Modern Methods of Information Retrieval

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Abstract - In this paper an overview of current methods of generating a query to search for information are given.

Keywords – Search query, suggest search, voice search.

I. Introduction

The electronics rapid development of and telecommunications, as a rule, due to demand for communication services. Without the need for information society in the communication would not make sense to develop a communication network. But the user is sometimes difficult to find the information he needs. That's why very important topic of the forming a correct search.

II. FORMATION OF INQUIRY

Today, there are a lot of information and communication services [1]. In this paper we will consider only the services provided by information services, which are directed to information (see [2], the recommendations of series F). Examples of such services may be: Searching for information about the objects that satisfy certain criteria, Access to search and view videos, Access to search and audition audio and similar services. These services are aimed at searching for information on demand, and the correct formation of the query will affect the quality of the result returned.

Currently under a lot of research on the formation of queries [2]. Most of them are aimed at helping the user to properly create a query and get exactly the data that it expects to receive.

Today's search engines to fully realize the advances in the formation of search queries. One successful example can be considered as the technology "Google suggest" [3]. It runs on AJAX technology [4] and allows the user after entering a few characters to get a list of words and phrases for auto-complete (fig. 1). In this case, the characters, that the user types, is sent to the server, processed and formed a response that appears in browser.



Fig.1 Example of the service Google suggest

In this example data can be entered by means of real (or virtual) keyboard. However, in some situations, this method of entry is difficult (for example, when searching for information made by mobile phone) and specially designed

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for this technology is "HTML Speech" [5], which has already been implemented for computers and mobile devices [6]. This technology allows to create queries using voice and works as follows: the user speaks the phrase, this phrase is recorded and sent to the server for processing, usually installed on the server speech recognition system that operate on the basis of complex algorithms and are responsible for obtaining the text of voice recording, then treated with the text string is returned in the user's browser and is inserted into the necessary field. Figure 2 shows the service interface of "Voice Search", developed by Google.



Fig.2 Voice Search, powered by Google

All these technologies are designed to help users find information on the basis of requests.

III. CONCLUSION

Thus, modern methods of forming a search query help the user to find the information, which in turn generates traffic in a telecommunications network, making it marketable.

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