FEATURES OF CONTROL WEB-RESOURCES COMMERCIAL CONTENT BASED FUZZY LOGIC

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Today a great part of information systems of various orientations is created using modern Internet technologies. The basis of such systems includes agreed and combined data set, which serves as a unified functional web-resource of information system. Usually, this set is focused on its composition data that is varied in content, format, filing and processing method. This resource can be unitary, consolidated, integrated, distributed, and strong or semi structured by way of its formation. One of the important tasks of the web-resource designing process is to provide a coherent representation, storage and interpretation of data at all stages of its processing. One of the recognized methods of achieving such unity of data is its integration.

Principal provisions of the methods of design of information web-resources, based on the distribution of integration process data on syntactic, structural and semantic integration phases, have been developed in this work. This way of information resources design is a further development of the classical approach to integration. It allows creating data structure, methods of filing, processing and final values of their interpretation independently of each other. This ensures the highest level of compliance, integrity and relevance of the final information web-resource. The data integration on the syntax level involves the development of a single system of a data values presentation in the process of resource design, within the resource and on the user interface level, as well as the exchange of this single system with other systems.

The integrated structure of information web-resource design allows the design of a unified heterogeneous data scheme that combines description of relational, poorly structured, active, streaming, and other types of data. The integration of semantics is the final stage of the web-resource information system design aimed to develop agreed rules of thr interpretation, the perception and the use of data that is combined in this resource. Using techniques developed in this paper provides additional opportunities to improve the quality of information web-resources, as well as the development and the implementation of effective CASE-tools for their design.

In recent decades humanity has performed a significant step in developing and implementing new technologies. Development of technologies has given the opportunity to solve a lot of complex tasks which humanity had faced with, but also it has generated new tasks, the solution of which is difficult. One of these tasks is a task of content analysis. Methods and systems of content analysis are used in various areas of human activity (politics, sociology, history, philology, computer science, journalism, medicine, etc.). These systems are quite successful and do not require large funds and time to get the desired result. At the same time using this type system allows you to increase the level of success at 60 %. Basic system of content analysis includes the following features: quick information updates, searching for information on this resourse, data collecting about the customers and potential customers, creating and editing surveys, analysis of resource visitations. If the workload is reduced at system automatization using information system of content analysis, the time for processing and obtaining the necessary information can be also reduced, productivity of work system increases which leads to a decrease in money and time expenses to get the desired result. The theme relevance has been caused by increasing users' demands on these systems and by the following factors: rapid growth in demand for reliable information, the necessity of forming plurals of operational information as well as use of unwanted information for automatic filtering.

Development of Internet technologies and its services gave the humanity access to virtually unlimited quantity of information but as it often happens in these cases - there is a problem in reliability and efficiency. That is why technologies of content analysis are implemented to make the information efficient and trustworthy. The use of these technologies allows you to receive the information as a result of its functioning, provides an opportunity of operational interference in the system to increase the level of that

system, the activity of the information resource and for popularity increase among the users. Such world's leading producers of information resources processing actively work in this direction as Google, AIIM, CM Professionals organization, EMC, IBM, Microsoft Alfresco, Open Text, Oracle, SAP.

Content analysis is a high-quality and quantitative method of information studies which is characterized by objectivity of conclusions and austerity of procedure and lies in the quantitive treatment of results with further interpretation. Content analysis is based on journalism and mass communication and uses equipment in the following empirical areas: psychiatry, psychology, history, anthropology, education, philology, literature analysis and linguistics. Overall, the methods of content analysis in these areas are connected with the use in the sociological research framework. Content analysis is rapidly developing today; it is associated with development of information and Internet technologies where this method has found wide application.

