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THE VALUE OF LIBRARY RESOURCES AND SERVICES THROUGH THE LENS OF DISCOVERY TOOLS

Objective. The objective of the paper is to show the discovery service from the perspective of the library and user values as a means of access to information. **Methods.** The literature review on the subject of value approach to the library functioning is provided. In the paper were used data from the user experience study, statistical reports and anecdotal experience. The **results** show the issues of customization of discovery services functionalities and resources management required. The users' evaluation of the discovery service as a tool for finding and retrieval of information is also given. **Conclusions.** Discovery services have special functions and are powerful tools for identifying the required information, which is placed in directories and databases, online libraries, and external full-text databases. The study found that finding relevant information was of paramount importance to users who highly appreciated the usefulness of this service for their research.

Keywords: academic libraries; values; discovery services

Introduction

As the academic libraries' strategic ax lays in the context of a service center for learning and research, their statement of values addresses the impact to institutional achievements by providing resources and services. (Oakleaf, 2010) The literature review indicated the scope of approaches in valuing the library's performance. The conceptual approaches to definition and measurement of values are differentiated between single- and multi-centered, and generally, based on the economic or social impact of libraries. (Malapela, & De Jager, 2018; Matthews, 2018). Though the libraries recognize the internal business-like definition of the values, in this paper we are not considering the concepts of ROI or other financial values.

The resources have value for the user and library as a source of information that has value "as a commodity, as a means of education, as a means to influence, and as a means of negotiating and understanding the world." (ALA, 2015). A range of studies explores the value of information sources in the libraries for their usefulness in practical and scientific applications in medicine, environment and engineering, education, humanities. (Zwicky, 2019; Kong, Bynum, Johnson, Sdunzik, & Qin, 2017; Laxminarayan, & Macauley, 2012).

The establishment of libraries implies the service to their communities. In the past decades providing access to collections and databases, the libraries linked a resources-focused model to service-related approach. The studies on libraries' mission statements note the ethical and emotional modes (friendly, welcoming, comfortable, reliable, respectful, sharing) of social values, such as access, quality, diversity of materials, responsiveness, user-centered, community-centered. (Barninskis, 2016; Chauvet, Bourbous, & Liston, 2016).

However, some researchers commonly admit the challenge in articulating libraries' values for institution research and academic development. L. S. Connaway, W. Harvey, V. Kitzie, & Mikitish (2017) reported that "Integration of library data in learning analytics is fledgling at best, but there are growing calls for such activity to increase, especially to enhance a library's ability to prove their resource expenditures and demonstrate alignment with wider institutional goals (e.g., improve learning outcomes, decrease costs, etc.)."

The ALA Report Value of academic libraries (2010) overviews the assessment tools applied to demonstrate their impact on student learning and researchers' performance on the institutional level, e.g. examinations of work in part of referencing and citing, anecdotal

evidence, surveys, usage. It seems possible to consider as an evaluation measure on the library level the community users' behavior and experience in using the library means to access the information.

The changes in approaches don't change the understanding of library values which remain services and resources, but the means of their delivery are in constant transformation. The tools and aids that ensure effective library ecosystem functioning has been significantly influenced and improved with the development of information technologies. K. Munson, & H. H. Thompson (2018) mentioned that "there is a relationship between the perceived value of the item and the effort required to acquire it". From this perspective, the website, catalog and other information search tools, have growing meaningfulness in searching, organizing and exposing the information; the virtual instructional and reference services are of critical importance in supporting access to information through improving information literacy skills.

The usefulness and performance of search systems has been explored in multiple studies using qualitative and quantitative data from evidence-based assessment of user's perceptions, usage counter statistics, usability tests of speed, accuracy and relevance of results. A few researchers set a prime focus on the value of search tools for library users. D. S. Pearson, S. Roksandic, & J. Kilanowski (2018) address the concern to "provide the most up-to-date, peer-reviewed content, often with an additional time constraint for rush patient care" in medical libraries. C. J. Belliston, J. L. Howland, & B. C. Roberts (2007) shared results of survey determining the value of federated searching for undergraduate students.

The discovery tools serve as a part of the library digital environment demonstrating the image of the library augmented. As the access point to the resources and services, they have to be designed in order to communicate the library values. The research focus of this paper is on defining the value of discovery service for users and its management in a value-centered academic library.

