

Digitalization for Preserving the Book Heritage of the University Library at “Angel Kanchev” University of Ruse

Viktoriya Ivanova^[0000-0002-5239-4174]

University of Ruse “Angel Kanchev”, 8, Studentska Str., Ruse, Bulgaria
vivanova@uni-ruse.bg

Abstract. This paper presents the project “Creating a digital collection in the fund of the University library in University of Ruse “Angel Kanchev” (Centre for digitalization), contract number No 2022-PY-04, funded by the National Research Fund. Aim of the project is digitizing the first book collection in the University library’s fund and presenting it to the wide audience.

Keywords: Digitalization, University Libraries, Cultural and Historical Heritage.

1 Introduction

The accelerated process of globalization in everyday life and the accompanying technological progress in the area of the information and communication technologies ensures new powerful tools for preserving the history of a given educational institution. This is extremely important task, because constantly there is a serious risk of damage or destruction of objects with historical, cultural and archeological value (Pavlova, 2020).

One of the key priorities of the European Commission (EC) for the 2019-2024 period is the execution of a large-scale digitization. The European Union (EU) initiates various activities and all interested stakeholders can be included in the digitalization process. Expected result is the establishment of equal standard in all member countries. According to the EU system for evaluation “Digital Economy and Society Index” (DESI), Bulgaria holds penultimate place for 2021. Although the overall result of Bulgaria has increased to 36,8 as compared to 2020, the level of the country’s technological development is still of one of the lowest in the EU.

“Bulgaria’s National Development Program 2030” foresees that until 2030 Bulgaria will create functioning and safe environment for unlocking the full potential of digital technologies and will execute digital transformation in all key sectors. The National Programme “Digital Bulgaria 2025” aims at the modernization and complete introduction of intelligent information solutions in all spheres of the social and economic life. (European Commission Representation in Bulgaria, 2022).

A study among the Research Libraries, described in a paper by Lynch and Lipincott, shows that 40% of the Universities have repositories and 88% of those, which do not have one, state that they have taken steps towards their creation. Contents of the repositories vary, but prevailing are electronic thesis, dissertations, preprints, work papers and digital values from special collections (Hunter, 2012).

2 Digitalization in the University Libraries

The main purpose of digital transformation is the necessity of modern technologies that can boost the competitiveness of an organization. The overall idea is offering online and offline services through digital platforms and the Internet (Leguina, et al., 2021).

Many research universities undertake mass digitalization of their book collections. Leading library institutions appeal for speeding up of digitalization and moving from project-oriented digitalization to international and national programs from mass digitalization. These initiatives would give access to unique and geographically distanced valuable collections (Gueguen, & Hanlon, 2009).

Ben Hunter in his article „The Effect of Digital Publishing on Technical Services in University Libraries” (Hunter, 2012) describes eight basic categories of digital publication:

1. Institutional repository (online platform for collecting, preserving and disseminating the output of a university);
2. Disciplinary repository (online platform for collecting, preserving and disseminating the work of scholars in a specific discipline);
3. Hosted open access journals or books (freely available digitally-born scholarly books and/or journals);
4. Digitized special collections (digitized copies of rare or specialized physical collections);
5. Dataset management and preservation (online platform for collecting, preserving and disseminating research datasets);
6. Digitized orphan or public domain works (digitized versions of physical items that are in the public domain or qualify as orphan works);
7. Digitized university press content (digitized content published by a university press or a “digital imprint” of the library);
8. Print-on-demand (on-demand production of bound, print books from digitized copies).

The university library at the University of Ruse has acknowledged the importance of digitalization and has been seeking for different initiatives for digitalization long before the world health crisis, caused by Covid-19. In 2022 successfully started the execution of the project “Creating a digital collection in the fund of the University library in University of Ruse “Angel Kanchev” (Centre for digitalization)”, contract number No 2022-PY-04, funded by the National Research Fund. Aim of the project is to be digitized the first book collection in the University library’s fund.

The main tasks in the project are: identifying the collection, which will be digitized; investigating suitable technological infrastructures for digitalization; selecting the best

technology according to the characteristics of the collection; digitizing the oldest collection in the University library's fund; presenting the digitized collection.

3 Digitalization the Oldest Book Collection in the University Library's Fund of University of Ruse "Angel Kanchev"

The Library at the "Angel Kanchev" University of Ruse emerges with the establishment of the Higher Institute of Mechanical Engineering, Mechanization and Electrification of Agriculture in 1954. The University library starts functioning in the French girls' college with boarding school named Notre Dame de Sion and located in the Youth Park in Ruse. It is there, that small rooms are adapted for the needs of the library, which consisted of 1 librarian, 6000 books and about 200 readers (University of Ruse, 1974).

The Higher Institute of Mechanical Engineering, Mechanization and Electrification of Agriculture gradually grows and is relocated in its specially designed new building (today's Central building of the University of Ruse) in 1958. The Library also enriches its services and collections. Until 1957 the book fund numbers 18 419 issues and the borrowed literature is 50 640 volumes. The total number of subscribed readers is 894 and one librarian is accountable for all librarian services (Dushkov, 2010).

The training of specialists in the sphere of pedagogy in Ruse has started in the period 1894-1898. In 1960 the Ministry of Public Education opened in Ruse Semi-higher institute (College) for children's teachers with a three-year training course. The Semi-higher institute – Ruse was transformed to a Pedagogical Faculty in the Higher Technical School – Ruse in 1994. In 1995 the Higher Technical School has been transformed in the University of Ruse "Angel Kanchev", where the department of "Pedagogy, psychology and history" was a natural follower of the long traditions in the sphere of pedagogical education in the city of Ruse. The book collection of the department of "Pedagogy, psychology and history" became part of the University library, located in the Central building of the University (University of Ruse Department of Pedagogy, psychology and history, 2022).

