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# PECULIARITIES AND PERSPECTIVES OF CLIENT AND CHATBOT INTERACTION IN THE COUNSELLING SPHERE

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# Abstract

Interaction of individuals with chatbots of different levels in order to obtain information has received maximum application in the sphere of consulting services. These are counselling centres or specialised service organisations. The problem is that a part of clients' rejection of counselling through chatbots and even their loss has been discovered. On this basis, it seemed to the author especially important to identify the critical features of chatbot-human interaction. Accordingly, the task that determined the achievement of the goal was the analysis of the client's behaviour in the course of counselling. The results of the research conducted in 2022 were used as data. As a result of the analysis of the received data, among the clients who applied to the Company's consulting service, it was possible to identify two groups, which can be conditionally called "advanced" and "traditionalists". "Advanced" bravely study the Company's website, try to get maximum useful information in the process and only after that contact a chat-bot for missing information. Representatives of this group do not experience negative emotions because of communication with it and show interest in this form of communication. "Traditionalists" overwhelmingly prefer communication with the operator, as they expect detailed information from him. Besides, other factors influencing their further choice were also revealed: whether to remain a client of this Company or to prefer some other.

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#### 1. Introduction

The basis of prosperity, development and existence of any society is interaction. Until recently, the process of social interaction was characterised by established features: an individual, or a group of individuals, or an organisation uniting individuals, interacting in one way or another, exchanging information, values, experience, with other individuals (Vinogradova, 2005). But in recent years, this process has acquired specific features that fundamentally change many, if not all, aspects of social interaction. And these features are the result of certain processes in all spheres of society: social, industrial, cultural, scientific, economic, educational. These are the processes of globalisation and digitalisation. These are voluminous processes affecting virtually all spheres of human life, but in this article, the authors decided to take a closer look at a rather narrow sector of the digitalisation of social life, which is acute and sensitive both for society and for specific individuals.

## 2. Problem Statement

The application of chatbots in various spheres of human activity has become a point of radical changes in social interaction (Komarova, 2021). An interaction of individuals with bots of different levels in order to obtain additional information for making a choice or decision has received maximum application in the so-called sphere of consulting services. This function is increasingly performed by consulting centres or specialised services in various organisations. Initially, these services were staffed exclusively by real employees who responded to enquiries. However, due to the development of digital technologies, this function has been largely delegated to chatbots of various levels. The problem is that communication between an individual and a chatbot has its own peculiarities arising from the specifics of this virtual gadget, and this can be an obstacle to the positive perception of such communication, as well as its results, by an individual (Barkov et al., 2022). On this basis, the author of the article sought to identify the reasons that determine the preference of an individual, in some cases, to interact with a bot, and in other cases with a person. It has to do not only with the quality of interaction, depending on the bot, but it also changes the very model of information transmission and social experience.

#### 3. Research Questions

The emergence of chatbots has radically changed the sphere of service, namely the process of counselling clients. However, as this practice was implemented in this case, the rejection of the proposed way of interaction, receiving counselling through a chatbot, and, accordingly, their loss were revealed. On this basis, to identify the critical features of the chatbot-human interaction system seemed particularly important to the author. Consequently, the task that determined the achievement of this goal was the analysis of the client's behaviour in the course of interaction for the sake of receiving advice.

#### 4. Purpose of the Study

During the collection of primary information, 100 people were interviewed, 92 of whom were customers and 8 were operators of the advisory centre. Moreover, the electronic data of AutoFAQ in the

period from 2022-03-01 to 2022-04-01 were used, namely the number of inquiries by the topic, the number of inquiries handled by the chatbot and the number of inquiries handled by the operator. A total of 1,000 appeals were analysed. The electronic documents of UseDesk were also analysed, namely: the number of appeals per day and the average duration of the chatbot's response to a customer's question. A total of 250 conversions were analysed (Komarova, 2021). At the same time, during the collection of primary information, no division was made by socio-demographic or other characteristics not directly related to counselling (Kulikova & Suvorova, 2021).

#### 5. Research Methods

The data used were the results of a study conducted in 2022 under the guidance of the author of this article, at the request and on the basis of the "MK" "SIBIRSK HEALTH" Company LLC, located at Russia, Novosibirsk, Lenin St., 48.

