

eLibrary of the Goethe-Institut

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ABSTRACT: The first chapter of this paper presents theoretical terms in the field of eLibraries, which are later further explained using the example of the eLibrary of the Goethe-Institut, called Onleihe. After a short historical overview of eLibraries in general, the final chapter presents the results of the survey conducted among active users of the Onleihe. The purpose of this survey was to determine users' habits as well as their impressions considering the offer of the Onleihe. We also tried to determine the causalities between their gender, age, education level, location, knowledge of the German language and previous experiences in traditional and eLibraries, if any, on the one hand and the aforementioned habits and impressions on the other.

KEYWORDS: eLibrary, digital library, digital reading.

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1 E-libraries

1.1 Definition of terms

In order to fully understand the subject matter relating to electronic libraries, it is necessary to define first the terms such as electronic books, electronic reader, electronic library and digital rights management (*DRM: Digital Rights Management*).

According to the electronic version of the Oxford dictionary, an electronic book, abbreviated as eBook, is an electronic version of a printed book that can be read on a computer or a handheld device (mobile phone), designed

specifically for that purpose.¹ In the older editions of the Duden and Brockhaus encyclopaedias, we find the definitions of an eBook (*e-Book*, *elektronisches Buch*) that have in the meantime been ascribed to the term electronic reader (*e-Reader*). Namely, an eBook is defined there as a reading device the size of a book, which displays a book on an LCD screen. However, in the Brockhaus encyclopedia, it is implied that the database of a book which is read through that kind of device is often referred to as an electronic book.

Because of the obvious problem such terminology could lead to, the term “electronic reader” has been introduced. By that definition, an electronic reader would be a mobile device the size of a book which is used for displaying electronic books (Duden, 2007; Brockhaus, 2003).

“Electronic” or “digital library” is a term which created a lot of terminological confusion towards the end of the 20th century, alongside the related terms such as “virtual“, “hybrid” or “a library without walls“. From a number of various discussions related to this topic, Cleveland highlighted several characteristics of digital libraries, on the assumption that they ultimately remain – libraries. To him, digital libraries represent the face of traditional libraries and include both digital and printed material, as well as all the processes and services that constitute the nervous system of a library (Cleveland, 1998). Nevertheless, Borgman defines digital libraries as a set of electronic resources and technical possibilities for their creation, search and use. According to Borgman, digital libraries include data, metadata which describe various aspects of data, and metadata which consist of links or connections to other data or metadata, regardless of whether they are internal or external links (Borgman, 1999). Through the analysis of 64 definitions collected within a student project, Schwarz singled out several functions of digital libraries, which could be ascribed to them in an ideal situation. Thus she concludes that a digital library is a separate set of electronic resources and activities, which could, but do not have to be organized within the operational system of a traditional library (Schwartz, 2000)

Besides these three terms, it is also very important to define the term digital rights management. There is still no universal definition of *DRM* (Fränkl and Karpf, 2004), but we are going to take into consideration Ianella’s definition, which is one of the most cited ones. According to this definition, *DRM*, namely, comprises description, segmenting, analysis, evaluation, trade in and monitoring of the rights of a certain enterprise and

¹ Accessed 01.09.2017, <https://en.oxforddictionaries.com/definition/us/e-book>

pertains – in the context of publishing – to both physical and digital published books and other media (Ianella, 2003). *DRM* also pertains to data protection against copying, depending on the previously defined copyrights. The website *Ebook Architects* provides an illustrative description of *DRM* as being a lock attached to a digital database connecting it to the account of a person who has purchased it, i.e. rented it. In addition, the experts from the same website criticize *DRM* as an outdated manner of book protection, but they do not deny that this kind of protection is necessary. However, they hold the view that a new way of copyright protection of digital databases is necessary.

1.2 Format review

Despite efforts along these lines, there are still no universal standards for eBook formats, nor do they exist as regards the devices and software which are used to display them. Nevertheless, there are several formats which are most frequently used in electronic publishing. We are going to use the review provided by the website *Ebook Architects*.²

Kindle Format 8 (KF8) – this is the format used by the company Amazon, adjusted to the electronic readers Kindle, as well as Kindle-applications. This format allows book locking by means of *DRM*, linking it exclusively to the device the book has been loaded onto (Figure 1, left).



