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The Challenges and Possibilities for Digital Inclusion Increase in Lithuanian Public Libraries

The aim of this paper is to examine the current state of digital inclusion activities in Lithuanian public libraries, to identify the major challenges that libraries face, and to forecast opportunities for digital inclusion growth. Theoretical conception of digital inclusion activities provided by public libraries is presented based on scientific literature findings. The empirical research findings - content analysis of public libraries textual and statistical activity reports - are also presented, revealing the situation of the implementation of digital inclusion activities in Lithuanian public libraries over the last five years and allowing to identify the main arising challenges and opportunities for digital inclusion increase.

Keywords: public libraries, digital inclusion increase, digital exclusion.

Šio straipsnio tikslas – išanalizuoti skaitmeninės įtraukties didinimo veiklų įgyvendinimo situaciją Lietuvos viešosiose bibliotekose, atskleisti pagrindinius bibliotekų patiriamus iššūkius ir numatyti galimybes skaitmeninės įtraukties didinimui. Remiantis mokslinės literatūros analizės rezultatais pristatoma teorinė bibliotekų veiklų skaitmeninės įtraukties didinimo srityje koncepcija. Taip pat straipsnyje pristatomi empirinio tyrimo – viešųjų bibliotekų tekstinių ir statistinių veiklos ataskaitų analizės rezultatai, kurie atskleidžia skaitmeninės įtraukties didinimo veiklų įgyvendinimo situaciją Lietuvos viešosiose bibliotekose per pastaruosius 5 metus ir leidžia identifikuoti esminius bibliotekų patiriamus sunkumus bei numatyti galimybes skaitmeninės įtraukties didinimui.

Raktiniai žodžiai: viešosios bibliotekos, skaitmeninės įtraukties didinimas, skaitmeninė atskirtis.

Introduction

In today's world the issues related to the possibilities for digital inclusion increase are of particular importance, as digital technologies, and the Internet affect almost every aspect of public, professional, and private life. The usage of information and communication technologies (further ICT) and the Internet has become a necessity and is closely linked to the engagement in civic, economic, cultural, and social life. The researchers, working in the digital inclusion field (Treviranus et al., 2014; Williams, Philip, Fairhurst, 2016; Gann, 2019; Ragnedda, Ruiu, Addeo, 2020; Gallardo, Beaulieu, Geideman, 2020; Corteza, Johnston, 2020; Horrigan, 2020, et al.) note that these trends define changed lifestyles, include new types of services, new forms of work, learning and social interaction that

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highlight the necessity to have access to ICT and the Internet, to have sufficient digital competences and to be able to use digital services and products efficiently.

The goals of digital inclusion are related to such aspects as lifelong learning, participation in the labor market, social and economic inclusion, improved health, and better quality of life in general, with the orientation towards empowerment of the most vulnerable groups of society, lacking digital inclusion the most (Gann, 2019; Gallardo, Beaulieu, Geideman, 2020; Corteza, Johnston 2020, Flynn, 2022). Such diverse goals indicate that there are a lot of stakeholders interested in its increase, among whom, public libraries play a significant role. During the last decades, in many countries, including Lithuania, governments have allocated funds for computerization and modernization of public libraries to contribute to the reduction of the digital divide and to provide access to the Internet and digital competences trainings for those who do not have such possibilities elsewhere (Manžuch, Macevičiūtė, 2020). However, today public library services in the field of digital inclusion go far beyond providing access to ICT, the Internet, and improving the digital competencies of society members. The latest research (Gann, 2019; Gallardo, Beaulieu, Geideman, 2020; Strover et al, 2020; Corteza, Johnston 2020; Real, 2021; Baluk et al., 2021, Flynn, 2022, Wahler et al., 2022 etc.) shows, that nowadays public libraries provide digital services (access to e-books, e-catalogues, various databases and digital resources), train society members on how to use digital services of other institutions (e-Health, e-Government portals, e-banking, etc.),

offer trainings and events that are available in the digital forms, create various digital services and products, many public libraries have digital literacy labs and creative spaces where people can try out the latest technologies: 3D printers, pencils, virtual reality equipment.

Nevertheless, researchers analyzing the challenges and possibilities related to the digital inclusion increase in public libraries (Noh, 2019; Gann, 2019; Strover et. al, 2020; Gallardo, Beaulieu, Geideman, 2020; Corteza, Johnston 2020; Real, 2021; Flynn, 2022) highlight the need for deeper analysis of public libraries services that are implemented in the digital inclusion field. According to the authors, public libraries face challenges such as ensuring the sustainability and continuity of digital inclusion initiatives, reaching and engaging target audiences who lack digital inclusion the most, and adapting to changing needs of service users and the external environment, particularly during critical situations that necessitate quick reaction, adjusting existing services, and developing new digital products and services. If not addressed properly, these challenges may have a negative impact not only on the digital inclusion initiatives implemented by public libraries, but also on the wealth of society and its members.