### 6. Findings

Electronic data recorded by the AutoFAQ chatbot includes both calls processed by the bot alone and calls of the customers who have requested an operator's consultation. In the second case, the consultation is a more complex two-level interaction. The questions with which the customers applied for consultation can be attributed to several categories. And in each of these categories, the ratio of cases of interaction of customers only with the chatbot to cases of interaction with the operator is different (Vinogradova, 2005).

The most effective and demanded work of chatbots with clients is in the Small talk category. These are short questions that usually do not require additional explanations. Questions from this category are the most popular among those who asked for advice; they take up 10% of the total volume of questions asked during the period under consideration, and the vast majority of them, 81%, were processed by the chatbot and only 19% of customers requested additional communication with the operator.

The next popular category of questions, occupying an impressive 17% of the total volume of requests, were questions under the general name "Scenarios". The peculiarity of questions from this category is that they can be answered with fixed options provided by the chatbot software. These questions are specific, no additional information is required when answering them and in most cases the customer is satisfied with the simple answer provided by the chatbot. And only in 30% of cases, when clarifications are required and the customer has additional questions, the quality of interaction is assessed by the customer as insufficient and the operator's participation is required (Ryzhov et al., 2021).

Almost as often, there are questions of clients that can be conditionally categorised as "Thrash". They take up a substantial 13% of the total volume of questions asked, and probably, in part, they are new clients. They are still unfamiliar with the capabilities of the organisation's consulting service. And, accordingly, on the one hand, most of them are unable to formulate a clear question on the problem they are interested in, but at the same time give a negative assessment of the quality of chatbot work. And on the other hand, no more than 40% of them rely on the operator's help.

Another problem of the clients of the Consultation Centre, which seems to be solved quite satisfactorily when interacting with the chatbot, is "Registration". This operation is obviously a standardised way of communicating with the Campaign's website and involves following a certain algorithm. And in this case, in 50% of requests, clients prefer to use the help of an operator, not being satisfied with the help of a chatbot.

A significant part of customer inquiries, 16% of all inquiries to the Consultation Centre, is related to the list of the Campaign's products, their availability, ordering, sales and delivery conditions. Despite the fact that these operations are described in detail on the Campaign's website, the customers who contacted the Consultation Centre nevertheless have additional questions, and the chatbot's help in solving them is assessed as insufficient by them: only 30% of them are satisfied with it.

An important issue in the Company's work is terms of cooperation. This issue includes terms of cooperation, an incentive system, attraction of new clients, and appeals on this subject take a significant part of the volume of all appeals equal to 25%. These issues can also be addressed via both a chat-bot and an operator. However, this category of appeals brings the lowest satisfaction with the interaction with the chatbot, and it is 28%. Apparently, it cannot cope with non-standard, clarifying and requiring explanations of the questions that arise, as well as with customers' demand for help in formulating queries.

Comparison of the semantic load of the calls to the Campaign's counselling service shows that depending on the question voiced, the clients are distributed among the service actors according to a certain pattern. Those who had a clear idea of their purpose for contacting the counselling service and could formulate it succinctly were inclined to be satisfied with the chatbot consultation. At the same time in this category of clients we can distinguish those for whom communication with a chatbot was just enough, as well as those who deliberately preferred communication with a chatbot, and these were 46% of all respondents. The reasons for this choice, in the vast majority of cases, were the speed of receiving an answer and logical presentation of information. In addition, those who chose a chatbot as a consultant are supporters of new technologies and the robotisation process in general. The surveyed respondents are not frightened by machine technologies, and they feel no panic or depressed. Communication with a chatbot is highly appreciated by such clients, which is equal to communication with a human and does not cause discomfort in the process of communication. The same part of customers who considered interaction with a chatbot insufficient favoured the operator due to the unclear understanding of what information they need, how to find it, what steps to take for this purpose. This in the vast majority of cases was reflected in the inadequate wording of questions set to the chatbot, in the need for clarifying and leading questions, or in the need for additional information. Often, in such cases, customers were guided by emotions, but the majority of customers chose interaction with the operator. The operator was chosen by 54% of all respondents, against 46% of those who chose chatbot, and it turned out that there are several main reasons for this choice. And the main one is the ability of the operator to formulate leading questions for the client, to help the client to determine the ambiguous interpretation of the Company's requirements. A somewhat less frequently mentioned reason, but no less important for the positive perception of the company by the client, is the ability of the operator, unlike a chatbot, to accurately answer questions. That involves variability of wording, give detailed and lengthy explanations