Figure 1.

ePub2 / ePub3 – these formats have been developed as a general standard for eBooks. They are based on different technologies and standards, and are unique in terms of how they are combined. *DRM* is most effectively integrated into these formats through *Adobe Content Server* program. *NOOK Kids* is a very similar format to these, and is used for displaying children’s books (Figure 1, middle and right).

² Accessed 01.09.2017, <http://ebookarchitects.com/learn-about-ebooks/formats/>

iBooks Author – this format has been created by the *Apple* company, and has been mainly designed for non-fictional electronic books. It is not possible to build a standard *DRM* into the books using format, but the *Apple* company has created its own technology called *FairPlay*, which serves the same purpose (Figure 2, left).



Figure 2.

PDF – this format is certainly the most widespread, despite gradually becoming obsolete in the modern eBook world, mostly because it cannot be adjusted to the small screens of electronic readers, so, although readers in general support this format, reading is not so “comfortable“, as is the case with the aforementioned formats. Concerning digital rights, these databases can be encoded or locked (Figure 2, right).

1.3 Historical overview

Candela, Casteli and Pagano refer to the invention of Vannevar Bush from the year 1945 as a precursor of electronic libraries – a device which a person can use to store all their books, files and correspondence, and which can function flexibly and at great speed. One of the visionaries they mention is Lickleider, who in 1965 recognized the potential of computer technologies to create an automatic library which can be used by a number of persons simultaneously. However, serious research in this field started in the 1990’s (Candela et al., 2011).

According to Besser, the first major acknowledgment of the importance of electronic libraries occurred in 1994 by the announcement that 24.4 million American dollars from the US federal budget would be spent on research in electronic libraries, involving six universities (Besser, 2004). Although he considers them very exciting, Besser nonetheless emphasizes that the results of these researches were a far cry from libraries, consequently deeming this phase “experimental“. He subsequently introduces us to the so-called “development” phase, which ensued four years later. During this phase the American Government invested money in a project which served the purpose

of adding some of the services of a traditional library to this experimental product, while at that time, he states, the administrators of traditional libraries started to develop serious digital components.

Various initiatives appeared, which spawned research projects in this field, both in the US and Europe (Besser, 2004). When librarians took part in these projects to a larger extent, the attempts at creating electronic libraries advanced from informatics experiments to more operational services.

Nowadays all initiatives and projects can be divided into three groups: those which are guided by the principle of data sharing, those committed to the definition and development of generic systems for the purpose of simplifying the construction and operation of electronic libraries, as well as those leading to new research environments (Besser, 2004).

2 About the Goethe-Institut

The Goethe-Institut is a cultural institution of the Federal Republic of Germany which operates worldwide. It supports and promotes study of the German language abroad and fosters international cultural cooperation. It also conveys a comprehensive image of Germany by providing information about its cultural, social and political life. With the network of Goethe-Instituts, Goethe Centres, cultural societies, reading rooms, exam and language learning centres, it assumes the central task of the educational and cultural policy of the Federal Republic of Germany abroad. It also establishes partnerships with public and private cultural institutions, federal provinces, communes and the economy. The Goethe-Institut in Belgrade was founded in 1970. It is responsible for the cultural exchange between Germany on the one hand and Serbia and Montenegro on the other.

The Goethe-Institut in Belgrade is a part of the regional network of the Goethe-Instituts in South-Eastern Europe, and in that respect it provides strong support to the implementation of regional projects, topics and program goals. The work of the Goethe-Institut in South-Eastern Europe is coordinated by the institute in Athens, and apart from the institute in Belgrade, the other institutes in this region are in Ankara, Bucharest, Istanbul, Ismir, Nicosia, Sarajevo, Sofia, Thessaloniki, Tirana and Zagreb.

The activities of the Goethe-Institut in Belgrade include the following spheres of work:

- cultural programs;
- providing information and library services;

- language courses and corresponding exams;
- cooperation in language teaching.³

2.1 About the Goethe-Institut eLibrary

eLibrary is the Goethe-Institut's digital library. This service enables customers to borrow digital media on a time-limited basis by simply downloading them from eLibrary.⁴

The eLibrary services on offer by the Goethe-Institut have been provided by the company *divibib GmbH*⁵ from Wiesbaden in Germany, a daughter company of *ekz.bibliotheksservice GmbH*. Since 2007, the company *divibib* has offered one of the leading platforms of electronic libraries called *Onleihe*⁶ and it currently boasts more than 3,000 libraries among its clients. This platform is used in Germany by all major public libraries, and also by libraries in Denmark, Belgium, France, Italy, Liechtenstein, Austria and Switzerland. In addition to the standard services offer through the web pages of libraries that use the services of the company *divibib*, there is a possibility of using applications for *Android* and *iOS* platforms free of charge.