The COVID-19 pandemic that struck the world in 2019 has highlighted these challenges even more, as the need to effectively use digital technologies in both personal and professional spheres of life has grown, widening the gap between those who can and those who cannot. The COVID-19 pandemic has raised questions about the public libraries'

functions and services during crisis and encouraged researchers, working in this field (Ma, 2020; Ali, Gatiti, 2020; Garner, et al., 2021; Wang, Lund, 2020; Smith, 2020; Panattoni, 2021; Kou, Chen, Pan, 2021 et al., Kulikauskienė, Šaparnienė, 2021) to redefine the functions that are performed by public libraries during critical situations, highlighting the need for digital inclusion increase. The necessity for the digital inclusion increase in public libraries is further actualized by the current crisis in Ukraine, when the need to be able to find trustful information sources and critically evaluate the information, available in the virtual space, e. g. to have sufficient digital, media and information literacy competences, is growing. Also, the questions of the availability of digital technologies, the Internet, and various digital services for refugees from Ukraine are becoming more important as their numbers are rising not only in Lithuania, but in the neighbor countries (Poland, Lithuania, Latvia, etc.) as well.

These insights allow to define **a scientific problem** that research in the field of digital inclusion in public libraries still lacks a deeper analysis of the situation, definition of the main challenges, and insights into possible solutions to arising digital inclusion problems. To fill this gap, this paper focuses on the evaluation of digital inclusion activities implemented by public libraries, with the goal of identifying the main challenges and opportunities for digital inclusion increase by analyzing the case of Lithuanian public libraries. **The object of this paper** is public libraries activities in the digital inclusion field.

The aim of this paper is to analyze the current situation of the implementation of digital inclusion activities in Lithuanian public libraries, to identify the main challenges and opportunities for digital inclusion increase.

To achieve this aim, **the following objectives** are foreseen: 1) to analyze the scientific literature related to the digital inclusion issues and to define public libraries activities in the digital inclusion field; 2) to conduct a content analysis of Lithuanian public libraries documents (textual and statistical annual activity reports) in order assess the current situation of the implementation of digital inclusion activities in public libraries; 3) to identify the key challenges, encountered by libraries and propose opportunities for digital inclusion increase.

To achieve the aim of this paper, **the methods** of the overview, analysis, and synthesis of scientific literature (for the theoretical part) and qualitative content analysis of public libraries documents (for the empirical research) are applied. These methods allow to define the theoretical concept of digital inclusion activities, carried out by public libraries and to empirically investigate the situation of the implementation these activities in public libraries.

Theoretical conceptualization of public library activities in the field of digital inclusion

This section presents the main activities that are implemented by public libraries in the field of digital inclusion from the theoretical point of view. In general, digital inclusion can be understood as

the ability to use ICT and the Internet purposefully, encompassing access to ICT, the Internet, and digital competences (Real, Bertot, Jaeger 2014; Ragnedda, Ruiu, Addeo, 2020; Rutherford et. al, 2018; Beyne, 2018; Strover, 2019; Strover et al. 2020; Gallardo, Beaulieu, Geideman, 2020). In its essence, digital inclusion refers to the notion that certain groups (or segments) of society are excluded because of disability, age, economic status or cultural differences. According to E. J. Helsper (2012), E. J. Helsper, B. C. Reisdorf (2017), B. Gann (2019), individuals who experience difficulties in the economic, social, cultural, and personal spheres of life often face problems, related to insufficient digital inclusion. The authors note that groups lacking digital inclusion the most are: people with disabilities, seniors, the unemployed people, children and youth, people with lower levels of education, people living in rural areas, immigrants, refugees, etc.

In general, the goals of digital inclusion are related to lifelong learning, participation in the labor market, social and economic inclusion, improved health, and better quality of life (Gann, 2019; Corteza, Johnston 2020, Flynn, 2022). Such variety of goals means, that there are a lot of stakeholders, interested in digital inclusion increase: public and private sector organizations, higher education institutions, NGO's, community-based organizations, society, and its individual members (Kaletka, Pelka, 2015; Strover et al., 2020; Gallardo et al., 2020). Among them, public libraries are one the main organizations that directly contribute to the digital inclusion increase as they provide free access to ICT and the Internet, improve digital competences

of society members, primarily targeting such audiences as seniors, people with disabilities, children and youth, unemployed people, immigrants, etc. that lack digital inclusion the most (Real et al., 2015, Real, 2021; Flynn, 2022). Therefore, it can be argued that the concept of digital inclusion is embedded in the context of public libraries activities, as public libraries, in collaboration with other organizations from the public, private and non-governmental sectors, are acting as mediators and promoters of digital inclusion (Beyne, 2018).

