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INFLUENCE OF CHATBOTS ON QUALITY OF CUSTOMER SERVICE

Introduction:

In recent years, chatbots have become an integral part of customer service policy in various fields. With the development of artificial intelligence and natural language processing technologies, these virtual assistants are able not only to process users' requests, but also provide personalized recommendations, which significantly improve customer interactions. Chatbots provide twenty-four-hour availability, instant answers to questions and the ability to resolve issues without having to wait in line what is especially important in today's fast-paced world.

An analysis of the impact of chatbots on quality of client servicing shows that their use contributes to increased customer satisfaction due to more efficient and prompt responses to requests. In addition the automation of routine tasks allows employees to focus on more complex issues that require human involvement. As a result of it companies can not only improve the quality of service, but also optimize their costs which make chatbots a profitable tool for business.

This article deals with problems how the implementation of chatbots affects the interaction between companies and their customers, as well as what benefits it brings in the context of increasing user satisfaction.

Main Subject of Research:

Currently, chatbots, as modern communication tools, have become widely used in many areas of human activity in order to establish contact with Internet users. Chatbots have gained the greatest popularity with their implementation in instant messengers and social networks such as Telegram, Viber, Facebook and VKontakte. These virtual assistants provide users with the opportunity to receive information about special offers, news and to perform more complex operations, what makes them an important tool for interacting with customers.

Chatbots can be used not only for communication between users, but also for entertainment and information purposes. They are able to report the weather forecast, to exchange rates, to make appointments for clients, to register calls and perform many other tasks.

The concept of "chatbot" comes from the English words "to chat" (casual conversation) and "bot" (robot), which emphasizes their purpose – to communicate with users on the Internet according to a predetermined scenario [1]. Modern technologies underlying chatbots, such as artificial intelligence and neural networks,

make it possible to bring their functionality closer to human communication and solve commercial and marketing problems.

Research shows positive dynamics in the use of chatbots in various areas of human activity. It is important to note that contact with chatbots is not only interesting but also useful for users since it allows them to quickly receive the necessary information and solve consumer problems.

Given the growing interest in chatbots from the audience, many organizations have begun to develop their own solutions to attract the attention of customers. Chatbots are becoming not just a communication tool, but also a channel for promoting goods and services, what is especially important in a highly competitive market. However, it is worth noting that some companies initially used chatbots only as a fashion statement without taking into account their practical significance. The active use of chatbots began in 2017, when artificial intelligence technologies began to enter the mainstream [2].

The ELIZA program, designed by Joseph Weizenbaum in 1966, is considered to be the first attempt to create a virtual interlocutor capable of maintaining natural communication. This program marked the beginning of a new stage in the development of human-machine interaction.

Among Russian originators considering certain aspects of the work of chatbots, we can highlight Belous E., Zilberman N. N., Ivanov A. D., Ivanova E. G., Kuznetsov V. V., Chivilev A. A.

Researcher Ivanov A.D. notes: "The time of news "for everyone" has already passed – today the audience wants to read and watch what interests it." In foreign science, one can highlight the works of Shauar B. and Atvel E., who examined the history of the development and functional features of chatbots.

Chatbots are actively used in business, education, media and entertainment. In business, they can perform various functions: automatic document distribution, customer service, finding out their needs and providing information about consumer goods or products. This allows users to save time and quickly make purchasing decisions. Chatbots can also analyze customer information to further improve their work. Data on chatbots indicate a number of key features of their use in modern digital communications. First of all the main function of chatbots is to provide communication which includes interaction and correspondence with users. These systems are becoming an important tool for business, allowing you to automate customer service processes, provide information and resolve user requests in real time [3].

In addition most chatbots have a welcome message and name which demonstrates the desire of developers to give programs a certain personality and make the interaction more human. This reflects social trends that strive to create a more personalized communication experience. Chatbots are often used to create a friendly atmosphere which can contribute to improving brand perception and increasing customer loyalty. To analyze the work of chatbots deeply, it is important to study the texts used in their interfaces including speech acts recorded in written forms [4]. These texts form the basis of the interaction between the bot and the user. Since

chatbots are customized by teams of specialists, including linguists and marketers, text scripts are often developed with marketing goals in mind. This can lead to shortcomings in the communication process, as the emphasis on sales or promotion may overshadow the needs of users.

It also should be noted that chatbots can be used in various areas – from providing information about goods or products and services to arranging appointments with doctors or consultations. However it is important to take into account the specifics of the target audience and the context of using chatbots in order to avoid communication errors [5]. For example, insufficient adaptation of texts to specific user requests can lead to misunderstandings and a decrease in the quality of service.

Conclusion:

In conclusion it should be noted that chatbots have become an important tool in modern digital communications actively used in various spheres of life. Their implementation in messengers and social networks such as Telegram and Facebook has opened up new opportunities for interaction with users allowing them to quickly provide information, resolve requests and perform many tasks.

Chatbots not only facilitate the communication process but also create a more personalized experience thanks to welcome messages and personalized addresses which help to improve brand perception and increase customer loyalty.

Up-to-date technologies such as artificial intelligence and neural networks allow chatbots to effectively imitate human communication and adapt to user needs. However, it is important to consider that the successful functioning of chatbots depends on the quality of text scripts developed by specialists. Incorrect configuration or insufficient adaptation of content can lead to misunderstanding and a decrease in the quality of service.

Thus despite the significant benefit of using chatbots it is important to continue to research their functionality and impact on communication processes. This will not only improve the quality of interaction with clients but also optimize business processes in the context of growing competition in the market.

References:

1. Chat-boty: vozmozhnosti i primeneniye. <https://www.semanticscholar.org/paper/3229d22f7c119336e4c181d112dc7b521ce1d725>
2. O.M. Kulikova, S.D. Suvorova. Rol' chat-botov v postroyenii effektivnykh kommunikatsiy. <https://cyberleninka.ru/article/n/rol-chat-botov-v-postroyenii-effektivnyh-kommunikatsiy/viewer>
3. Chat-boty kak tekhnologii iskusstvennogo intellekta v Rossii i SSHA. <https://www.semanticscholar.org/paper/4ee54ec00c926abb8e24228bae051c9acffbb570>
4. Chat-boty v sfere zdavookhraneniya. (2023). <https://www.semanticscholar.org/paper/7842b3b334ba9ee11e89a7b781e92d1925b0eee2>
5. Chat-boty i osobennosti ikh ispol'zovaniya v obrazovanii. <https://www.semanticscholar.org/paper/4e8845caff08e92e6b2c6d96599db5ad70e88689>