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# **Transformation of University Library Activities in the Conditions of Modern Challenges**

**Objective.** The article analyzes the activity of the university library under conditions of transformational changes caused by the unification of the book collections of 4 higher education institutions, while solving the problems of activity in the conditions of Russia's war against Ukraine. Methods. The research was conducted by reviewing publications related to the practical use of remote forms of work of modern university libraries, summarizing the experience of the Scientific Library of the State Biotechnology University (SL SBTU) in the organization of work under conditions of activity restructuring in wartime. Results. Reviewing publications and studying the experience allowed us to find the best ways and lead changes, as well as to address the challenges of reorganization in the conditions of online activity. The approaches and methods presented in this study are based on the author's personal experience as a university library manager, as well as on the experience of library managers around the world. During the research, the author determined that the main response of the Scientific Library of SBTU to the challenges of time is theoretical justification, practical testing, mobility and timeliness of the tasks of information support of scientific and educational processes in the conditions of remote work. Conclusions. Originality of the work consists in expanding ideas about the possibilities of using remote work forms in the activities of the university library, which is an important factor for evaluating the effectiveness of its management activities. Practical value. The obtained results can be used to improve the management of university libraries in the conditions of transformational changes.

Keywords: library; activity transformation; time challenges; personnel management; talent management

## Introduction

The Scientific Library of the State Biotechnological University was created in 2021 by combining the information resources of the libraries of 4 higher education institutions on the basis of the Order of the Cabinet of Ministers of Ukraine No. 431 dated 12.05.2021 and the Order of the Ministry of Education and Culture No. 689 dated 18.06.2021 "On the Formation of the State Biotechnological University." It was created through the reorganization of Kharkiv Petro Vasylenko National Technical University of Agriculture, Kharkiv National Agrarian University named after V. V. Dockuhaiev, Kharkiv State Zoo Veterinary Academy, and Kharkiv State University of Food Technology and Trade, and their libraries. In its activities, the newly created Scientific Library is intended to support the achievements and traditions of the united libraries and to retain the image as one of the leading divisions of the SBTU for solving the tasks of information support for the scientific, educational, and training processes of the university.

Even before the merger, each of these libraries accepted the challenges of the times with dignity. This is the transformation against the background of general civilizational changes based on informatization, digitalization, (Bakumenko, 2020; Dovgalyuk & Zhydkykh, 2020; Rybalchenko, 2019), and the coronavirus pandemic, and the associated process of establishing remote forms of work based on the experience of the libraries of Ukrainian higher education institutions (Kolesnykova, 2020; Ogar & Dushu, 2018). At the end of 2021, huge reorganizational changes had to be introduced, which were related to combining the resources of four university libraries into one. This created new unique challenges and tasks for a large team: personnel, organizational, technical, technological. Based on the foreign experience (Mael, 2014; Mael & Münster, 2017; Uwamwezi, 2017, 2020; Lebbin, 2022; Lobrano, 2018; A. M. Thompson,

H. J. Thompson, Jones, & Rosenbloom, 2021), the library staff were ready to overcome these challenges with great responsibility, continuing to support national, regional projects, and their own project activities.

However, the greatest challenge of the time was working in the conditions of a full-scale military Russian invasion, and from February 24, 2022, the priorities of activities were changed, shifting the emphasis to the use of only online forms of work. Opportunities for timely and full-fledged information and library provision of the professional needs of scientists and students of SBTU were created due to the library digitization, which has been successfully developed in recent years, the provision of open access to printed and electronic documents, the formation of modern information resources of one's own generation, the introduction of new forms of work with a focus on the remote user.

### **Methods**

The study was conducted by reviewing publications related to the use of remote forms of work in modern university libraries of the world. Searches were conducted in the Scopus database, Web of Science Core Collection, Google Scholar, and the websites of academic libraries around the world. Chronological framework – publications of the last decade: from 2012 to 2022. Keywords for searching resources are library mergers, merger of university libraries. The experience of the Scientific Library of the State Biotechnological University (SL SBTU) in organizing work under conditions of wartime restructuring was also summarized. Chronological framework from 18.06.2021 to 30.07.2022.

#### Results

The availability of an online library without physical location, but with access to thousands of electronic files, new search tools, and the willingness of library specialists to provide online assistance is the basis of the library's functioning in the conditions of war. The online work of librarians is aimed at developing key competencies for learning, including lifelong learning, which is a powerful way of European integration in the context of ensuring the quality of education. The list of key competencies recognized as necessary for the successful development of the knowledge economy and social harmony includes literacy, language competence, scientific-communicational, technological, and technical competence, digital competence, personal, social, and educational competence, civil competence, entrepreneurial competence, competence of cultural awareness, and self-expression.