In general, public libraries activities are geared towards the inclusion and the empowerment of society members by enabling them to benefit from the information, cultural and lifelong learning services offered by libraries, both physically and digitally. The provision of inclusive information services in public libraries started with Braille books, and as digital technologies evolved and become more prevalent, the need for digital inclusion initiatives has become apparent (Beyne, 2018). P. D. Moxley and J. M. Abbas (2016) point out that in the field of digital inclusion, public libraries can serve as gateways to digital services, as spaces for access to digital technologies and as organizers of digital competences training activities. According to B. Real et al. (2015), P. D. Moxley, J. M. Abbas (2016), S. Strover et al. (2020), in the field of digital inclusion, public libraries provide free access to ICT and the Internet, help society members improve their digital competencies, create and offer digital services and products, and host key digital inclusion initiatives such as projects and events, etc. (Figure 1).
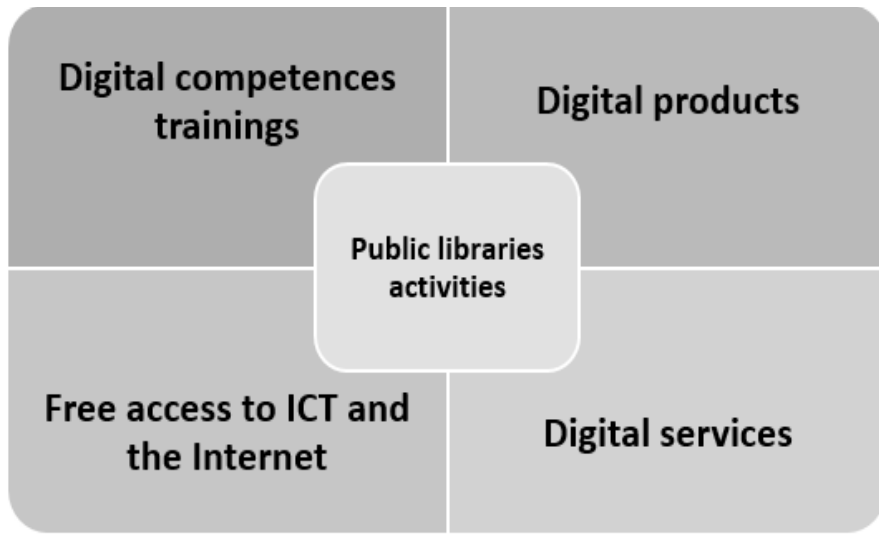
Fig. 1. **Public libraries activities in the digital inclusion field**

Source: the authors' own compilation based on B. Real et al. (2015), P. D. Moxley and J. M. Abbas (2016), S. Strover et al. (2020).

IFLA (2019) and ALA (2018) state that public libraries can contribute to the digital inclusion not only by providing free access to digital technologies, the Internet and information resources, but also by giving digital literacy advice, implementing digital competences trainings, providing access to, and encouraging the usage of digital services and products. The wide network of libraries, the orientation towards the needs of the communities in which they operate distinguish public libraries from other public sector organizations and put them in the unique position to contribute to digital inclusion.

These aspects are particularly relevant for libraries operating in the regions, because they often become one of the most important sources of access to the latest technologies and information for the local habitants (Manžuch, Macevičiūtė, 2020; Strover et al., 2020; Whiteside et al., 2022).

The COVID-19 pandemic, which started at the end of 2019, had effect on public libraries activities, oriented towards digital inclusion as well. The strict activity restrictions, imposed by the governments in all over the world, led to the changes in the way libraries operate. They had to adapt to constantly changing conditions, limit contact services and move most of activities to the digital space (Gann, 2020; Smith, 2020; Wang, Lund, 2020). By limiting physical access to the premises, public libraries started to provide digital services, created digital products, updated digital book collections, developed on-line learning platforms, increased access to the digital databases, started organizing on-line events, such

as meetings with the book authors, educational activities for children (Smith, 2020; Ma, 2020). During the pandemic, people have used ICT and the Internet to work and learn remotely, to manage their financial affairs, and to communicate with their friends and relatives, seeking to overcome loneliness and social isolation. Meanwhile, those who did not have access to or were unable to use ICTs and the Internet were severely limited and encountered the danger to face the total exclusion (Gann, 2019; Aslam, Naveed, Shabbir, 2020; Horrigan, 2020; Flynn, 2022; Guernsey, Prescott, Park, 2022). Also, during the pandemic, the need for the digital inclusion increase, related to the improvement of digital, media and information literacy competences became crucial, together with the necessity for librarians, as information specialists, to fight the rising infodemic, fake news and misinformation spread.