Methodology

For this paper, we used data from a user experience study conducted with the aim to improve the information discovery and retrieval experience of the users working with the discovery service of the library. The project of user study involved 25 users including 1 faculty, 2 staff members, undergraduate students (School of Science and Technology, School of Engineering, School of Humanities and Social Sciences, School of Medicine, Center for Preparatory Studies), 1 master student (Graduate School of Education). 8 participants seized the opportunity of online session while the others participated in-person. For the study we designed 18 tasks with the purposes to learn about their search experience and explore the users' perception of the discovery service.

In the paper, we also describe the issues of electronic resources management on EDS, observation of customized functionalities and reference services as well as limitations of the tool.

The utility value was analyzed based on statistical reports from EBSCO Discovery Service (EDS) for the past two academic years (2015-2016, 2017-2018).

The reports on virtual reference services and statistics track or questions related to EDS were exported from the LibAnswer, the application for managing the reference services provided by Springshare. Data include interactions starting from April 2017 when the application was implemented in the library.

We also used the examples and anecdotal issues faced by librarians in their daily work with EDS.

Results and Discussion

The discovery tools integrate and generate a powerful information environment. The NU Library has implemented Proquest's Summon discovery service in 2012. Starting from 2016 the EBSCO Discovery tool is being used. The initial then planned (2018) branding of site interface and functionalities added value of the asset to the library. We applied the institution branded colors and logo, simplified the navigation labels on the top menu, renamed custom links to Open Full text and integrated widgets of search tools (Google Scholar, CORE) and Ask a Librarian service (chat, FAQ). The Interlibrary loan request form was also tailored and implemented for non-holding items. (Fig. 1, 2).
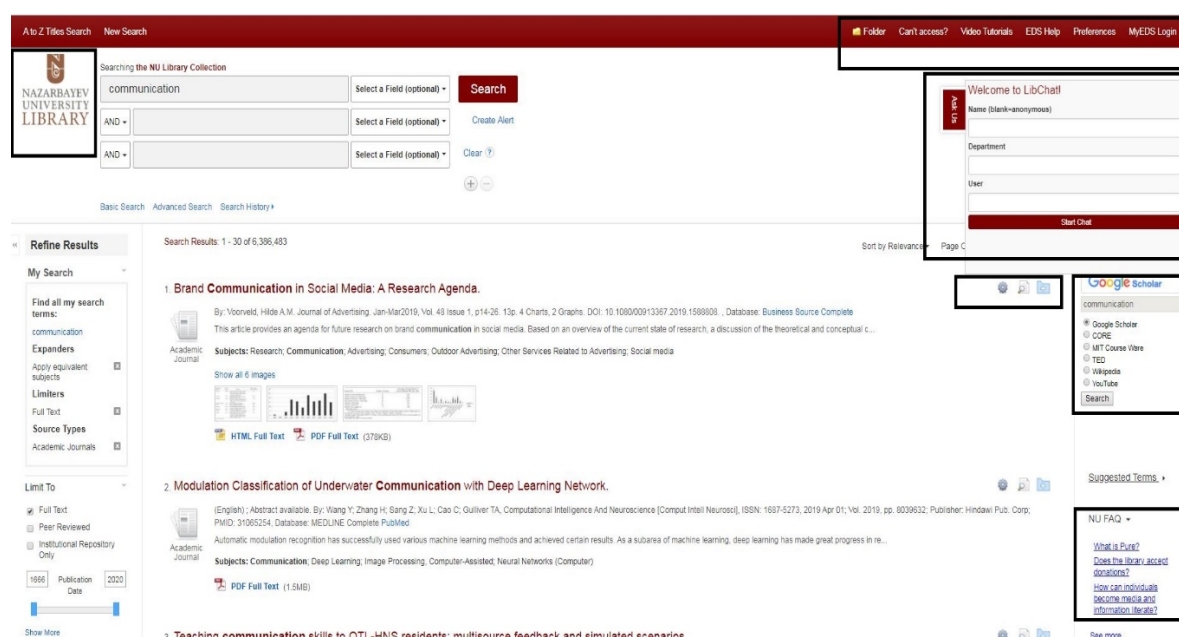
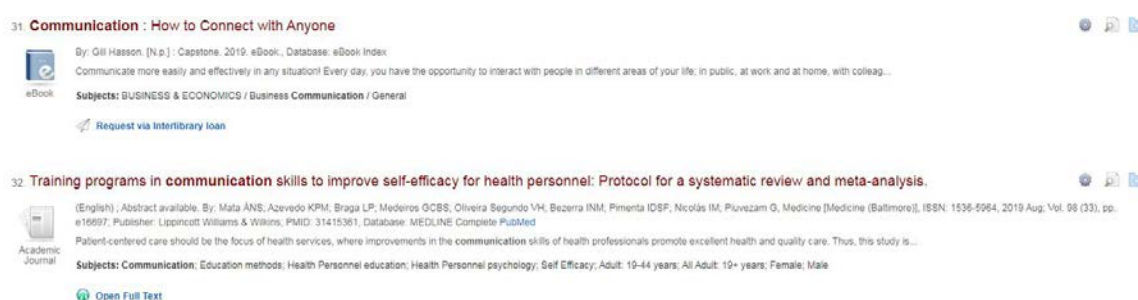

