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Project Solutions for the Successful Implementation of the Strategy of Creating a Consolidated Resource of the National Academy of Sciences of Ukraine

Objective. The study focuses on the relevance of launching the ResearchUA digital platform based on the V. I. Vernadskyi National Library of Ukraine to form a consolidated scientific information space. **Methods.** The results of the research were obtained thanks to the application of a complex of general and special methods of scientific knowledge, among which systemic and synergistic approaches, structural-functional and descriptive methods, source analysis and synthesis were decisive. **Results.** There is an urgent need to establish a system of informing about academic resources that have been created for more than a hundred years of operation of the National Academy of Sciences of Ukraine. The V. I. Vernadskyi National Library of Ukraine has launched the ResearchUA digital platform, which is focused on the development of the electronic research infrastructure of not only the National Academy of Sciences of Ukraine, but also on the formation of the national digital scientific space, namely the accumulation, integration, effective use of scientific electronic library and information resources and their promotion to modern global digital platforms communications. **Conclusions.** A promising direction for further information and communication activities of academic libraries is to intensify information support for scientific research in Ukraine by promoting the involvement of new forms of digital scientific communication; developing modern models of communication with all subjects of copyright for scientific works; simplifying access to scientific library and information resources; integrating and consolidating scientific library and information resources; introducing digital resources of the national documentary cultural heritage into scientific circulation; monitoring the state and development of scientific research in Ukraine.

Keywords: academic libraries; Information and Library Council; V. I. Vernadskyi National Library of Ukraine; National Academy of Sciences of Ukraine; digital platform ResearchUA

Introduction

The relevance of the topic is due to the dynamism of the transformations that the library and information sphere of Ukraine is currently experiencing. The need for rapid adaptation to a constantly changing external environment, increased competition in the information services market lead to a transition to the targeted integration of library resources, providing users with an integrated and synthesised information product, and encouraging the use of reliable information and authoritative resources by society.

The library network of the National Academy of Sciences of Ukraine (NAS of Ukraine) focuses on the formation, preservation and access to information resources as a research base, which is one of the priorities for strengthening the scientific potential of the state. Academic libraries have significant resources, valuable cultural and historical collections. The total collection of libraries of the National Academy of Sciences of Ukraine is more than 32 million items and is part of the combined resources of national importance. The development of library and information activities of the network in the system of scientific communications is carried out with the wide use of modern technologies of electronic data processing, which makes it possible to form full-

text databases. This results in increased efficiency of searching for reliable information, in particular, and contributes to the overall rise of the intellectual and spiritual potential of Ukrainian society through the dissemination of reliable information, scientific knowledge and popularisation of the achievements of the Ukrainian nation in the world in general.

The development of library services in remote mode requires academic libraries to take initiatives to productively form a consolidated information and library space at a qualitatively new level. Digitalisation introduced in the country provides new tools to meet the information needs of users. Today, it is not enough just to respond to an information request, but to stimulate the user's interest in finding new data on the requested topic. This, in turn, requires constant monitoring of users' interests and the formation of an adequate supply to meet demand. That is why establishing broad virtual library interaction has proved to be the best solution in the recent years of global transformations experienced by Ukraine and the world. "The challenges of today encourage domestic libraries in the context of globalisation and the dominance of information-communication technologies to become more active in organising and conducting promotional campaigns and their own events to confidently establish themselves both as information service providers and digital literacy ambassadors" (Klymenko & Sokur, 2021, p. 273).

Methods

The results of the study were obtained by applying a set of general and special methods of scientific cognition. The methodological basis for determining the vector of development of the library network of the National Academy of Sciences of Ukraine is synergistic approaches, which involves expanding the range of information processes in a scientific library. In particular, the use of a systematic approach allowed substantiating the network of libraries of the NAS of Ukraine as a system. The application of the structural and functional method helped to reveal the peculiarities of building the library network of the NAS of Ukraine and their functioning in modern conditions. The descriptive method was used to present the new digital platform ResearchUA, which was launched and operates on the basis of the V. I. Vernadskyi National Library of Ukraine (VNLU). With the help of the methodological arsenal of source analysis and synthesis, the publications of recent years are included in the orbit of our research. The information-analytical method allowed us to argue for the expediency and necessity of integrating the scientific resources of academic libraries based on the V. I. Vernadskyi National Library of Ukraine.