However, in the field of digital inclusion, public libraries frequently face challenges, such as difficulties in maintaining the sustainability of digital inclusion initiatives, reaching target audiences, adapting services to changing service user needs and external environment requirements, particularly during unexpected, critical situations (Noh, 2019; Gann, 2019; Gallardo, Beaulieu, Geideman, 2020; Real, 2021). These challenges highlight the importance of identifying potential solutions to these problems. This can be done by evaluating the current state of the implementation of digital inclusion activities offered by public libraries, such as digital competences trainings, provision of free access to ICT and the Internet, digital products, and digital services, defining

the main challenges that libraries face while implementing these activities, and offering opportunities for digital inclusion increase.

Research methodology

The qualitative content analysis method was chosen for this study, which included a qualitative content analysis of the textual and statistical activity reports of Lithuanian public libraries from 2017 to 2021. The libraries selected for this analysis are public libraries that fall under the Lithuanian Ministry of Culture and implement digital inclusion activities: the National Library of Lithuania, 5 county and 60 municipal public libraries. The National Library of Lithuania and 5 county public libraries are methodological centers for municipal public libraries, providing advice, competence development and other support to municipal public libraries. The National Library of Lithuania and five county public libraries report their activities to the Ministry of Culture, whereas municipal public libraries report their activities to the administrations of the municipalities where their libraries are located. Every year all Lithuanian public libraries prepare statistical and textual activity reports in which they provide the main information about the implemented activities, provided services, organized events, trainings, etc., including information about public libraries' digital inclusion activities.

The textual activity reports of the National Library of Lithuania, county and municipal public libraries are published on the libraries' websites. Statistical

activity reports of all Lithuanian public libraries are available in the statistics module of the National Library of Lithuania: http://statistika.libis.lt:7878/pls/apex/f?p=106

Taking into account the total number of public libraries operating in Lithuania (5 county public libraries, 60 municipal public libraries and 1 National Library of Lithuania) and the analysis period (2017–2021 years), using a sample size calculator and following the criteria of stratified sampling, which ensures that the number of reports from each type of library is representative (Cohen, Manion, Morrison, 2007), the sample size for the study was calculated: 169 textual and 169 statistical activity reports.

During this study, the 175 textual reports of municipality (148 reports), county (22 reports) public libraries, and the National Library of Lithuania (5 reports) for 2017–021 years were analyzed, together with 190 statistical reports of municipality (160 reports), county (25 reports) public libraries, and the National Library of Lithuania (5 reports). This sample ensured the necessary representativeness and validity of the study.

Following the principles of the qualitative content analysis approach (Cohen, Manion, Morrison, 2007), the key categories were identified, which represented the main activities implemented by public libraries in the digital inclusion field: the access to ICT and the Internet provided by public libraries, digital services, digital competences trainings for adults, educational activities for children and young people, digital products, on-line digital competences trainings, and on-line events. Additional categories representing the orientation of digital inclusion activities towards groups lacking digital inclusion, such as seniors, people with disabilities, adults, children, and youth, were identified during the data analysis.

The data was compiled by integrating quantitative statistical methods into the qualitative analysis, which allowed to reveal trends in digital inclusion activities provided by Lithuanian public libraries over a five-year period, and it was organized by relevant categories and the number of reporting public libraries (data represented in percentages) (Cohen, Manion, Morrison, 2007). To illustrate the statements in each category, quotations from library activity reports are provided in brackets in italics in the data analysis.

Representation of digital inclusion activities in Lithuanian public libraries' textual and statistical reports

According to the scientific literature (Real, Bertot, Jaeger, 2014; Real et al., 2015; Beyne, 2018; Strover et al., 2020; Real, 2021), the key activities of public libraries in the field of digital inclusion include providing access to ICT and the Internet, implementing digital competency trainings for various target audiences (seniors, people with disabilities, children and youth, unemployed people, etc.), and providing access to and the use of computers (digital products and services). Based on these insights, the key categories that reflect the activities carried out by libraries in the field of digital inclusion were identified while analyzing

the data presented in the textual activity reports of Lithuanian public libraries for the years 2017–2021 (Figure 2).

According to the data presented in this graph, all Lithuanian public libraries have engaged in the following activities aimed at increasing digital inclusion over the last five years: provided free access to ICT and the Internet *(<...> in public libraries <. ...> 127 computerized workstations for users <...> 11216 internet users registered during the year <...> 35784 internet sessions <...> printing, copying, scanning of documents <...> support for those using computers and the internet <...>* Utena MPL*[1], 2019), offered digital services, such as access to electronic catalogues, e-books, databases *(<...> users were periodically provided with subscription databases <...> free remote access to the digital library <...>* Kaunas MPL, 2017; *<... > library visitors had the opportunity to use library services electronically <...>* Klaipėda MPL, 2018) and carried out activities aimed at improving the digital competencies of members of the communities in which they operate

[1] MPL - abbreviation for municipal public library

(<...> in 2019, more than 500 people in the district were trained at digital competences training programs for the beginners' and advanced learners <...> Šiauliai MPL, 2019).