Figure 1. EBSCO Discovery service interface

Figure 2. Types of customized links

In terms of the content, we included in EDS index all subscribed databases, resources which are in trial mode, and some open access databases recommended by Subject Librarians. The Nazarbayev University Repository collections are also included in EDS.

The quality access to the growing resources relies on appropriate electronic resources management which should include content (holdings) management and system support and development.

We were able to identify different types of problems which affect the comfort work with the system: EZproxy issues such as firewall blocks; not standardized or inaccurate metadata in the records received from publishers and providers display the confusing information e.g types of documents; failures to inform about changes made to access policies; timely updating custom links and assigning items for Interlibrary loan requests; inability to include the content of databases providing evidence-based acquisition or having institution-specific resources accommodation; limits to interface customization for required the system development.

Consequentially from the user experience study we learned at least a practical understanding of that tool by students and its value for research.

The verbatim responses of UX study participants to open-ended questions highlight the value of the tool for scholars and researchers: "helpful", "It eases work of the researcher. It is user-friendly and anyone can master using it"; "It made me confident in doing the research. It provides multiple opportunities to find Information"; "As I am a senior student and don't have any research paper left, I regret that I hadn't discovered all the benefits of the EDS. Even though, now I know how to search for the research papers written by our students and read the dissertations of master students related to my major"; "I guess nothing because every tool is functional and even if it is not used by me, it might be very useful for more advanced researchers. Also, I really liked the interface as nothing distracts your attention".

The responses included the evaluation of EDS as a sources of information: "Provides a wide range of sources, open to your requests, quite easy to use"; "As a very user-friendly and powerful online service to get an academic article/book/etc almost on any topic"; "Fast search for relevant sources. Free access to some articles, which regular users need to pay for"; "It helps me looking for journal subscription and sharing the articles with my professors and classmates"; "An ability of getting access to many articles and journals, and to be able to use, analyse and store them efficiently"; "Good alternative to Google Scholar".

The value of service provided on the site and how easy and functional the tool was also mentioned in the responses: "Easy to use, up to date"; "I can also ask help from Librarians through various methods"; "Many features, advanced search, friendly and simple design"; "User friendly, has several options to sort articles, to limit"; "Time saving, gives relatively more relevant and qualified results"; "All academic sources in one platform, easy access to any sources, chat with librarian in case you have any questions"; "Making a collection of sources that can be shared. Searching among different databases. Having an opportunity to get an article/book though requiring"; "Interface is very nice"; "I think this system works very well and has all needed functions starting with searching information and finishing by saving and sharing with friends."

The participants were proposed to compare the library discovery service with other search tools such as commonly Google Scholar. In the response the majority found the advantages of the library search system: "Google scholar which is more intuitive and easier, but accessibility can be limited. In addition, EDS has much more tools"; "GS, but with more features available"; "GS, they both shows academic results"; "Google Scholar, often used"; "GS, used for the same purpose before I found out EDS and almost completely switched to this tool"; "Google. To find initial information about the specific topic, Google is easy. However, EDS is good for researchers who already have background information about the topic"; GS because allowed to search for, but not so flexible functional as EDS"; "GS, it's mainly used by majority"; "The only system I've used throughout my studies (along with library.nu.edu) was Google Scholar. However, it was sometimes difficult to access some of the research papers without registration, and the searching system was not so specific and accurate as in library.nu.edu."