to the client, able to fill in the data necessary for communication with the company (mail, phone number, or code word, etc.), which significantly increases the comfort of communication between the client and the operator and the level of mutual trust, which, importantly, extends to the interaction

Despite the uncertainty and hesitation of customers regarding the preference of interaction with a chatbot or an operator, it is noticeable that in terms of receiving advice, among the customers who applied to the Company's consulting service there are two groups that can be conditionally called "advanced" and "traditionalists".

The "advanced" boldly explore the Company's website, try to get maximum useful information in the process and only then contact the chatbot for missing information. Representatives of this group do not experience negative emotions from communication with it; on the contrary, they note some curiosity to this form of communication. And such assessment of interaction with a chatbot is usually just a specific manifestation of the general interest of the representatives of this group in the study of technologies, innovations of various orders. They are not embarrassed by rather narrow possibilities of chatbot communication, they do not evoke negative emotions, but this does not mean that they are related to the limited possibilities of chatbot communication. Moreover, they voiced a number of wishes related to the expansion of chatbot capabilities in the context of its interaction with clients of the company's consulting service.

"Traditionalists" overwhelmingly refused to communicate with a chatbot in favour of an operator because of the inherent limitations of the chatbot's communication abilities. And there were several reasons for this choice: one of the most frequently mentioned was a lack of interest in preliminarily exploring the campaign's website in order to get as much information on the topic of interest as possible. They preferred to contact an operator instead, but when they realised that they were being answered by a chatbot. They were disappointed, believing that by replacing full human communication with a "fake", cheaper version of such communication, the company was not showing proper respect for its client. Another reason for preferring interaction with an operator is the low degree of trust of the group's representatives not only in the chatbot itself, but also in everything related to digitalisation and computerisation.

Another reason for the advantage of interaction with an operator from the point of view of representatives of this group and their aversion to communication with a chatbot is the technical aspect of such interaction. Not being inclined to independently study the information provided by the company, they expect detailed explanations from the operator, and not only explanations, but a detailed description and evaluation of the company's offers and opportunities.

As a result, the distribution principle of clients of the consulting service depending on their readiness to interact with a chat-bot or with an operator is quite noticeable. Clients who ask complex questions, who want to learn more deeply and in detail about the offers and opportunities of the campaign, meeting with a chat-bot consultant, experience, to a certain extent, disappointment and distrust, which seems to be a significant factor influencing their further choice: to remain a client of this campaign or to prefer some other one.

#### 7. Conclusion

In part, it must be admitted that the company's consulting service does not pay enough attention to and perhaps underestimates the significance and impact of the initial contact between a potential client and the consulting service represented by a chatbot. A simple chatbot, limited in its ability to meet the expectations of a potential client, to a large extent forms a negative opinion of a potential client about the company itself, not only about the consulting service, and serves, in part, as a factor in reducing the demand for the company and its products.

In order to ensure a balance between the expectations of both customer groups and the capabilities of the counselling chatbot, it is necessary to carry out a set of activities aimed at improving the characteristics and enhancing the capabilities for quality chatbot-human interaction. The counselling service will achieve a more loyal attitude and effective interaction with customers if it makes efforts to integrate into its structure a chatbot with more advanced interaction capabilities. It must be capable of formulating complex scenarios of communication with the customer and offering him multiple ways to achieve the goals of obtaining the desired information or solving the problem, based on the ability to use previous experience. To this end, the work of a chatbot should involve the use of neural network principles and elements of medium-level artificial intelligence (Kulikova & Suvorova, 2021). The result of the undertaken efforts is very likely to lead to full amortisation of the work of the employees of the consulting centre, increase the level of customer service and, in the long term, the profitability of the company.

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