Currently, to strengthen European integration processes at the university, SL specialists take care of the availability and openness of their own information resources, firstly, through the library website (https://library.btu.kharkov.ua), which is a web-oriented technological platform for supporting the educational, scientific, and training activities of the SBTU. Today it is available from mobile devices. It provides access to the necessary information resources, innovative services; improves the efficiency and quality of scientific and information support for education and scientific activity. The introduction of ICT made it possible to increase the number of remote users and virtual visits to the library. An electronic user account has been created to register students online, which provides an opportunity to use all services of the electronic catalog and electronic library through an authorized login.

Filling the databases (DB) of own generation – Electronic catalog, Repository, Webportfolio of scientists takes place online due to the setting up of remote access to the software

from the personal computers of library employees, wherever they are: at home or far from home, in other regions of Ukraine, the world.

Gradually, the databases of electronic catalogs of 4 libraries are being merged by converting them into a single database. Taking into account that all libraries worked using different software, 402,939 records were subject to editing after conversion of bibliographic records of electronic catalog. Unfortunately, during the hostilities, we lost the library server, which stored electronic copies of educational and teaching-methodical publications. The library specialists search and find opportunities to restore full-text databases through direct communication with teachers, e-mail archives.

A large volume of work is associated with filling the SBTU repository on the DSpace platform https://repo.btu.kharkov.ua/., created by combining the resources of 4 repositories of higher education institutions (Kharkiv National Agrarian University, Kharkiv National Technical University of Agriculture, Kharkiv State University of Food and Trade, Kharkiv State Zooveterinary Academy). It is necessary to transfer more than 25 thousand full-text documents of scientific journals, conference proceedings, educational publications https://repo.btu.kharkov.ua/, as well as register it in open access directories. To integrate the repository into the structure of the international information space and to increase its authority, the work to obtain an international universal ISSN identification is underway.

The content of the information and search electronic resource "Web-portfolio of SBTU scientists" http://athra.dbtu.libteh.in.ua/, which was developed by the specialists of the Scientific Library as a portal with a single access point to the bibliographic data, full-text materials, bibliometric indicators of publishing activity of SBTU scientists is of great importance. Personalized pages include surname, first name, patronymic, scientific degree, place of work, list of publications with the links to full texts of documents (if available), scientometric indicators of scientists, integrated from many databases, interactive links to the ORCID identifier, accounts in Scopus, Web of Science, Google Scholar databases, as well as links to the inventor's pages in the Ukrpatent resource. The information for the portal is generated from the Works of Scientists database, both by bibliographic records and full texts, to represent the publishing activity of scientists of the State Technical University of Ukraine. From February 24 to September 15, in the Works of Scientists database 8,058 entries were made, 718 full-text links, 493 full-text DOIs, 222 PDF files were added. The feasibility of the Web-portfolio resource has been proven both for the assessment of the university's scientific activity or an individual scientist, and in the licensing of specialties, attestation, accreditation due to the transparency, openness, relevance, and reliability of the information presented.

Library specialists provide administration and advice in plagiarism check in the UNICHECK system. Training was held for the responsible for checking qualification papers from faculties and departments. Additional free pages for plagiarism check during the period of military aggression were obtained from the company. Recently, the library checked 46 works (2 articles, 4 dissertations, 15 textbooks/manuals, 8 monographs, 10 student, and 7 qualification works).

The activity of the library on informational and analytical monitoring of the publishing activity of scientists is the basis for increasing the international and all-Ukrainian ratings of SBTU, which affects the European integration processes of the university. Therefore, constant attention is paid to this work. In particular, ID of 4 higher education institutions in Scopus and WoS were combined to identify the overall scientific potential of SBTU in these resources. Individual counseling on editing profiles of SBTU scientists in ORCID, Google Scholar, Research ID, etc. is also provided by phone, mail, via Viber.

The library organizes access to external information resources of scientific information – Scopus, Web of Science, ScienceDirect, Research4Life (correspondence with State Scientific and Technical Library of Ukraine on providing access via an additional IP address, providing the possibility of remote work, contact with teachers by phone, mail, consulting, etc., contract with Research4Life: connecting more than 180 teachers to use the database).

Online user services are an integral part of the transformation processes taking place in the library. Currently, specialists are working on the development of a module for online registration of users to the library by creating a personal reader account, creating video materials to popularize the resources of the Scientific Library. Representations of the SL on the Facebook social network - SBTU Scientific Library https://www.facebook.com/library.dbtu/, SBTU Scientific Library. Library branch 6 (in post office "Dokuchaievske-2") https://www.facebook.com/library.dbtu6, the group SL SBTU (library branch no. 7; Klochkivska St., 333) https://www.facebook.com/groups/233460583745457, Instagram account – "Calendar basket" https://www.instagram.com/kalendarniikoshik/, SL YouTube channel https://www.youtube.com/channel/UCwRAVxLReIY3oyUU3Ai5\_Pw.