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Although participants admit that having problems they would be willing to communicate with librarians online via chat, the statistical report shows that for the past three years only 8% (121) of transactions came from EDS. (Fig. 3).
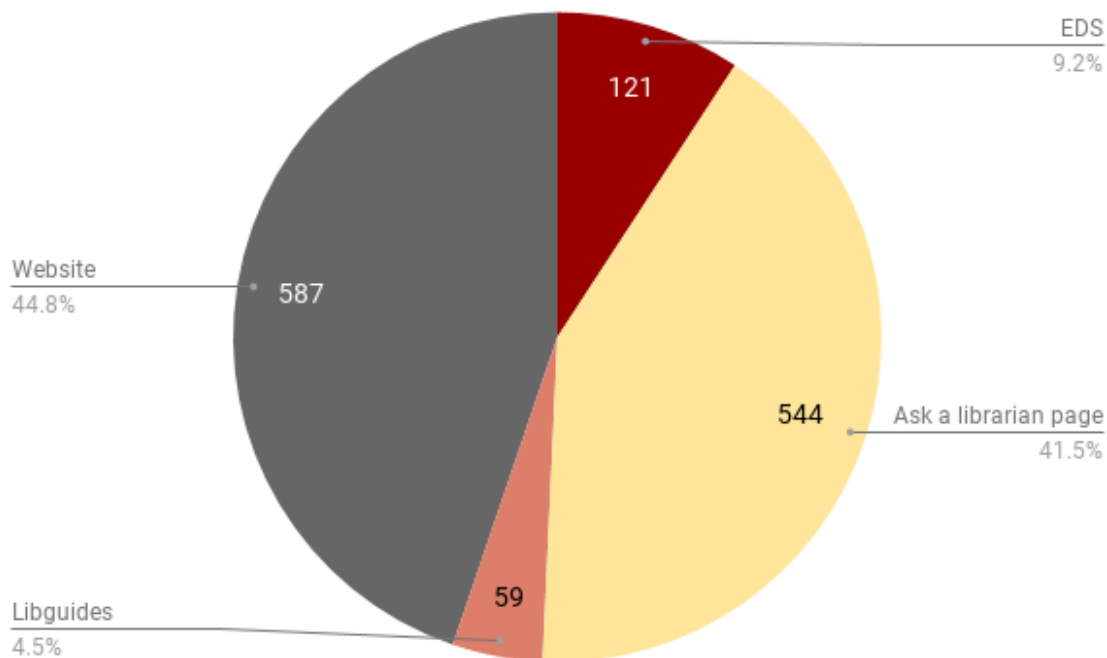

Figure 3. LibChat references

Some students participated in the study with ready questions on the EDS work and case of poor experience such as broken custom links and problems with accessing the full text. The pending queries were still actual but students couldn't explain why they hesitated to ask librarians or report the problems.