In 2011, the network of Goethe-Instituts included eLibrary among the services it offers, and even in that initial phase some of the libraries from South-Eastern Europe joined in. The eLibrary of the Goethe-Institut currently contains 19,225 units,⁷ which comprise popular fiction, books for children and youth, manuals and handbooks from various specialist fields, as well as music, audio books and movies. The current services on offer include electronic books and magazines in *pdf*, *ePub* and *.acsm* formats, and audio material (music or audio-books) in *.wma* format, whereas the movies on offer can only be watched online. The library holdings are available to all the libraries of the Goethe-Institut which are included in the network of electronic libraries, but terms of service vary from one institute to another. Unlike the majority of other institutes, the Belgrade Institute enables its users to use this service free of charge, just as is the case with the services offered by the traditional library.

³ Accessed 01.09.2017, <https://www.goethe.de/ins/cs/sr/ueb/auf.html>

⁴ Accessed 01.09.2017, <https://www.goethe.de/ins/cs/sr/kul/bib/onl.html>

⁵ Accessed 01.09.2017, <http://www.divibib.com/>

⁶ Accessed 01.09.2017, <http://www.onleihe.net/>

⁷ Accessed 01.09.2017, <http://www2.onleihe.de/goethe-institut/frontend/welcome,51-0-0-100-0-0-1-0-0-0-0.html>

The users register filling out a form on the web page of the Goethe-Institut⁸ in Belgrade, providing their basic data such as their name, surname, date of birth, address, phone number and their library membership card number of the Goethe-Institut, if they have one (Figure 3, left).

Figure 3.

This registration reaches the library by means of an email, and the librarian subsequently generates a unique activation code from his or her account on the portal *Mein goethe.de* and sends it by email to the user with the accompanying instructions on how to use it in PDF format. Then the user, if he or she has not done it already, opens an account on the portal *Mein goethe.de*, where in the section “eLibrary” he or she enters the received activation code. That is how an account is activated for the duration of one year. Upon the expiration of that period, the user may register again following the same procedure (Figure 3, right and Figure 4).

The eLibrary holdings can be searched by a simple searching method, or browsed through the categories they are divided into. When the user finds the desired medium, it is necessary to “place it into the library basket” first, where he or she can select a suitable format and download the database. It is not necessary to return the borrowed databases. After the expiry of the loan period, the database simply cannot be opened any more.

⁸ Accessed 01.09.2017, <https://www.goethe.de/ins/cs/sr/kul/bib/onl/ann.html>



Figure 4. eLibrary visual identity (design: Slavimir Stojanović Futro)

The Goethe-Institut in Belgrade has been in charge of the eLibrary services on offer since January 2014. Since then – for more than three and a half years – 2,600 activation codes have been generated, which makes up for more than 10% of the overall number in the region of South-Eastern Europe. Out of that number, only 1,315 users have activated their account, whereas 1,285 of them – less than a half – have not used the registration code they received. There are indications this percent is due to a somewhat complicated registration process, which requires form filling, waiting for a registration code, which is not automatically generated, but is granted manually, registration at the portal *Mein goethe.de* and finally account activation. According to subjective assessments, there are too many steps to take in order to register, so less savvy computer users are frequently demotivated before they carry out the account activation. In some cases, users do not provide their correct email address, so the librarian is unable to forward their registration code to them. However, in July 2017, the traditional library system in the physical library was replaced by the modern software Koha, which additionally enables users to keep their personal search requests, extend loan periods and reserve media from the library. These personalized accounts are available to the library users as of November 2017. When this practice becomes more common, a gradual increase of eLibrary activated accounts is expected, taking into consideration that the physical library account is activated via the portal *Mein goethe.de*, the same portal which is used to log into the eLibrary.

The eLibrary is currently⁹ being used by 338 active users from Serbia, which makes up for 16.1% of the overall number of active users in South-Eastern Europe. In 2014, there were 2.22 users registering per day, while in 2015 the average percentage was somewhat lower: 1.81. In the year 2016 there were 2.12 of users on average who registered with the eLibrary per day.

⁹ Data from August 2017.

