Original article

Directions for the development of information resource management in military libraries of higher education institutions in Poland on the example of the Library of the War Studies University and the Library of the Military University of Technology

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INFORMATION	ABSTRACT
	The article addresses the directions of management development in military libraries of higher education institutions in Poland. These changes are noticeable in such areas as information technology, interpersonal communication, spatial architecture, and library budget. The article also presents two most important and largest libraries in the Polish Armed Forces, namely the Library of the War Studies University and the Library of the Military University of Technology. It provides a brief historical outline of the mother universities of these libraries and the beginnings of their activities. Then, the essential modern solutions implemented there and have directly contributed to their development, are analyzed.

Introduction

Military libraries of higher education institutions have gone through a revolutionary journey over the past decade from the beginnings of computerization to advanced and integrated libraries and electronic information systems. The technological conditions that created such concepts as "electronic document", "electronic library", "virtual library", "digital library" and above all "electronic access to information" have altered significantly. It can be observed that the changes in the direction of management in military libraries of higher education institutions consist mainly in the new work organization, change of information technology, or the way of interpersonal communication or functional-spatial arrangements. It should also be noted that the proportions of the library budget division change from one year to the next

due to above all the growing expenditure on electronic sources. It is also imperative to modernize and change the spatial architecture of the library. In this case, it is about expanding free access to sources, the possibility of all-day study, computer workstations for working with electronic sources and access to electronic catalogs and extensive computer networks, the possibility of realizing lectures and seminars for students, doctoral students, or librarians. These three areas of change in the management of military libraries of higher education institutions are necessary to shape both the information model and library management.

1. The Main Library of the War Studies University – historical outline

The Main Library of the War Studies University occupies an elementary place in the University's structures, which is not only a nationally recognized library center meeting the needs of researchers dealing with the issues of war art and national security. The beginning of the Library is connected to the establishment of the General Staff Academy, which took place on 12 December 1947. In the first years of its existence, the Scientific Library of the General Staff Academy was primarily involved in the organizational work and gathering the book collection. The Library's small book collection was mainly professional-military and general academic literature. It was accumulated from the Polish collections of the inter-war period and taken away from German libraries as well as received as gifts from individuals and military units. The collections of that time were very modest and did not fully meet the needs of users. Further changes took place in 1954 when the General Staff Academy, together with the Library, was moved to the facilities of the pre-war Infantry Training Centre (CWPiech.) in Rembertów [1]. For the first ten years, the General Staff Academy Library was characterized by dynamic development. The number of users was continually growing, which increased the demand for literature necessary for the educational process. In the Library, a Centre for Military Scientific Information was set up, whose task was to inform about the collections, make scientific information available, and translate professional literature and articles from the foreign press. The policy of gathering the book stock was improved, the qualifications of librarians were raised as part of the training, and the forms of popularization and making the collections available were extended. One of the most vital tasks of the General Staff Academy was to develop the theory of war art following the needs of staff and troops and the principles of efficient state defense. The Academy prepared officers with higher education for command and staff positions [1].

The next notable change in the Library came in 1990. In October that year, the National Defense Academy was established on the General Staff Academy's foundation. The main task of the National Defense Academy was to educate in the following fields of study: management and command, security, aviation, logistics, economics, national security, history, and European studies. Students gradually gained knowledge of increasingly higher command levels, starting from the regiment level, then the division level, to learn the general principles of command at the army level in the third year. Most of the subjects were based on operational and tactical techniques, and the educational program, to a slightly lesser extent, included specialist and socio-political subjects [2]. The Main Library of the National Defense Academy became the most important library in the Armed Forces of the Republic of Poland in the category of book collections concerning military sciences and humanities.

