

**Матеріали VIII Міжнародної науково-практичної конференції  
«Інформаційні управляючі системи та технології»  
23 - 25 вересня 2019, Одеса**

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Недоліками представлення алгоритмів формування тестових завдань у вигляді продукційних правил є:

- 1) низька ефективність обробки, оскільки більша частина часу витрачається на перевірку можливості застосування правил;
- 2) відсутність гнучкості при логічному виведенні;
- 3) складність оцінки цілісного образу знань з тієї чи іншої предметної області;
- 4) при великій кількості продукційних правил достатньо складно відстежити несуперечливість та повноту бази знань.

**Література**

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**Тимошук О. В., к.т.н. Басюк Т. М.  
ПРОЕКТУВАННЯ СИСТЕМИ ПОПУЛЯРИЗАЦІЇ ІНТЕРНЕТ  
РЕСУРСУ З ВИКОРИСТАННЯМ ЗОВНІШНІХ ЧИННИКІВ**

**Tymoshchuk O. V., Ph.D. Basyuk T. M.  
DESIGNING THE SYSTEM OF POPULARIZATION OF INTERNET  
RESOURCE WITH USE OF EXTERNAL FACTORS**

In order to take high positions in the search return, you need to be actively engage in promotion of the site – SEO optimization. Relevance of promotion today is high, as never before. First of all, this is due to the sharp increase of the number of users of the global web and their interest in finding the necessary goods and services. Secondly, in the area of the information network Internet is hosted a significant number of websites that compete on their topics in order to attract potential customers. And in order to win this struggle, it is necessary to bring the site to the TOP position, which is impossible without using of modern technologies for the popularization of Internet resources. It's no secret that the process of website promotion is quite routine and monotonous work, which requires not only a lot of forces but time, so many webmasters in order to facilitate their work use special systems of automatic promotion of sites that are characterized by a number of

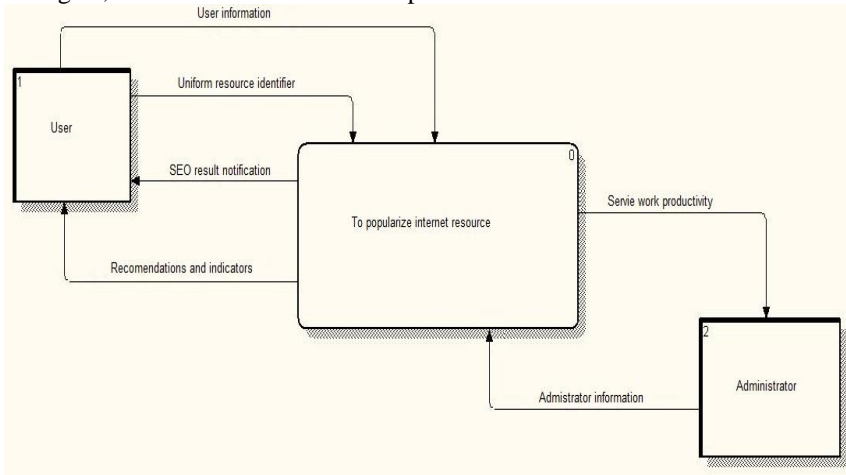
**Матеріали VIII Міжнародної науково-практичної конференції  
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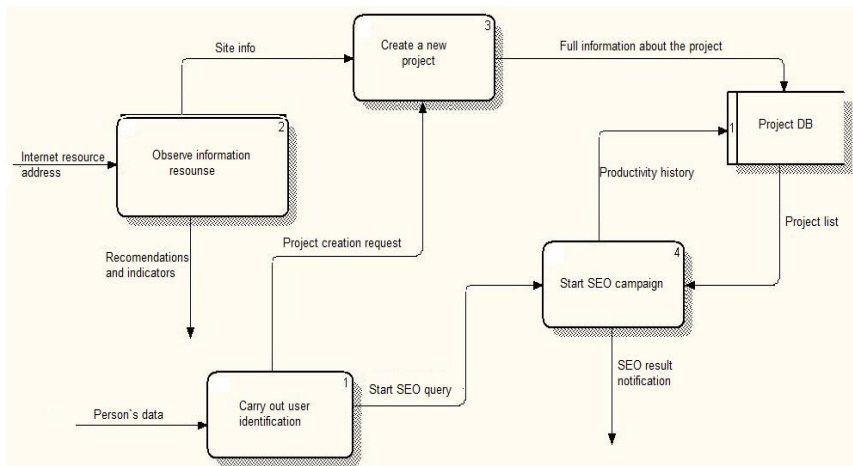
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disadvantages: from limited functional to commercial use [1]. Given the fact the actual task is to design a system for popularizing an online resource using external factors of ranking.

To develop a system of popularization, we carried out a comprehensive system analysis of the subject using a structural approach and a tree of goals and a plurality of diagrams was constructed. In fig. 1 and 2, the context diagram and it's decomposition are depicted. On this contextual chart with the system being developed, two external entities interact with each other – the user and the administrator. The customer enters information about himself, that is, authorizes, and the address of the Internet resource that needs to be promoted, after processing these data, it is sent to him back the generated recommendations and indicators, as well as relevant notifications about the results of SEO. The administrator, after entering the personal data, confirming his rights, can view and influence the performance of the service.



*Fig.1. Contextual chart*



*Fig. 2. Detailed (decomposition of level 1) data flow diagram*

On a detailed chart, the following processes are present: carry out user identification, observe the information resource, create a new project, start an SEO campaign. The "Carry out user identification" process is responsible for the registration and identification of the user. In case of a successful authorization, the user gets access to his account and the ability to create projects and run an SEO campaign. The process "Observe the information resource" carries out the analysis of the Internet resource on certain indicators, the analysis can be done as by the authorized user as the guest. The process "Create a new project" is responsible for selecting keywords, relevant pages for each of these words and entering the information received into the database, where the system users' projects are stored. In the process of "Start an SEO campaign" on the basis of the previously created project, which is taken from the database, the launch of popularization, also configures the system of notifications of SEO results. The projected system will carry out the analysis the information resource, the selection of keywords in accordance with the subject of the site, identification of effective donor sites, which is extremely important both for saving time and money. In this case, the user will be provided with detailed statistics on the results.

Further research will be aimed at program implementation of the system in accordance with the described approach and verification of its work.

### **References**

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