Overall, the statistics recorded 227 questions from users regarding EDS. The majority of queries were received online via chat, ask-a librarian system, email (Fig. 4). Mostly students were asking specific questions which librarians categorized as questions on finding or accessing specific source, article or book. This type of questions is followed by requests for research consultation (Fig. 5, 6).
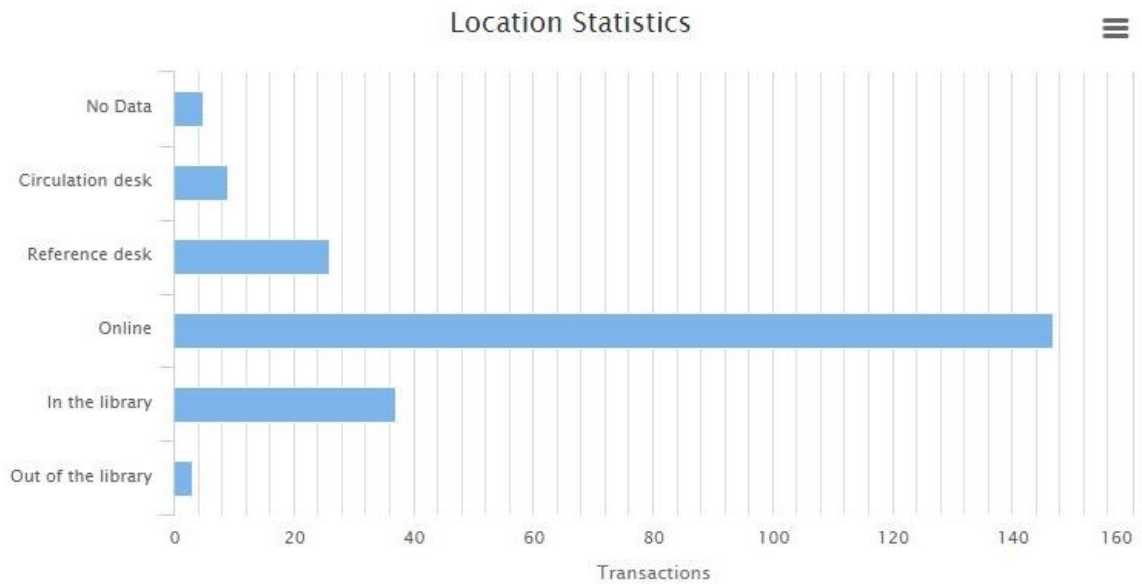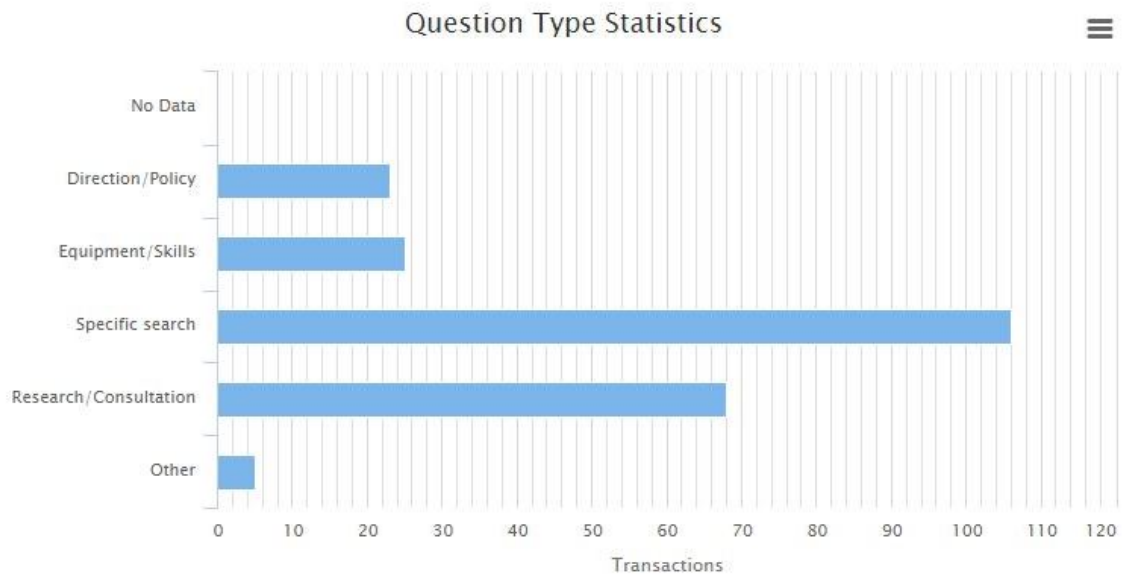
Figure 4. Location Statistics for EDS queries

Figure 5. Question Type Statistics for EDS queries

Q: Search for online full-text resources A:					
Specific search	Student	Walk-Up	Reference desk	EBSCO-EDS	NLA
Q: Access troubles to EDS from Macbook with Safari A:					
Direction/Policy	Student	Walk-Up	Reference desk	EBSCO-EDS	NLA
Q: access to e-resources on T&F A:					
Direction/Policy	Student	Chat	Online	EBSCO-EDS	GSB