Analysis of Recent Research. Describing the available source base, it should be noted that the issue of transformation of models and forms of work of scientific libraries in the context of digitalisation is covered in articles in professional periodicals, conference proceedings, and monographs. In particular, joint monographs by leading experts of the V. I. Vernadskyi National Library of Ukraine are devoted to this topic: "Ukraine's Integration into the World Community in the Context of Development of Library and Information Technologies" (2011); "Information Component of Socio-Cultural Transformation of Ukrainian Society" (2012); "Informatisation and Modernisation of Socio-Cultural Sphere of Society: Interaction and Development" (2013); "National Information Resources as an Integrative Factor of the National Socio-Cultural Environment" (2014); "Information and Communication Activities of Scientific Libraries in the Context of Development of the Knowledge Society" (2017), etc. The authors of the studies are reputable Ukrainian librarians: O. Brui, O. Hryhorevska, S. Horova, L. Dubrovina, T. Kolesnikova, L. Kostenko, K. Lobuzina, O. Maryina, Y. Polovynchak, N. Samokhina, O. Serbin, T. Yaroshenko and others.

The researcher K. Varnum rightly notes that it is extremely difficult to keep up with library technologies and any modern technologies in general, because all this is likely to become the basis

for the service that the library will offer to its users tomorrow, as well as the service that the user already expects (Varnum, 2017).

In the context of the European integration processes of the information and library sector of Ukraine, Ukrainian scholars A. Humenchuk, N. Michanyn, T. Novalska, and O. Trach emphasise that services should be developed on the basis of a thorough study and implementation of the best foreign experience in order to diversify the range and increase the comfort of remote library resources and services (Humenchuk, Michanyn, Novalska, & Trach, 2020).

Thus, the relevance of the chosen topic is evidenced by the attention of both theorists and practitioners of the information and library sphere to the development of the national scientific information space, taking into account the best foreign practices and its integration into the world.

Results and Discussion

At the present stage, the place and role of the library network of the National Academy of Sciences of Ukraine in the formation of the national scientific information space will be determined by the degree of systemic transformation of all library and information activities, which involves, first of all, the consolidation of information resources.

According to the Regulation on the Network of Libraries of the National Academy of Sciences of Ukraine (Sokur, Soloidenko, Kulakovska, & Vasylenko, 2023 pp. 46-49), the library network of the NAS of Ukraine is a system of interconnected libraries that combine their efforts to serve a special group of users and provide library and information support for basic and applied research, national programmes and projects.

The library network of the National Academy of Sciences of Ukraine is represented by:

- V. I. Vernadskyi National Library of Ukraine;
- V. Stefanyk Lviv National Scientific Library of Ukraine (V. Stefanyk LNSL of Ukraine);
- 93 libraries and library information units, which are part of: the Section of Physical, Technical and Mathematical Sciences of the NAS of Ukraine - 44, the Section of Chemical and Biological Sciences of the NAS of Ukraine - 27, the Section of Social Sciences and Humanities of the NAS of Ukraine - 22.

The network of libraries of the National Academy of Sciences of Ukraine is headed by two national-level library-information institutions: VNLU is the methodological centre for all libraries of the NAS of Ukraine, and the V. Stefanyk LNSL of Ukraine is the methodological centre for the libraries of the Western Scientific Centre of the NAS of Ukraine and the Ministry of Education and Science of Ukraine. The total collection of academic libraries is more than 32 million documents (Sokur, Soloidenko, Kulakovska, & Vasylenko, 2023).