3 Survey analysis

"The Goethe Institut eLibrary in Belgrade" survey was conducted from September 2015 to August 2017 on a sample of 327 respondents, and new data are constantly being collected. The aim of the survey was to establish the respondents' user habits, their impressions in regard to the offer and user services of the eLibrary, as well as the causalities between their gender, age, education, place of residence, knowledge of the German language and previous experience in electronic and traditional libraries on the one hand, and their habits and impressions on the other.

3.1 Statistical descriptors

The number of respondents according to gender is practically even. Namely, 53.2% of the respondents are women and 46.8% men (Chart 1, left).

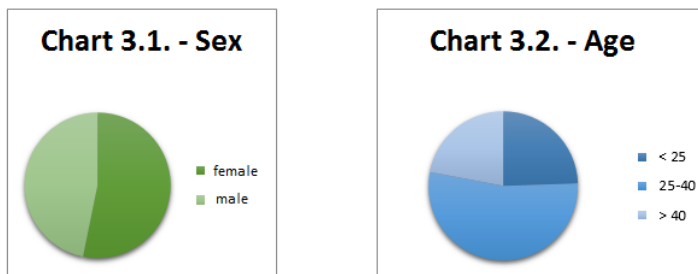


Chart 1.

As regards the age of the respondents, according to the sample we can conclude that the majority of active eLibrary users are aged between 25 and 40. 24.5% of the respondents are under 25, 53.5% are between 25 and 40 years, and 22.0% above 40 (Chart 1, right).

According to the place of residence, we divided the results into two groups: the respondents living in Belgrade and those who live outside Belgrade. The results show that these two groups are almost the same. Namely, 57% of the respondents live in Belgrade, while 42.8% reside in other cities in Serbia (Chart 2, left).

34.3% of the respondents graduated from high school or a place of higher education, 28.1% completed their basic university studies while the rest of them, a sizeable 37.6%, obtained a Master's or PhD degree (Chart 2, right).

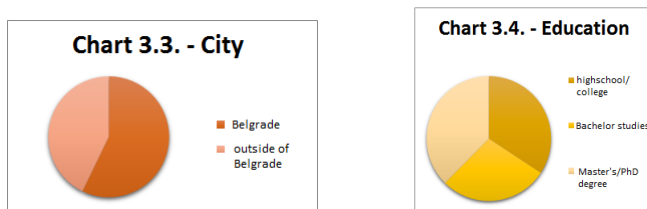


Chart 2.

According to these data, we conclude that the majority of the eLibrary users of the Goethe-Institut are highly educated, which can be explained by their high degree of computer literacy which academic education implies.

When they were asked to assess their knowledge of the German language on a scale from 1 to 5, the lowest grade being 1 and the highest 5, the respondents' answers were as follows: a mere 12.5% of the respondents assessed their knowledge with the lowest grade, 17.4% would give themselves grade 2, 33.3% assessed their knowledge with an average grade 3, 22.0% would give themselves grade 4 while 14.7% of the respondents think they possess an excellent command of the German language. Therefore we conclude that the majority of users of the Goethe-Institut eLibrary have a solid to excellent knowledge of the German language. Given that the whole content of the eLibrary is in the German language, this result was easy to predict. However, taking into consideration that the eLibrary interface can be used in English as well, or some other world language, and that the library holdings include material for the study of the German language, it is no surprise that there are, among active users, those who do not assess their knowledge of German with the highest grades (Chart 3, left).

The greatest number of the respondents, 27.2% of them, use the eLibrary several times per month, while 42.5% do so once or several times per month (Chart 3, right).

42.5% of the Goethe-Institut eLibrary users simultaneously use the Institute's "paper" library, whereas the rest of the respondents, 57.25%, if we compare them with the data concerning their place of residence, can be

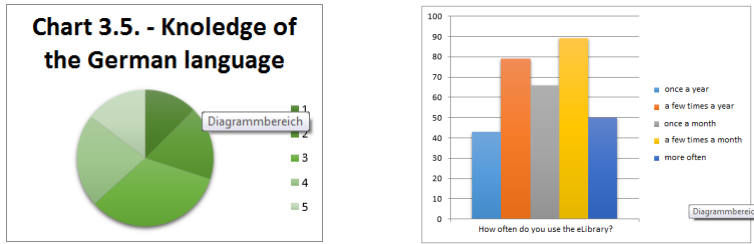


Chart 3.

explained by the fact that the Goethe-Institut does not have its branches outside Belgrade. That was later confirmed by using an independent samples t-test, where it was found there was a considerable difference between the number of users of the traditional library of the Goethe-Institut, who reside in Belgrade, and those living in some other city – to show that those from Belgrade prevail. The majority of the respondents, 60.9% of them precisely, simultaneously hold membership cards of some other libraries, while only 28.1% use an additional eLibrary. The latter is explained by the fact that ePublishing has not gained momentum in Serbia yet and, as a consequence, there is no substantial offer of electronic library holdings (Chart 4, left).