In the years 1997-2001, the Library and Scientific Documentation Office of the Military Historical Institute, which was rich in collections on military and military history, also operated within the organizational structure of the National Defense Academy. In that period, the

collection consisted of about 960 thousand library units, including 890 thousand books and 920 thousand titles of Polish and foreign magazines. Then, the library subscribed to 197 titles of Polish and foreign journals on an ongoing basis [3]. In 2007, thanks to the American Information Centre's efforts at the Embassy of the United States AP in Warsaw, the Library enriched its resources with over 7 thousand volumes from the United States Air Force in Europe (Kaiserslautern, Germany). Among the books, military themes related to politics and international security prevailed. In the nineties of the twentieth century, there were qualitative changes in the Library's work related to computerization and automation of library processes. Two IT systems of comprehensive library services began to function: MAK and SOWA, which improved the collection, development, sharing, and satisfaction of the information needs of users. The databases were converted from the MAK system to the SOWA system, which was gradually updated with new functions. Currently, the integrated library system SOWA2SQL works. Connecting the Library to the Internet in 1998 caused revolutionary changes in the work of librarians, and users were given the possibility of remote browsing of the Library's databases, booking publications, and book extensions. Since 1995 the local electronic catalog started to replace the traditional card catalog [1].

2. The Main Library of the War Studies University – new developments

From 1 October 2016, the name of the National Defense Academy was changed to the War Studies University (Polish abbrev. ASzWoj). From the academic year 2016/2017, the Library started to operate under the new name of the Main Library of the War Studies University. The ASzWoj Library is a university-wide organizational unit with scientific, didactic, and service tasks, serving as a public scientific library [1]. Currently, the Main Library of the War Studies University has an extensive collection, which in the vast majority of cases is also located in computer databases. The Main Library of the War Studies University has over 800,000 book volumes, 19,000 magazine volumes (750 Polish and 260 foreign titles), and 150,000 cartographic publications. Among the Library's book stock, we can list Polish and foreign-language literature on defense and security sciences, such as international politics, types of armed forces, war art, strategy and tactics, war and military history, logistics (military economics and economy), organization and management and marketing, as well as compendia covering the humanities [4]. It accumulated the most extensive library resources among the libraries of the Ministry of National Defense during seventy years of activity. The book stock is divided into the following categories: academic book collection, military specialist publications (mainly instructions and departmental regulations), basic book collection, continuing publications (Polish and foreign journals), fictional literature, USAF book collection (foreign-language collection containing military topics), archival collections, cartographic publications, multimedia collections, electronic full-text collections (mainly articles from the University's Scientific Journals) [5]. The Academy fulfills academic tasks related to the education of officers and general staff for the needs of the Polish Armed Forces and civilian students. However, it is also an important scientific and research center with a pivotal contribution to the development of defense security sciences. That is evidenced by the unique character of these library collections, which are reports from research conducted mainly by the Academy's staff, devoted to improving the functioning of not only the Armed Forces and the broadly understood system of national security, taking into account the experience of many Polish officers in service in line units in the country and the international structures of NATO, the EU and the UN [5]. The Main Library of the War Studies University is perceived as modern and highly appreciated by students, academic and teaching staff, and other users. A critical period in the Library's

operation was the years 2015-2016 when planning for the digitization of resources began. The very structure of the Library has also changed, and currently, there are 2 Departments. The Development and Scientific Information Department consists of 3 Sections: Bibliography and Bibliometrics Information, Gathering, and Studies. Another one is the Department of Access to and Protection of the Collections, which supervises: Distribution Point of ASzWoj Publishers, Reading Room, and Lending Room. There is also the System Librarian and the Librarian for Information Education and Scientific Communication [6]. The War Studies University is implementing the project "Security and Defense Portal of the War Studies University" co-financed from the European Funds. As the leading scientific center in Poland dealing with security and defense sciences, since January 2017, the Academy has been carrying out a digitization project awarded within the competition organized by the Digital Poland Project Center. Due to EU funds of nearly 12 million zlotys, it will be possible to make available over 47 thousand digitized documents [7]. As part of this project, the University's Security and Defense Portal, through which the users will be able to use the collections collected by the Main Library of the Academy, will be launched. The available collections will be used by students, doctoral students, employees of the University, public administration bodies, and entrepreneurs who fulfill tasks for the benefit of national defense and security. Digitalization will also enable easier access to the collections for users interested in military history. The project is an element of the University's policy of creating effective methods for managing information and knowledge in the field of defense and security. Digital access to the book collection will undoubtedly significantly increase the range and scope of services provided by the Library, which might be an opportunity to build a positive image not only of the Library itself but also of its home University [1].