It should be noted that with the outbreak of the Russian-Ukrainian war in 2014, the network of libraries of the National Academy of Sciences of Ukraine suffered significant losses. The annexation of the Autonomous Republic of Crimea by the Russian Federation resulted in the loss of five large libraries located on this peninsula, which were part of the following academic institutions: Marine Hydrophysical Institute of the NAS of Ukraine and its Experimental Department, Karadag Nature Reserve of the NAS of Ukraine, Crimean Branch of the Institute of Archeology of the NAS of Ukraine, and Kovalevsky Institute of Biology of the Southern Seas of the NAS of Ukraine. The libraries remained in Russian-occupied Donetsk: Donetsk Botanical Garden of the NAS of Ukraine, Galkin Institute of Physics and Technology of the NAS of Ukraine, Institute of Industrial Economics of the NAS of Ukraine, Institute of Applied Mathematics and Mechanics of the NAS of Ukraine, Lytvynenko Institute of Physical and Organic Chemistry and Coal Chemistry of the NAS of Ukraine.

The NAS library network includes libraries of scientific institutions, museums, observatories, research and experimental stations, and botanical gardens. The oldest institutions of the NAS of Ukraine are the Odesa Archaeological Museum (founded in 1825) and the State Museum of Natural History (founded in 1870), which contain particularly valuable natural science collections and unique collections of Ukrainian and foreign documents. Specialised libraries include the M. M. Hryshko National Botanical Garden of the NAS of Ukraine and the Kryvyi Rih Botanical Garden of the NAS of Ukraine, the Olvia National Historical and Archaeological Reserve of the NAS of Ukraine, the Poltava Gravimetric Observatory of the S. I. Subbotin Institute of Geophysics of the NAS of Ukraine, the Ceramology Institute of the NAS of Ukraine, and others.

For many years, the functioning of the network of libraries of the National Academy of Sciences of Ukraine has been guided by the Information and Library Council (ILC) of the NAS of Ukraine, which has changed its name and structure several times throughout the period of its activity, but its main purpose has remained unchanged - coordination of the work of academic libraries to create a documentary information base for the support of scientific research of the NAS of Ukraine (Svoboda, Soloidenko, Kulakovska, & Onyshchenko, 2013). The decisions of the ILC of the NAS of Ukraine are advisory in nature for academic institutions that have libraries within their structure.

The coordination of the NAS of Ukraine library network is as follows:

- acquisition of information and library resources as a basis for scientific research;
- creating a reference and search apparatus for the multidimensional disclosure of library collections through a system of both traditional catalogues and card indexes, as well as electronic catalogues and thematic databases;
- reorientation of library staff to the modern requirements of the system of professionalization and professional adaptation;
- encouraging academic libraries to participate in the work of specialised library unions and associations;
- rational organisation of library, bibliographic and reference and information services for users-scientists (Sokur & Klymenko, 2022).

In June 2023, a meeting of the ILC of the National Academy of Sciences of Ukraine was held to discuss the information and library work of the NAS of Ukraine library network during martial law and the prospects for library services in the post-war reconstruction of the country. As emphasised by the Director General of the VNLU, Liubov Dubrovina, the most important task of academic libraries in the difficult conditions of the Russian-Ukrainian war remains the preservation of highly specialised library collections and human resources, and the establishment of services in a way that allows libraries to fully fulfil their professional duties (Kapustianska, 2023). Thus, the main tasks of the library network of the NAS of Ukraine are to preserve and increase:

- library collections;
- library staff;
- principles of library service.

Today, there is an urgent need to establish a system of informing about academic resources that have been created over more than a hundred years of functioning of the NAS of Ukraine and its main library and information institution, the V. I. Vernadskyi National Library of Ukraine. In 2023, the VNLU launched the ResearchUA digital platform, which is focused on developing the electronic research infrastructure of not only the NAS of Ukraine, but also the formation of the national digital research space, namely the accumulation, integration, effective use of scientific electronic library and information resources and their promotion to modern world digital communication platforms (ResearchUA, n.d.).