The biggest part (about 90%) of Lithuanian public libraries in their activity reports indicated that they organized educational activities for children and youth, which were focused on the improvement of information and digital literacy competences *(<...> the Public Library's Young Engineers' Laboratory toured the libraries of the district, organized workshops for children and presented the possibilities of 3D printers <...>* Tauragė MPL, 2017).

About a half of the Lithuanian public libraries created and offered digital products *(<...> created an interactive guide to educational activities <...>* Šiauliai MPL, 2020), organized on-line digital competences trainings *(<...> only remote trainings for residents have been held <...>* Kaunas MPL, 2020; *<...> the public library has created 80 different virtual educations, which have been shared on the YouTube channel <. ...>* Kaunas MPL, 2020).
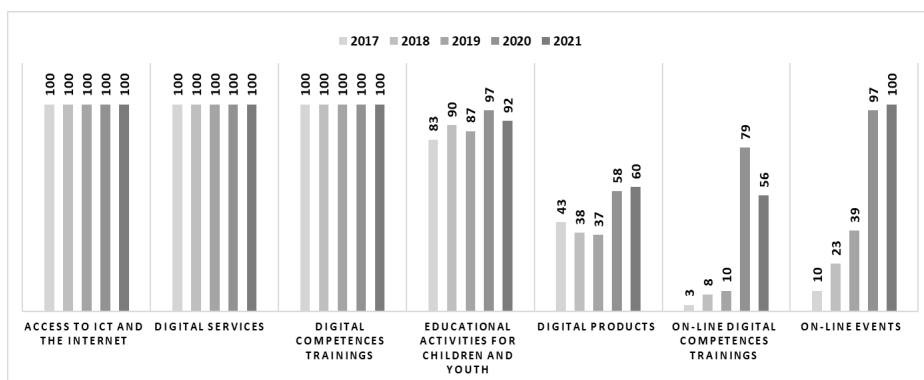

Fig. 2. **Activities of Lithuanian public libraries in the field of digital inclusion (%)**

It is evident, that the number of public libraries, offering on-line trainings and events (<...> *1 515 events took place in 2020 – 80% of which were virtual <...> Vilnius m. MPL, 2020*), had grown in 2020 and 2021 years, which is due to the COVID-19 pandemic and the restrictions imposed on the provision of contact services. The analysis showed that 79 percent of public libraries in 2020 and 56 percent of public libraries in 2021 at some point of time, due to contact service restrictions, held only online digital competence trainings. This could limit the improvement of digital competencies of those people who do not have computers, internet access, or at least basic digital competencies to connect to those online trainings (<...> *8 on-line digital competences trainings were organized on the Microsoft Teams platform in <...> Anykščiai MPL, 2020; <...> people living in rural areas don't have sufficient digital competences <...> are less proficient in modern information technologies and do not connect to online trainings*

<...> Pagėgiai MPL, 2020). Those were mostly seniors, people with disabilities, people living in rural areas, who might face complete digital exclusion during the pandemic.

This information can be supplemented with the data gathered from analysis of statistical activity reports of Lithuanian public libraries for the years 2017–2021, in which they also record some data about digital inclusion activities (*see* Figures 3–5).

Figure 3 shows that free Internet access in Lithuanian public libraries has been actively used over the last five years, increasing from 1304251 sessions in 2017 to 1588523 sessions in 2021. The highest number of the Internet sessions – 1704444 was reached in 2020 despite the fact that in 2020, due to the contact services restrictions imposed by the COVID-19 pandemic, this service was not available at some months. This shows that the pandemic has particularly increased the need to have access to ICT and the Internet, as a large part of
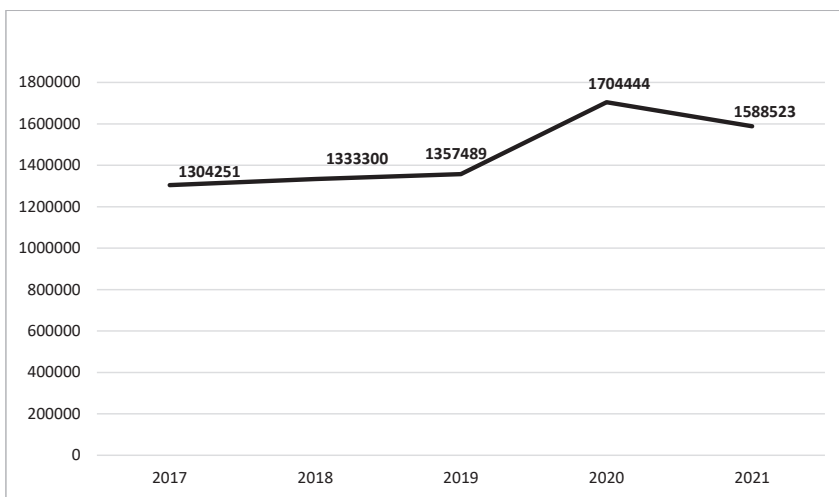