3. The Main Library of the Military University of Technology – historical outline

The Military University of Technology (Polish abbrev. WAT) started its statutory activity on 1 October 1951, after a modest ceremony inaugurating the higher education institution's first year. The first students were recruited mainly from academic companies at the Gdansk and Warsaw Universities of Technology [12]. The Main Library of the Military University of Technology was established in 1951, together with the Military University of Technology. Originally it was called the Technical Library, then the Scientific Library, and at the end of the 1960s, it received the name of the WAT Main Library. At the beginning of its existence, the Library did not have its seat. The Library's collection was located partly in the WAT Club, partly in the casino rooms and in the basements of the buildings belonging to the University. Since its foundation, the Library has been an essential element of the University's structure, exerting considerable influence on the level of didactic and scientific activities. In the years 2010-2013, the Library's building was thoroughly renovated and adapted to various users' needs in a modern and friendly way. Conference and training rooms, self-study rooms, booths for individual work, and a wi-fi zone in the whole building were put into use. New services were implemented at the end of 2014: Ask the librarian, Order copies, Online Payments, and a new website to meet the expectations of users. Since 2014 the Library has been working in the ALEPH IT library service system with remote access to the online catalog and the PRIMO search engine of library resources. A year later, there was employed the HAN system allowing for the coexistence of 35 licensed electronic resources, both within and outside the university network, through a single login to the Library's account. Since 2016 the Library has had the Digitalization Workshop. Since that year, the Omega-PSIR Repository has been created,

which is a continuation of the WAT Employee Bibliography Database. Currently, the Main Library has 350 thousand volumes of books, scripts, and textbooks; 19 thousand volumes of magazines and 4 thousand special collections. The Main Library of the WAT organizes cultural events: photographic and painting exhibitions and occasional concerts. Besides, the Library hosts national and international conferences, training courses, and seminars and job fairs for the academic community of WAT [9].

4. The Main Library of the Military University of Technology – new developments

The Main Library of the Jarosław Dąbrowski Military University of Technology in Warsaw (WAT) has been recording significant and innovative changes in every field of library activity in recent years. The sphere of IT services is undergoing changes, and the Library is moving towards a teaching and learning organization [10]. During its activity, the Main Library of the Military University of Technology has actively participated in the scientific development of its users by collecting a selected resource of books, scripts, and printed journals, and with time creating access to electronic sources. In 2010, the Library underwent a comprehensive renovation, thanks to the Academy authorities and the support of EU funds from the Marshal's Office, the building was thoroughly restored. For users and librarians, it was a time of great trial and hardship. The Library's general departments were located in different parts of the academic campus, and some of the collections were taken out of use. Renovation and modernization took three years. The place delights visitors, the library building and its surroundings have become the setting for several Polish films [11]. The Library's book collection currently consists of about 400,000 volumes, over 23,000 volumes of printed magazines, most of which are computer cataloged. The book stock policy is conducted following the needs of the University. The electronic collection of the Main Library of the WAT consists of over 60 thousand licensed documents, the remote access to which was paid by the Library. There are 35 electronic databases, 7200 electronic journals, and about 54 thousand electronic books in the collection. The book collection in reading rooms and current acquisitions were introduced to the RFID system. The collection of printed library documents is also retrospectively supplemented. Thanks to the device called "electronic library assistant", which cooperates with the RFID system, organizing the collection and preparing documents for inventory is significantly shortened. In September 2014, a new library system Aleph PRIMO was introduced. The unbelievably short implementation time of this system deserves to be emphasized. The tender procedure for the Aleph PRIMO system ended in June 2014, and at the end of September, the users were already served in the new library system. It should be noted that the PRIMO metasearch engine of library resources, a "one window" search engine has been implemented. It allows for quick access to the library catalog, e-sources purchased by the WAT Library, and resources in the open-access model. From the PRIMO level, it has become possible, among others, to order collections, pro-long, and view ordered and borrowed books. Also, the HAN (Hidden Automatic Navigator) – an all-in-one system that enables comprehensive management of e-journals and databases and differentiates users concerning license and permission management, giving access to usage statistics. The HAN enables logged-in users in the PRIMO system to remotely access all electronic sources available in the Library [11]. Together with the new website, the readers of the Main Library have also been provided with the Libsmart package in the form of three new applications: Ask the Librarian, Lib-smart Copy, and Lib-smart Payment. The WAT Library was the first to implement such a wide range of Libsmart system services.