Figure 6. Examples of questions

The cohort of students from NU Center for Preparatory Studies (CPS) is involved in elementary research. The CPS faculty strongly recommend to use EDS as a valuable start-point of searching for information according to the required quality (peer-reviewed, authoritative, receint, etc.). Although the library sessions based on Information literacy modules are integrated to CPS courses, it takes time to build skills and experience needed for efficient work with the system. This explains data showing that among the most active students who asked librarians about EDS issues are scholars affiliated to Center for Preparatory Studies (CPS) (Fig. 7).
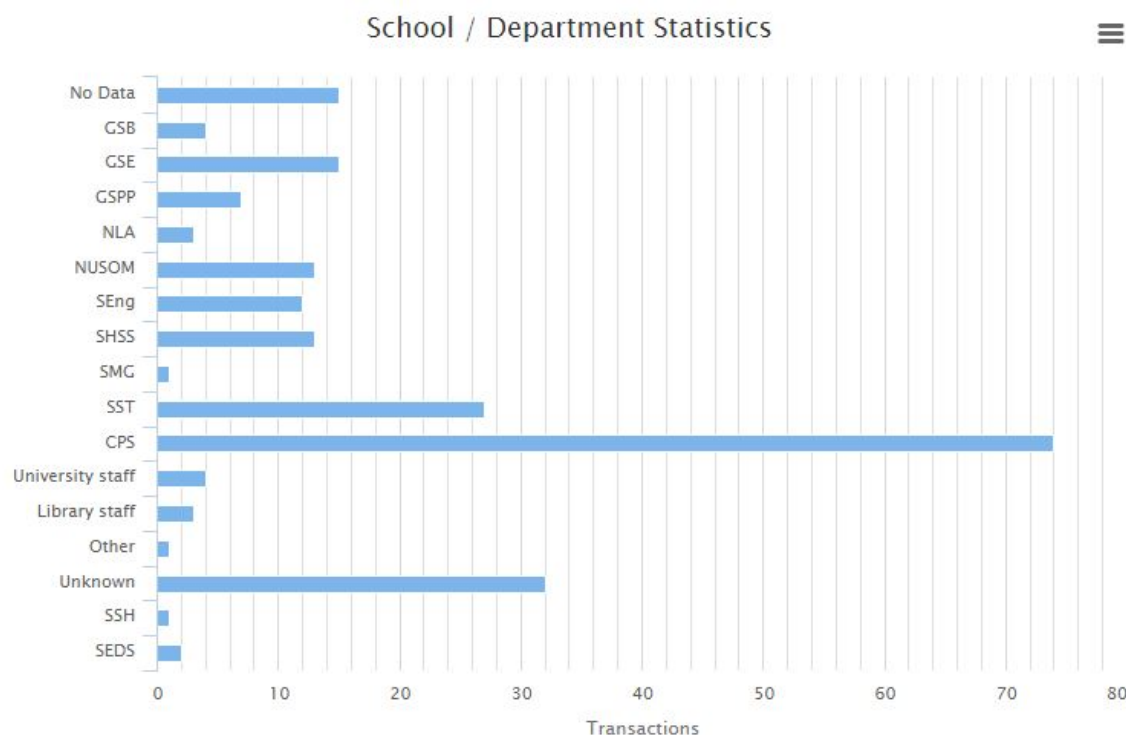

Figure 7. School / Department Statistics for EDS queries

The discovery system reports display an increasing usage of the site by NU community from 150137 in 2016 to 192605 in 2018 (Table 1). In contrast, almost all people participating in

the study admitted to underestimate the discovery service and used Google Scholar or a direct search on the specific databases for the reason of unawareness about the tool.

Table 1. Usage of the discovery service site in academic years 2017-2018, 2016-2017

Academic Year	Number of searches	Successful custom links activity
2016-2017	150137	40395
2017-2018	192605	48924

It was recommended to enhance the library service in training sessions on EDS: "From my experience, everything is fine, the only thing is that new users do not utilize all features of EDS, so, for example, creating more workshops in the beginning of the year may help new students to get to know the system in more detail."; "I would recommend making an online video manual on how to use its features, such as EDS folder, limiters and sharing results."; "I just want to suggest to explain and show to work with EDS to our students because I think many students just do not know how to work on it that is why most of my peers just want easy life and go to search on Google Scholar".

Conclusion

The continual advancement of academic libraries is determined by their strategic values. The discovery tools merge resources and assistance to foster access to information which is a value in itself. The value-based approach to the library tools and systems namely discovery service requires branding, proper electronic resources management, system support, and development.

While discovery tools are supposed to be a powerful search and information retrieval service enriched with special features, the study demonstrated that finding relevant information has a primer value for users who highly evaluated the usefulness of the discovery tool for research.

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ЦІННІСТЬ РЕСУРСІВ І ПОСЛУГ БІБЛІОТЕКИ ЧЕРЕЗ ПРИЗМУ ІНСТРУМЕНТІВ DISCOVERY

Мета. Основною метою статті є показати discovery-сервіс як засіб доступу до інформації з точки зору цінностей бібліотеки й користувачів. **Методика.** Наведено огляд літератури на предмет ціннісного підходу до функціонування бібліотеки. У роботі використано дані дослідження досвіду користувачів, статистичні звіти та ін. **Результати.** Описано можливості налаштування необхідних функцій пошуку для користувачів та

управління ресурсами, а також проблеми підтримки інструментів discovery. Також наведено оцінку користувачів discovery-сервісу як інструменту пошуку інформації. **Висновки.** Пошукові сервіси мають спеціальні функції і є потужними інструментами виявлення необхідної інформації, яка розміщена в каталогах і власних БД, електронних бібліотеках, а також у зовнішніх повнотекстових базах даних. Дослідження показало, що пошук відповідної інформації має першорядне значення для користувачів, які високо оцінили корисність цього сервісу для досліджень.

Ключові слова: академічні бібліотеки; цінності; discovery-сервіс