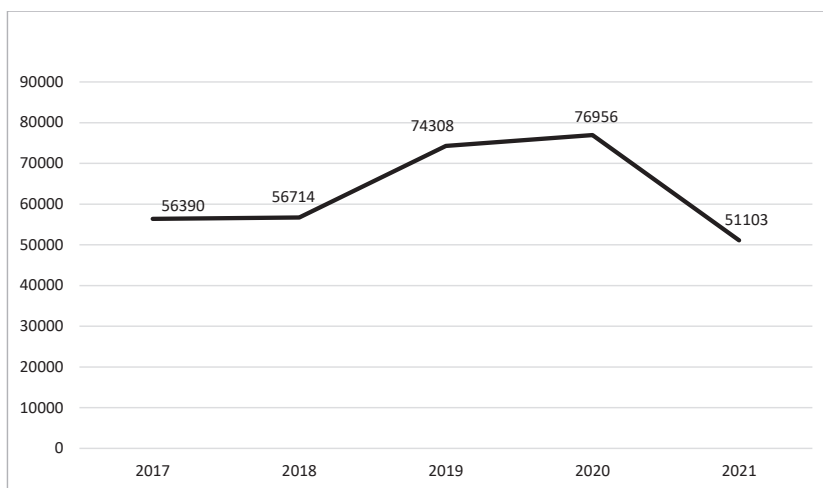*Fig. 3.* **The Internet usage sessions in Lithuanian public libraries (pcs.)**

Fig. 4. **Hours of digital competences trainings and consultations provided by Lithuanian public libraries to their service users (hrs.)**

various activities and services have been moved into digital space.

The information presented in Figure 4 reflects the amount of time that public libraries spend on digital competences trainings and consultations to their service users. It can be seen that the largest number of hours spent on improving users' digital competences (digital competences trainings and consultations on digital literacy topics) was in 2019 and 2020 (74308 and 76956
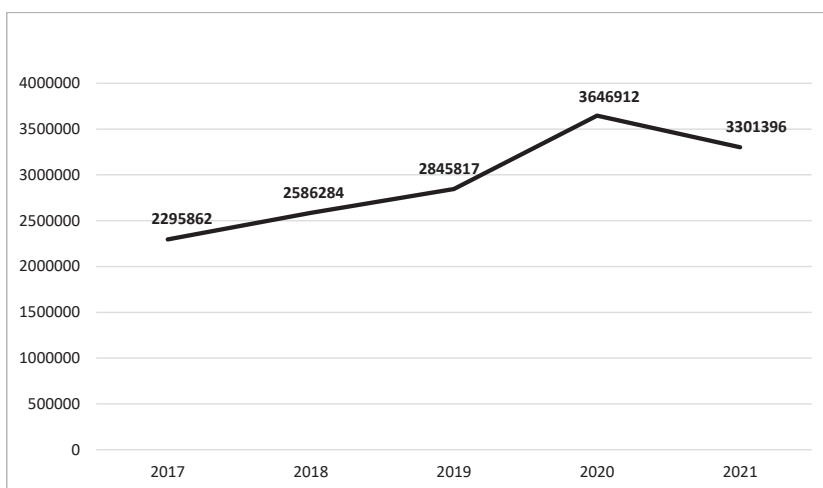

Fig. 5. **Number of virtual visits to Lithuanian public library websites, events and trainings (pcs.)**

hours respectively). In 2021, this figure dropped by 34% to 51103 hours. The increased number of hours spent on user training in 2019 and 2020 can be attributed to the intensive implementation of the national project "Connected Lithuania", which was primarily aimed at improving the digital competences of society members and involved almost all Lithuanian public libraries (the project ended in the middle of 2021).

Analysis of the dynamics of the number of virtual visits to public library websites, virtual events, and trainings can be used to assess the situation of the usage of digital services provided by Lithuanian public libraries (Figure 5).

While analyzing the data presented in Figure 5, it is important to note that between 2017 and 2019, Lithuanian public libraries in their statistical activity reports only gave the numbers of virtual visits to their websites, while from 2020, in response to the pandemic situation, they started to provide information about the usage of their digital activities (events, trainings, etc.).

According to the data presented in this graph, the highest number of virtual visits to Lithuanian public libraries (3646912) can be recorded in 2020, when the stringent restrictions on contact and physical services were implemented. With the relaxation of activity restrictions and the emergence of more contact services (for example, contact digital literacy trainings and physical events were renewed in public libraries in 2021), the number of virtual visits decreased slightly but remained relatively high in comparison to the pre-pandemic period.