The Ask the Librarian is a modern service for communication with the Main Library staff, whose mission is to provide users with reliable and complete information and expected help in the shortest possible time. The Ask the Librarian enables the contact with the librarian on duty, who will provide information personally or redirect the matter to competent persons, e.g., specialists in a given field. The Libsmart Copy is an automated application integrated with the library computer system for remote ordering of copies from traditional library materials. This service is also available to users without an active library account. The Libsmart Payment service, on the other hand, makes it possible to settle library payments through electronic banking. Owing to the integration with the library computer system, after the transfer is booked, the Libsmart Payment application dynamically makes appropriate changes to the reader's account in synchronous time. This new functionality is very popular with readers. Even small liabilities to the Library can be handled remotely, without the need to present certificates of no arrears [11]. The Scientific Information Centre of the Military Library of the Military University of Technology employees carry out orders for the analysis of quotations for individual employees or departments or plants of the University. Citation analysis is carried out in the Web of Science and Scopus databases and may concern a single publication or the entire scientific output of a given author. Since 2012 the Library has been cooperating with the NUKAT Center. Within the framework of this cooperation, it takes over the records of the model password files and bibliographic records. Since 1999, the Scientific Information Center has also been a co-editor of the BazTech database – the content database of Polish technical journals. The employees edit the records, thereby co-creating a dictionary of subject entries [10]. A new intensively developed undertaking is the platform – repository, OmegaP-sir knowledge database registering information about the scientific achievements of WAT employees, storing employee publications, and project documents. The platform enables the creation of a research map of the University's organizational units, extended reporting, and parametric evaluation of the University's units. The database is updated and extended with the latest scientific and teaching staff publications [12]. One of the latest projects of the Main Library of the Military University of Technology is the digitization studio. The purchase of a large-format scanner has become a contribution to the work in this field. There has been appointed a team for the digitalization of resources. The work on creating digital copies has a two-track character. The first task is to scan scientific and research works created at the University, and the second is the digital processing of WAT scripts, allowing to free up space in the warehouses after multi-copy scripts. All digitalization works are carried out under the provisions of the Act on the author's rights. The Library has also implemented the CoLibri cover system for all acquisitions, reading room resources, fictional lending room, and retrospectively for the most frequently used resource. It should be mentioned here that the number of the library team has not changed for years. However, the task-oriented approach to the work and undertakings, often initiated by the librarians, has changed [10].

Conclusions

In recent years, the activities of military libraries of higher education institutions have been strongly influenced by new information and communication technologies. The current system of university libraries is also under a strong influence of information processes and systems in the virtual environment, digital revolution and development of information civilization, and visions of the society of the 21st-century era of communication, information, and knowledge. Libraries of universities and military schools must keep up with these challenges, effectively anticipating their future against the background of the future of educational services. It is

necessary to define clear goals of functioning and to develop new directions of action to achieve these goals. The future development directions for military libraries are hybrid libraries; it is important that traditional, digital, and hybrid libraries coexist. The libraries discussed in the article, the Library of the War Studies University and the Library of the Military University of Technology, are heading toward digital libraries. Now, one can already talk about the fact that these two most important libraries in the Armed Forces already have features of a hybrid library. Over the years, however, they will move towards complete digitization, just like other academic libraries. The modern solutions applied in both libraries prove that they are moving in this direction. The Library of the War Studies University boasts the new initiative – the Security and Defense Portal. The main goal of the project is to make more than 47 thousand digitized documents available. These include scientific resources from the area of national defense and security, collected in the Main Library of the War Studies University. The indicated materials will be made available through the ASzWoj Security and Defense Portal, which is to be a digital platform for the exchange of scientific ideas. In recent years new solutions can also be seen in the Library of the Military University of Technology. Particularly noteworthy are the PRIMO metasearch engine and the HAN (Hidden Automatic Navigator) IT system, which enables comprehensive management of e-journals and databases, and the Libsmart package in the form of three new applications: Ask the Librarian, Libsmart Copy and Libsmart Payment, these applications significantly improve the use of library resources. To sum up, over the last ten years, massive progress in the development of these libraries from the "serving" library to the "teaching" library has been noticed.