Since the beginning of military aggression, new sections in the social networks Facebook and Instagram have been created. They are as follows: "Useful information in wartime," "A nation that reads is invincible," "The big day will come! AND FREE UKRAINE WILL WIN!," "Open resources for science and education," "This is a classic, my friend!," "Hryhorii Skovoroda – 300," "Anniversaries of writers in 2022" (for the period from February to August 2022 on the Facebook page posted – 361 publications, Instagram – 288 publications, on the SL YouTube channel – 53 videos), in the virtual cultural and educational project "Calendar basket," 285 publications were prepared and posted, 43 virtual resources (reviews, exhibitions) were updated).

We are pleased to note the fact that the library joined the group of volunteers of the Ukrainian Library Association for archiving documents about Russia's war against Ukraine. Currently, 4074 files have been sent to the project.

The publishing activity of the library also continues in the conditions of remote work. The first issue of the series of bibliographical indexes "Works of the Departments" (Scientific work of the professors and teachers of the UNESCO and Social Protection Department (1996-2021)) has been published: to the 25th anniversary of its foundation: scientific-assistant bibliographical index / compiled by: E. M. Bocharova, O. I. Barabolik, T. B. Bohdanova; scientific editor, N. M. Nikolaienko; Scientific Library of SBTU. – Kharkiv, 2021. – 316 p. – (Series: "Works of the Departments"; issue 1)) and methodical recommendations for scientific and pedagogical workers of higher education institutions are being prepared for reissue (General requirements for the design of scientific, training and educational and methodological literature: method. rec. for scientific and pedagogical workers; compiled by: N. M. Nikolaienko, O. Rybalchenko. – Kharkiv. – SBTU, 2022. p.).

In view of global digitization and integration into the international information space, employees are constantly working on improving their professional skills (from February 24 to September 15, the employees of the scientific library participated in 26 events (courses, webinars, online trainings), received 54 certificates.

Among the latest achievements of the team is the victory in the competition "Librarian of the Year 2021" of the Kharkiv Zonal Association of Libraries of the Kharkiv Institutions of Higher Education (L. I. Bezdolna, Head of the Department), the award for participation in the wiki project (February 2022) "The Most Active Newcomer" to I. Zhydkikh and "The most active writer" to Ivakhnenko V.

There are many ambitious plans ahead to raise the image of the university and its library.

# **Conclusions**

The library world has changed, and the war, forced distance learning, have become a challenge for all participants in the educational process. The library radically reshaped its activities and opened up new opportunities for work in the online environment. As library leadership and management, tools used, and internal organization become increasingly flexible, librarians acquire new skills, improve teamwork and collaboration, maximize creativity, and foster innovation. Remote forms allowed not only to continue library activities, but also significantly expanded the horizons of cooperation with users.

Thus, the originality of the work consists in expanding ideas about the possibilities of using remote forms of work in the activities of the university library, which is an important factor for evaluating the effectiveness of its management activities.

All the listed priorities in a certain way meet the requirements of the time dictated by reality, because we should understand that after the end of the war, Ukraine will need specialists capable of initiating the development of the state, setting the pace of its development. These are the ones that SBTU prepares, and the SL helps in this process.

The obtained results can be used to improve the management of university libraries in the conditions of transformational changes.

We believe in Victory. Glory to Ukraine.

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# Трансформація діяльності університетської бібліотеки в умовах сучасних викликів

Мета. В статті проаналізовано діяльність університетської бібліотеки в умовах трансформаційних змін, викликаних об'єднанням книгозбірень 4х закладів вищої освіти одночасно з вирішенням проблем діяльності в умовах війни Росії проти України. Методика. Дослідження проводилось шляхом огляду публікацій, пов'язаних з використанням в практиці роботи сучасних університетських бібліотек дистанційних форм роботи, узагальнення досвіду Наукової бібліотеки Державного біотехнологічного університету (НБ ДБТУ) з організації роботи в умовах реструктуризації діяльності у воєнний час. Результати. Перегляд публікацій і вивчення досвіду дозволив знайти найкращі шляхи і очолити зміни та впоратися із завданнями реорганізації в умовах онлайн-діяльності. Підходи та методи, наведені в цьому дослідженні, грунтуються на особистому досвіді автора як керівника університетської бібліотеки, а також на досвіді керівників бібліотек світу. Під час дослідження автором визначено, що головна відповідь Наукової бібліотеки ДБТУ на виклики часу – це теоретичне обгрунтування, практична апробація, мобільність та своєчасність виконання завдань інформаційного забезпечення наукового та навчального процесів в умовах дистанційної роботи. Висновки. Оригінальність роботи полягає в розширенні уявлень про можливості використання дистанційних форм роботи в діяльності університетської бібліотеки, що є важливим чинником для оцінювання результативності її управлінської діяльності. Практична цінність. Отримані результати можуть використовуватись для удосконалення управління університетськими бібліотеками в умовах транформаційних змін.

*Ключові слова*: бібліотека; трансформація діяльності; виклики часу; управління кадровим потенціалом, управління персоналом

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