The above presented information, gathered through the analysis of textual and statistical activity reports of Lithuanian public libraries, allows to identify one of the arising challenges, that libraries encounter in the digital inclusion field – it is the maintenance of the sustainability and continuity of digital inclusion activities. Very often various digital inclusion initiatives in public libraries start as large scope, national level projects (e.g., the national project "Connected Lithuania") that have additional funding for the creation of new digital services, products, digital competences trainings, technological equipment, etc. However, once the projects are completed, the funding is exhausted, and the continuation of these initiatives, which frequently necessitate additional human, time, and financial resources, is left to libraries, which are frequently unable to maintain the same pace of implementation of these initiatives (e.g., organize the same amount of digital competences trainings, renew the technological equipment, buy the newest versions of software, etc.). These issues could be addressed by seeking additional funding for digital inclusion activities from other resources, by initiating institutional level, smaller scope project activities by libraries themselves, by developing collaboration, aimed at combining resources, reaching more target groups, etc. with other organizations, interested in digital inclusion increase.

Another challenge, defined by the researchers, working in the field of digital inclusion (Treviranus et al. 2014; Newman et al. 2019; Johansson, Gulliksen, Gustavsson 2020; Harris, Johns, 2020, and others) is that certain groups, such as seniors, people with disabilities, the unemployed, children, and youth, frequently
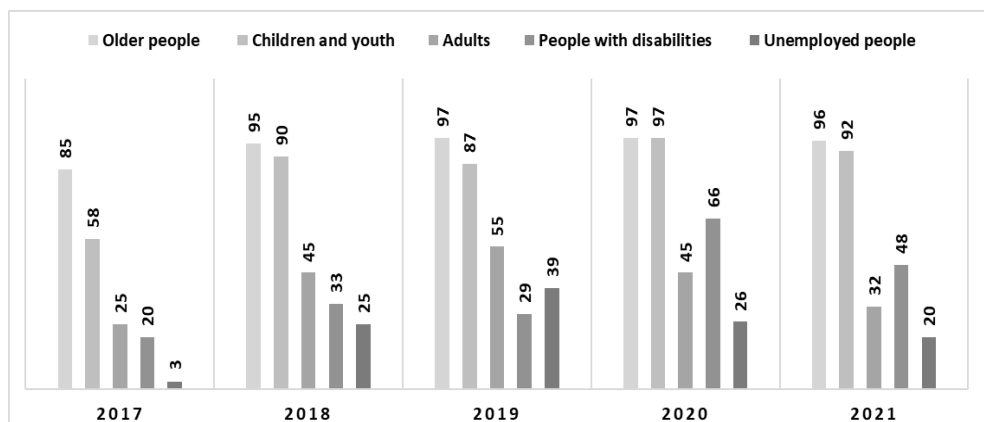
Fig. 6. **The focus of Lithuanian public libraries' digital inclusion activities on digitally excluded groups (%)**

face digital exclusion. In order to evaluate the situation in Lithuanian public libraries, the categories representing the orientation of digital inclusion activities towards groups lacking digital inclusion (seniors, children and youth, adults, people with disabilities, unemployed people) were identified while conducting the analysis of the information, presented in textual activity reports (Figure 6).

Considering the data in Figure 6, it is clear that more than 90% of Lithuanian public libraries prioritize digital competence trainings for seniors when implementing digital inclusion activities (<... > *participated in the thematic campaign "Senior Citizens' Days Online", aimed at encouraging older people to feel confident in the digital space <...> to improve their digital skills*, the National Library of Lithuania, 2018; <...> *the increase in the number of hours spent on user training is attributed to the activities of the ongoing "Connected Lithuania" project: campaigns and trainings for the population through digital literacy training <.*

...> *Panevėžys MPL, 2019; <...> the aim is to implement new models of digital literacy education for the elderly by sharing international experience <...> Utena MPL, 2020*). Another prioritized group is children and youth, for whom libraries organize educational activities oriented towards improving digital, media and information literacy competences (<... > *using the hardware and software of the special creative package, children tried out a 360-degree camera in workshops, filmed with a drone, created posters using the Canva software, learned the basics of graphic design, took and processed photos <...> Kaunas MPL, 2019*). The focus on these target groups has particularly increased since 2018, with the involvement of almost all Lithuanian public libraries in the implementation of the national digital inclusion projects, initiated by the National Library of Lithuania: "Connected Lithuania: an efficient, safe and responsible digital community in Lithuania" and "Encouraging citizens

to use the internet smartly in a renewed infrastructure".

Figure 6 shows that during the last five years much smaller proportion of Lithuanian public libraries focused on adults (reported by around 40% of libraries), the disabled (reported by around 50% of libraries), and unemployed people (reported by around 30% of libraries) while organizing digital inclusion activities. It can be seen that the focus on disabled people grown in 2020 (as reported by 66% of libraries), with the launch of the national project "Library for All", which was aimed at people with Autism spectrum disorders and the comprehensive adaptation of public library services to this target group. However, this project focused only on one specific target group – people with Autism spectrum disorder (<...>"Library for All". *The aim of this project is to increase the accessibility of library services for visitors with Autism spectrum disorder and other speech, communication and behavior disorders <...>* Tauragė MPL, 2020). However, this initiative requires constant maintenance, creation of new services, adaptation of existing services and activities. It is evident, that in 2021 when the initial initiative was over, only 22% of public libraries offered digital inclusion services, oriented towards disabled people.