Acknowledgement

Conflict of interests

The author declared no conflict of interests.

Author contributions

The author contributed to the interpretation of results and writing of the paper. The author read and approved the final manuscript.

Ethical statement

The research complies with all national and international ethical requirements.

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References

1. Majewska J. *Biblioteka Główna Akademii Sztuki Wojennej – wczoraj i dziś*. Obronność. Zeszyty Naukowe. 2017;2(22).

2. *Akademia Sztuki Wojennej – kierunki studiów*, [online]. Portal www.otouczelnie.pl. Available at: http://www.otouczelnie.pl/uczelnia_dzial/234/Akademia-Obrony-Narodowej-kierunkistudiow [Accessed: 1 April 2019].

3. Pedrycz T. *Rys historyczny Biblioteki Głównej Akademii Obrony Narodowej*. Przegląd Informacyjno--Dokumentacyjny Centralnego Ośrodka Naukowej Informacji Wojskowej. 1997;6.

4. *O Bibliotece*, [online]. Akademia Sztuki Wojennej. Available at: http://www.akademia.mil.pl/biblio-teka [Accessed: 1 April 2019].

5. Kolek G, Majewska J, Mijewska J. *Zasoby biblioteczne i usługi informacyjne Biblioteki Głównej AON*. Studia i Materiały Centralnej Biblioteki Wojskowej im. Marszałka Józefa Piłsudskiego. 2015;2(4).

6. *Struktura Biblioteki*, [online]. Akademia Sztuki Wojennej. Available at: https://www.akademia.mil.pl/struktura-biblioteka [Accessed: 25 January 2020].

7. *Portal bezpieczeństwa i obronności Akademii Sztuki Wojennej*, [online]. Akademia Sztuki Wojennej. Available at: https://pbio.akademia.mil.pl/library [Accessed: 1 April 2019].

8. *O uczelni. Historia i tradycje*, [online]. Wojskowa Akademia Techniczna. Available at: https://www.wat.edu.pl/o-uczelni/historia-i-tradycje [Accessed: 1 April 2019].

9. *Informacje ogólne*, [online]. Wojskowa Akademia Techniczna. Available at: http://www.bg.wat.edu.pl/informacje-ogolne [Accessed: 1 April 2019].

10. Konieczny-Rozenfeld B. *Przestrzeń nauki i kultury – nowatorskie rozwiązania w Bibliotece Głównej Wojskowej Akademii Technicznej w Warszawie*. EBIB. 2016;6(168).

11. *O bibliotece*, [online]. Wojskowa Akademia Techniczna. Available at: http://www.bg.wat.edu.pl/o--bibliotece [Accessed: 1 April 2019].

12. *Usługi online*, [online]. Wojskowa Akademia Techniczna. Available at: http://www.bg.wat.edu.pl/uslugi-online [Accessed: 1 April 2019].

Biographical note

Anita Kuźnik – M.A., the author is a graduate of the University of Wrocław. In the years 2011-2018 she was a worker of the Military University of Land Forces Library (in 2017 she opened her doctoral dissertation at the Faculty of Management of the Military University). Since September 2018, she has been an employee and a doctoral student of the Faculty of Management of the General Tadeusz Kościuszko Military University of Land Forces (Polish abbrev. AWL), where she is working on her doctoral dissertation entitled "Managing Information Infrastructure in the Library of the Military Higher Education Institution". She took part in many national and international scientific projects at the Faculty of Management of the AWL. She is a member of 3 scientific-research teams.

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SŁOWA KLUCZOWE	biblioteki wojskowe, biblioteki szkół wyższych, infrastruktura informacyjna, cyfryzacja, systemy informatyczne

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