There follows a set of questions the respondents assessed on a scale from 1 to 5, depending on the extent to which they agree with a statement. In the first group of questions, there are those dealing with application and registration in order to use the Goethe-Institut eLibrary. According to the results, 70.9% of the respondents find information on the eLibrary easily or quite easily, while not a single respondent finds it extremely hard to obtain information on the eLibrary. As many as 54.7% are of the opinion that sending a request for the use of the e-Library is quite simple, and 60.9% find the instructions on how to register completely clear. 80.7% consider the registration process as quite or absolutely simple. 52.0% assessed the e-Library technical support as fully functional. The majority of the respondents, therefore, faced no obstacles with application or registration. However, taking into account that the survey was conducted among the active users – those who had successfully gone through the process – this result does not come as such a surprise (Chart 4, right).

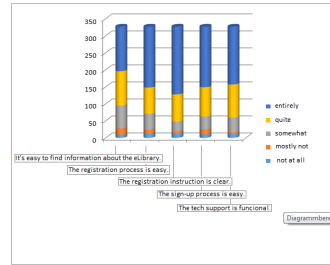
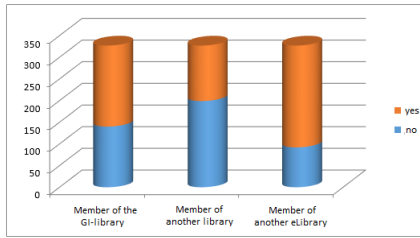


Chart 4.

The other set of questions deals with the user experience itself as regards the Goethe-Institut eLibrary. In this case as well, the majority of the respondents are satisfied with the eLibrary. As many as 74.0% find the required reading material easily or quite easily, while 70,0% of the respondents find the library holdings fully or quite well stocked. 23.9% of them assess the library holdings with an average grade, though. Almost four-fifths of the users (79.5%) are quite or completely satisfied with the efficiency of the media reservation process, while 73.1% of them consider the format selection absolutely or quite great. The vast majority of the respondents (78.9%) assess the media descriptions of the eLibrary as sufficiently informative. (Chart 5)

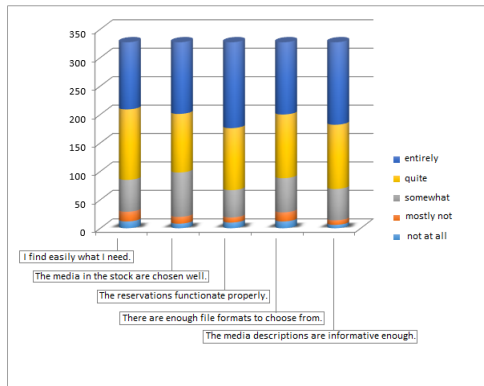


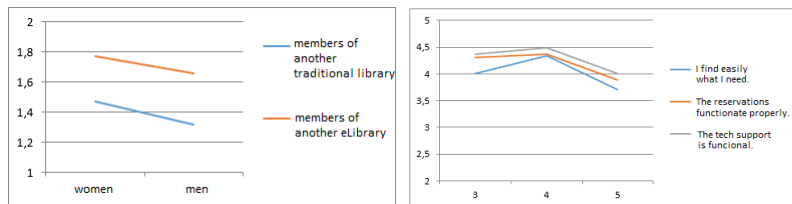
Chart 5.

The respondents were given space to leave additional comments in this survey, where they generally praised the electronic offer and expressed gratitude for being able to use it free of charge. Constructive criticism was mainly related to the eLibrary holdings choice, the majority of the users expressing their wishes to see movies in the German language in the electronic offer, which has been accomplished in the meantime. A demand for academic material was expressed, in the form of specialist literature, outstanding doctoral theses, etc. The eLibrary holdings of specialist literature exist and are renewed at regular intervals by the replenishment of the eLibrary holdings, but content such as academic papers is not compatible with the Goethe-Institut profile and purpose. There is, also, a great demand for the Goethe-Institut exam preparation material, but the publishing houses dealing with this sort of material have not enabled access to these editions in an electronic format yet. In addition, there is a demand for regular replenishment of popular fiction holdings, audio books and specialist literature for German scholars and teachers of the German language, which is the regular eLibrary practice.

