Платформа: ІНФОРМАЦІЙНІ СИСТЕМИ. КОМП'ЮТЕРНІ СИСТЕМИ ТА МЕРЕЖІ. ТЕХНОЛОГІЇ INTERNET OF THINGS TA SMART-СИСТЕМИ

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CHATBOTS AS A NEW PART OF SUPPORT SERVICE AND ONE OF THE BEST WAYS TO SAVE YOUR MONEY

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The purpose of the work. A chatbot is usually called a program based on artificial intelligence. It simulates interactive communication with a human based on user phrases and pre-calculated text or audio signals.

The chatbot market is growing steadily, and there are logical reasons for this:

- bots are able to close simple messages (the virtual assistant writes first and offers answer options, it is able to answer simple questions and passes the rest to the operator).
- these programs are capable of collecting and qualifying so-called leads (in this case, the bot itself asks what the client wants to buy and, based on this data, collects contacts, then transmits the data to the operator, who will contact the customer during working hours);
- provide a whole range of goods and products needed by the buyer; tell users about updates and provide feedback to them.

According to a study by Business Insider, the chatbot market is expected to change its compound annual growth rate, CAGR, by 29.7% from \$2.6 billion in 2019 to \$9.4 billion by 2024. According to Oracle's research, chatbots can save approximately \$174 billion in financial, sales, insurance, and customer support.

Chatbots are usually assistants for people. But they cannot perform complex tasks because their thinking process is limited to what is written in the program code. Continuing this topic, it is worth noting an interesting fact. In 2020, Facebook and Pandorabots held the first chatbot meeting. Facebook presented Blenderbot and Pandorabots presented Cookie. The main task of the so-called "Battle of the Bots" was to check whether they could reliably reproduce a human conversation. This experiment was conducted for more than 12 days, during which time the participants managed to discuss a number of topics: politics, sports, religion and even their own hobbies. However, the results of this event were not only positive. For example, Blenderbot in one of the dialogues stated that Zuckerberg is not the head of Facebook, but is the author of the series "Stranger Things". He also called Hitler an "outstanding person" who helped him "in difficulttimes". Blenderbot also

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confessed to killing many people, after which he asked Cookie how she was doing. Based on the BBC's assessment, it is safe to say that the dialogue between the chatbots "contains too many sentences that lack a logical continuation", and they themselves "have no clear causal link between them at all and it is unlikely that anyone would believe that it was a communication between two people". According to a study by CCW Digital: 59% of customer service experts think that bot technology can improve the work of support staff, but the capabilities of virtual assistants are not enough to completely replace people. The conclusion of the above experiment was the selection of five key components of quality support. They are: personalization, customer focus, versatility, quality of communication and security. The "Battle of the Bots" has shown that if the quality of communication is low, potential customers will feel uncomfortable using a chatbot and may decide to use the services of another firm or company.

The development of chatbots is no longer news, but rather a necessity. Juniper predicts that the virtual assistant will save \$8 billion by 2022. According to statistics, chatbots were able to save \$20 million in 2021. The business areas in which this type of software has the greatest success in using this technology can be confidently attributed to banking. The reason is quite simple - a large number of simple requests for questions and bank accounts in this sector.

Conclusion. Thus, chatbots have become a standard in the service sector and have been helping to avoid unnecessary money costs and inappropriate use of time for many years. In order to successfully use the capabilities of these tools, you should alwaysremember about 5 key components of quality support: personalization, customer focus, versatility, quality of communication and security. This is one of the bestways to make more profit and present your services on the labor market.

References

- 1. Перспективи розвитку інформаційних технологій в Україні. [Електронний ресурс] / Режим доступу: http://www.rusnauka.com/17 AND 2010/Informatica/68784.doc.htm.
- 2. Дмитренко К.О. Технологія розробки чат-боту / К.О. Дмитренко, С.М., Одокієнко, М.В. Люта // Сучасні електромеханічні та інформаційні системи: моногр. / за заг. ред. І. В. Панасюка. Київ : КНУТД, 2021., С. 107-111. https://er.knutd.edu.ua/bitstream/123456789/19937/1/SEIS mono 2021 P107-111.pdf