The purpose of launching this digital platform is to intensify information support for scientific research in Ukraine, in particular:

- promoting the use of new forms of digital scientific communication;
- development of modern models of communication between a scientific library and copyright holders of scientific works;
- easier access to scientific library and information resources;
- integration and consolidation of scientific library and information resources;
- introduction of digital resources of the national documentary cultural heritage into scientific circulation;
- analytical monitoring of the state and development of scientific research in Ukraine.

Thus, as a result of the painstaking work of the VNLU's leading specialists, powerful resources have been combined on a single platform: Scientific Periodicals of Ukraine (updated since 2009); Abstract database "Ukrayinika Naukova" (launched in 1998); Ukrayinika (e-library) (updated since 2017); Science of Ukraine: Access to Knowledge (launched in 2016); Bibliometrics of Ukrainian Science (launched in 2014); Library Portal of the NAS of Ukraine LibNAS (launched in 2020).

The V. I. Vernadskyi National Library of Ukraine Development Strategy (2022-2025) states that the development of the Library Portal, the Repository of Scientific Works of the NAS of Ukraine, and support for innovative projects of the VNLU "provides for the inclusion of the most valuable part of historical and cultural sources in the information socio-cultural space and the preservation and organisation of intellectual access to the resources of international scientific information systems and digital libraries, the promotion of the scientific achievements of scientists in the European Open Science system, integration into the European and global research infrastructure, acceleration of communication processes" ("Stratehiiia rozvytku", 2023).

It is worth noting that the presentation of the ResearchUA digital platform for librarians of Ukrainian academic libraries took place on 19 March 2024 as part of the thematic scientific and methodological seminar "Digital Opportunities for Academic Libraries" organised by the Institute of Library Science of the VNLU as part of the professional development (Sokur & Klymenko, 2024).

Conclusions

Given the information challenges, academic libraries are transforming their activities, offering users products and services that meet their needs.

The V. I. Vernadskyi National Library of Ukraine is a leading scientific institute of the state, in particular in the fields of library science, book science, document science, codicology, information science, which collects, preserves, studies and promotes the documentary heritage of the Ukrainian people, actively participates in the formation of a single national consolidated information space, and implements complex tasks of integrating electronic document flows. That is why a promising direction for further information and communication activities of academic libraries is to intensify information support for scientific research in Ukraine by promoting new forms of digital scientific communication; developing modern models of communication with all subjects of copyright in scientific works; simplifying access to scientific library and information resources; integrating and consolidating scientific library and information resources; introducing digital resources of the national documentary cultural heritage into scientific circulation; monitoring the state and development of scientific research in Ukraine.

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Проектні рішення для успішної реалізації стратегії створення консолідованого ресурсу Національної академії наук України

Мета. Дослідження зосереджене на актуальності започаткування цифрової платформи ResearchUA на базі Національної бібліотеки України імені В. І. Вернадського для формування консолідованого ресурсу наукових бібліотек України. **Методика.** Результати дослідження отримані завдяки застосуванню комплексу загальних та спеціальних методів наукового пізнання, визначальними серед яких були системний та синергетичний підходи, структурно-функціональний та описовий методи, джерелознавчий аналіз та синтез. **Результати.** Нагальною потребою є налагодження системи інформування про академічні ресурси, які було створено за понад сто років функціонування НАН України. У НБУВ започатковано цифрову платформу ResearchUA, яка орієнтована не лише на розбудову електронної дослідницької інфраструктури НАН України, а й на формування національного цифрового наукового простору, а саме на акумуляцію, інтеграцію, ефективне використання наукових електронних бібліотечно-інформаційних ресурсів та їх просування до сучасних світових платформ цифрових комунікацій. **Висновки.** Перспективним напрямом подальшої інформаційно-комунікаційної діяльності мережі бібліотек НАН України в системі наукових комунікацій є участь у розбудові української електронної дослідницької інфраструктури на засадах науково-інноваційної модернізації техніко-технологічного потенціалу.

Ключові слова: академічні бібліотеки; Інформаційно-бібліотечна рада; Національна бібліотека України імені В. І. Вернадського; Національна академія наук України; цифрова платформа ResearchUA

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