The oldest collection in the University library's fund consists of literature, which can be divided in two main scientific fields. The first one is the field of engineering sciences and is connected with the specialties, offered in the Higher Institute of Mechanical Engineering, Mechanization and Electrification of Agriculture, today University of Ruse "Angel Kanchev". The greater part of this collection is in French language. The main reason for this is that the Higher Institute of Mechanical Engineering, Mechanization and Electrification of Agriculture was located at the building of the French girls' college in the city of Ruse. Most of the books have not been registered in the Catalogue of the National Academic Library and Information System Union. This gives the University library's experts the possibility to believe that these volumes of the titles are the only ones in the country.

The second part of the oldest book collection in the University library is in the area of the humanitarian sciences. In 2022 Bulgaria is celebrating the 260th anniversary since Saint Paisius of Hilendar, originally in Bulgarian – Паисий Хилендарски, has written

Slav-Bulgarian history, originally in Bulgarian – “История славеноболгарская” (1762). This is the first work of Bulgarian historiography and one of the most influential pieces of the Bulgarian revival. For the whole team of the University library it is a great honor to have and keep for the next generations Slav-Bulgarian history from 1898 with the compiler and author of the preface Aleksandar Stoyanov Teodorov-Balan, the first rector of the Sofia University “St. Kliment Ohridski”. Research conducted in the National data basis shows that so far there is no published digital copy of this book.

The digitalization of the first volumes in the University library’s fund will preserve its historical and cultural heritage for the next generations. Additionally, during the execution of the project, the first digitized copy of the Slav-Bulgarian history, originally in Bulgarian - “История славеноболгарская”, from 1898 with the compiler and author of the preface Aleksandar Stoyanov Teodorov-Balan will be created and presented. This, in a special way, will mark the 260th anniversary since the Slav-Bulgarian history was first written.

The first book collection, which will be digitized during the project, consists of especially valuable books, the oldest dating from 1888. List of the oldest book collection in the University library in the University of Ruse is presented below:

Engineering sciences

1. Analysis course at the Ecole Polytechnique, First volume, originally in French - Cours d'analyse de l'Ecole Polytechnique, Tome Premier, author Ch. Sturm, 1888.
2. Analysis course at the Ecole Polytechnique, Second Volume, originally in French - Cours d'analyse de l'Ecole Polytechnique, Tome Second, author Ch. Sturm, 1888.
3. Mechanics. Hydraulics. Thermodynamics, originally in French - Mecanique. Hydraulique. Thermodynamique, author G. Dariès, 1896.
4. Mathematics, originally in French - Mathématiques, author G. Dariès, 1896.
5. Rural engineering: Rural constructions and agricultural machinery, originally in French - Génie rural: Constructions rurales et machines agricoles, authors J. Philbert; O. Roux, 1902.
6. Electricity. First part. Theory and production, originally in French - Electricite. Premier partie. Theorie et production, author E. Dacremont, 1898.
7. Physics course at the Ecole polytechnique, originally in French - Cours de physique de l'Ecole polytechnique, author Jules-Celestin Jamin, 1886.

Humanitarian sciences

1. Saint Paisius of Hilendar Slav-Bulgarian history (1762), compiler and author of the preface Aleksandar Stoyanov Teodorov-Balan, originally in Bulgarian - Паисий Хилендарски, История славеноболгарская (1762), Теодоров-Балан, Александър Стоянов, 1898.
2. Bulgarian bibliography for 100 years (1806-1905), originally in Bulgarian - Български книгопис за 100 години (1806-1905), Aleksandar Stoyanov Teodorov-Balan, 1909.

3. Man as an object of education, originally in Russian - Человек как предмет воспитания, author K. Ushynsky 1894.
4. Poetic biography of Ivan Vazov up to the age of 20. Written in collaboration with the poet, originally in Bulgarian - Поетическа биография на Иван Вазов до 20-годишната му възраст, написана със сътрудничеството на поета, author T. Gabrovski, 1920.
5. My autobiography: The story of my life and beliefs, originally in Bulgarian - Автобиографията ми: Историята на моя живот и убеждения, J. Mill, 1898.
6. Great didactics, originally in Bulgarian - Велика дидактика, author J. Comenius, 1905.
7. Thoughts about upbringing, originally in Bulgarian - Мисли върху възпитанието, author J. Locke, 1905.
8. Guide to Pedagogical Psychology and Education: On Experimental Basics: For Men's and Girls' Pedagogical Schools and Primary School Teachers, originally in Bulgarian - Ръководство по педагогическа психология и възпитание : Върху опитни основи : За мъжки и девически педагогически училища и основни народни учители, author P. Tsonev, PhD, 1904.

Digital technologies offer new opportunities for preserving the cultural heritage. They also increase the accessibility of cultural heritage for all audiences. Museums and cultural organizations, which use new technologies, are able to offer to visitors new experiences, as well as to give access to exhibitions online (European Commission Representation in Bulgaria, 2022)

4 Conclusions

Digital transformation is an important process for university libraries. Digitalization of valuable books ensures the preservation of the historical and cultural heritage of the university for the next generations. At the same time, giving access to electronic resources supports education and research. As a result, there is a higher standard and more opportunities for research and innovations. Thus, the academic community is more competitive in the international field of higher education.

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Received: June 02, 2022

Reviewed: July 04, 2022

Finally Accepted: July 13, 2022