While creating an effective information system significant attention should be given to content management, because content analysis is used in the content management systems for work automation and to reduce money and time expenses. There are several stages in the content management such as: content analysis, content processing and content submission. For effective system work, firstly, the content is analyzed, then the relevant results are processed, conclusions are made, and after the content are worked on. And on the final step the content is being presented. The following methods of content analysis are: comments analysis, rating evaluation, statistics and history analysis. Comments analysis is used for analysis, adjusting and monitoring the system users' moods who write reviews about system advantages and disadvantages or for adjusting operational and liquid information in their comments. Analysis of statistics and history is used for observation and result processing which are used to determine information efficiency and liquidity. For example, if one of the articles was visited by 100 users and another was visited only by one person, then we can certainly claimy that information in the first article is more efficient than in the second. Rating assessment is used to determine the rate of the same articles and is conducted with the help of polls, the users evaluation etc. The content in the form of articles is the base of online newspaper due to which user is looking for the necessary information. Thanks to content analysis, the system owner can determine the reliability and efficiency of the information contained in the online newspaper article. With the help of this option you can determine the popularity of the newspaper and do some actions in order to increase number of users. General recommendations in architectural design of content analysis systems are developed which, however, differ from existing by more detailed stages and availability of information processing module resources, allowing easily and efficiently to handle information resources at system developer's stage.

The essential problems that are solved during commercial project lifecycle are planning and preparation of the project. Project planning and preparation process involves identifying a number of characteristics that define the technology, content, commercial and other features of the project. The peculiarity of control parameters of commercial web project is the difficulty of determining their exact values. In this case, the use of methods and means of control, which are based on the principles of situational control and fuzzy logic, is appropriate. Gained experience for today in this area allows applying the principles of fuzzy logic in project management problems.

Commercial web project is a creation of a specific Internet resource by developer on demand of the customer for further receiving the income or support of his main business. One of the essential features of commercial web-projects is their focus on of the use of the result by a wide range of consumers. Therefore, the commercial component of the success of the project depends on many external and internal factors. Performer, customer and target audience of consumers determine the values of parameters, which characterize factors that have an influence on the project. At the same time, such values cannot always be set or determined with sufficient accuracy and reliability. In this case, there is a need for making project decisions, planning and implementation of project activities taking into account the absence, incompleteness or inaccuracy of some data. In this paper, fuzzy logic is selected as a tool that provides solution to the problem of commercial web projects management, taking into account all peculiarities of the project. It allows replacing the value of necessary parameters that are difficult or impossible to determine during management processes by their fuzzy linguistic counterparts. The main objective of this work is to

determine the procedure and methods of formation and application of fuzzy data in technological tools of commercial web project management.

Rapid development of the Internet contributes to increasing needs in receiving operative data of productive and strategic nature and implementation of new forms of information service. Documented information prepared in accordance with user needs is an information product or commercial content and main object of e-commerce processes. The issue of design, development, implementation and maintenance of e-commerce content is relevant in view of factors such as lack of theoretical foundation of standardized methods and the need for unification of software processing of information resources. Practical factor of processing of information resources in electronic content commerce systems (ECCS) is related to solving problems with increase in content amount on the Internet, active development of e-business, rapidly spreading Internet accessibility, extension set of information products and services, increasing demand for commercial content. Principles and technologies of electronic content commerce are used in creating online stores, systems for on-line and offline sale of content, cloud storage and cloud computing. The world's leading manufacturers of informational resources processing tools such as Apple, Google, Intel, Microsoft, Amazon work in this direction. The aim was to develop methods and software of processing information resources to improve the efficiency of e-commerce content systems due to increased sales of commercial content. The article is devoted to the development of standardized methods and software of processing of information resources of e-commerce content systems. In this paper an actual scientific problem of development and research in methods and means of information resources processing ECCS was solved with the use of designed classification, mathematical providing and software and generalized ECCS architecture. ECCS classification was researched and improved on the basis of analyzing and evaluating such systems. It made it possible to determine, detail and justify the choice of their functional possibilities for commercial content lifecycle designing.

The task of developing methods and software formation, management and maintenance of information products was resolved with a theoretically grounded concept by automating information resources processing in ECCS to increase content selling for constant user, by involvement of potential users and expanding the boundaries of the target audience.

Keywords - Web resources, commercial content, content analysis, content monitoring, content search, electronic content commerce systems