consequences of plagiarism of information in their post-university life;

- to provide tasks directly for analyzing the information provided by the GPT chat, training in data analysis and comparison, developing critical thinking.

In summary, today there are specific risks due to the lack of development of control schemes for the use of artificial intelligence and legislative regulation of relations arising in connection with its use in Belarus. At the moment, these risks can be reduced by means of a competent approach to the organization of the educational process and the active inclusion of classical learning models that involve the active participation of the teacher in interaction with the student.

### References

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