When it comes to using eLibrary mobile applications, more than two-thirds of the respondents (68.2%) do not use any of the available applications. 23.5% use the Android application, 6.1% the one for the iOS- platform, and a mere 2.1% use both applications. Among those who use them, 77.3% are quite or very satisfied with their efficiency.

3.2 Comparison groups

The results related to the use of other traditional and electronic libraries in men and women were compared by an independent samples t-test. An independent samples t-test is used to compare the average values of some continuous variable in two different groups of subjects (Pallant, 2009). A considerable difference was established in both cases, in favour of men (Chart 3.2, left).



The survey on the use of some of the applications for the eLibrary in relation to the respondents' gender produced similar results in some earlier researches; this time, however, no considerable difference between genders was discovered. With regard to the application use, a considerable difference was determined in relation to a place of residence – Belgrade citizens use them much more than their counterparts in other cities.

An independent samples t-test established there was a considerable difference in education among the respondents who stated they were members of some other electronic library and those who stated the opposite. Namely, the users of other electronic libraries have a higher degree of education than the ones who do not use those libraries.

By applying one factor analysis of variance, the impact of age, knowledge of the German language, the frequency of the eLibrary use, as well as use of some of the applications for handling the registration process effectively and the user experience were researched respectively. The analysis of variance is used to compare the variability of the results among different groups with a variable within each group (Pallant, 2009). Despite the fact that considerable differences among age groups were found before, that was not the case this time. The knowledge of the language, nevertheless, has a considerable impact on effective use of the eLibrary, although not to the extent it may have been anticipated at first. Namely, the respondents who assessed their knowledge of the German language with the highest grade (5) were less satisfied with the offer than those who assessed their knowledge with grades 3 and 4. We obtained the data by comparing cumulative answer results on a scale of 10 questions, but also for separate answers relating to the question of how easy it is to find the material and the effectiveness of the reservation system, with a considerable difference occurring among those with a very good and excellent knowledge of the German language concerning the technical support satisfaction level (Chart 3.2, right).

We discovered a considerable difference by comparing the answers to the question pertaining to the effectiveness of the reservation system with those to the question of whether the respondents used mobile applications, and if so, which applications. We obtained the results showing *iOS* platform application users were more satisfied with the effectiveness of the reservation system compared to other users.

4 Conclusion

In this paper, we primarily presented the terms related to electronic libraries: electronic books, electronic readers and digital management rights. We made a reference to the most widespread formats of electronic books used today, as well as eLibrary history. Subsequently, we said something more about the Goethe-Institut cultural institution and its Belgrade office, further providing a more in-depth description of the Goethe-Institut offer of services, complementing it with pictures and general statistical data.

We summed up the paper by the survey results analysis, conducted among the active Goethe-Institut eLibrary users. The survey results showed considerable differences in several instances. Although our sample in relation to gender was almost the same, men use other traditional and electronic libraries more. The eLibrary applications are more frequently used by Belgrade citizens compared to other citizens in Serbia. Users with a higher degree of education use other electronic libraries more frequently, which comes as no surprise, bearing in mind that electronic libraries are a very important source for scientific research in the world's academic environment. We did not manage to provide an adequate explanation with regard to the findings that users who assessed their knowledge of the German language with the highest grade were less satisfied with their user experience than those assessing their knowledge with somewhat lower grades.

We conclude that the users are, generally speaking, quite satisfied with the Goethe-Institut eLibrary, although there is room for improvement when it comes to making the registration and activation process easier and replenishing the holdings with video material and didacticized video-material.

For further research, we recommend conducting a survey on a larger sample, so that the results could be as reliable as possible. The Goethe-Institut in Belgrade continues to compile answers from its active users and analyze them annually. Conducting a survey in other Goethe-Institut libraries in South-Eastern Europe could contribute to a broader perspective and would give us insight into the differences caused by different environments.

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Note

The first version of this paper was presented at the conference “Service Tailored to the 21st Century User Needs: the Implementation of ICT in Libraries”, held on 10th December 2015 at Belgrade City Library.