Insufficient orientation towards people with disabilities, unemployed people and adults while implementing digital inclusion activities might be identified as another challenge, faced by Lithuanian public libraries. Public libraries, according to E. J. Helsper (2012), E. J. Helsper and B. C. Reisdorf (2017), should focus more on these target groups by engaging people with disabilities and unemployed people in digital inclusion activities, digital competences, media and information literacy trainings. Media and information literacy skills were of particular importance during the COVID-19 pandemic, and are important now, when the crisis in Ukraine is still going on. During critical situations, librarians as information specialists are needed to combat the rising infodemic, as well as the rapid spread of misinformation and fake news. According to Bonnet, Sellers (2020), T. Wang and B. Lund (2020), M. Fraser-Arnott (2020), M. Y. Ali and P. Gatiti (2020), A. P. Winata, R. Fadelina and S. Basuki (2020), during crisis, public libraries can assist their service users in finding and evaluating reliable information sources, improving their media and information literacy skills, and developing critical thinking skills by organizing trainings, events, and publishing useful links to reliable information sources on their websites.

Conclusions

The analysis of the scientific literature about public libraries activities in the digital inclusion field (Real, Bertot, Jaeger, 2014; Real et al., 2015; Beyne, 2018; Strover et al., 2020; Real, 2021) revealed, that public libraries are among the most important organizations, contributing to the digital inclusion increase as they provide free access to ICT and the Internet, organize digital competences trainings for society members, create and offer access to digital services, products, implement various digital inclusion initiatives, such as projects, events, etc., primarily

targeting those groups, that lack digital inclusion the most.

However, the implementation of digital inclusion activities is challenging and public libraries might face difficulties related to maintaining the sustainability of digital inclusion initiatives, reaching target audiences, and adapting services to changing service user needs and external environment requirements, particularly during unexpected, critical situations. So, it is important to anticipate potential solutions to these challenges, which was accomplished in this article, by evaluating the situation of digital inclusion activities implemented by public libraries through the analysis of the textual and statistical reports of Lithuanian public libraries for the years 2017–2021.

The content analysis of Lithuanian public libraries' textual and statistical activity reports revealed that libraries implemented the following activities aimed at increasing digital inclusion over the last five years: provided free access to ICT and the Internet, offered digital services, digital products and carried out digital competence's trainings.

The detailed analysis of each activity showed that free access to ICT and the Internet was provided by all Lithuanian public libraries during the last five years. Also, all Lithuanian public libraries offered digital services, such as access to electronic catalogues, e-books, databases, and carried out activities aimed at improving the digital competencies of members of the communities in which they operate. The biggest part of Lithuanian public libraries (about 90%) organized digital competences trainings for seniors and educational activities for children and youth, which were focused

on the improvement of information and digital literacy competences. And only less than half of Lithuanian public libraries focused on the adult population, the disabled and the unemployed people.

It was indicated, that during the last five years about a half of Lithuanian public libraries created and offered digital products, organized on-line trainings and events. The number of libraries offering online trainings and events especially increased in 2020 and 2021 years, due to the COVID-19 pandemic and the restrictions imposed on the provision of contact services.

This analysis allowed not only to evaluate the current situation of the implementation of digital inclusion activities but also to identify the main challenges, faced by Lithuanian public libraries in the digital inclusion field. The first one is related to the maintenance of the sustainability and continuity of digital inclusion activities. It was noted, that when large national projects aimed at increasing digital inclusion are completed, funding is exhausted, and the continuation of these initiatives, which frequently require extra human, time, and financial resources, is left to libraries, they are frequently unable to maintain the same pace of implementation of these initiatives. This could be solved by seeking additional funding from other resources, by initiating institutional level, smaller scope project activities by libraries themselves, by developing collaboration, aimed at combining resources, reaching more target groups with other organizations (e.g., NGO's, educational institutions, other cultural organizations, private sector enterprises, etc.), interested in digital inclusion increase.

Insufficient orientation towards people with disabilities, unemployed people and adults while implementing digital inclusion activities was identified as another challenge, faced by Lithuanian public libraries. It might be stated that public libraries should focus more on these target groups by engaging people with disabilities and unemployed people in digital inclusion activities, digital competences, media, and information literacy trainings, which were of particular importance during the COVID-19 pandemic, and are important now, when the crisis in Ukraine is still going on.

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SKAITMENINĖS ĮTRAUKTIES DIDINIMO IŠŠŪKIAI IR GALIMYBĖS LIETUVOS VIEŠOSIOSE BIBLIOTEKOSE

S a n t r a u k a

Šio straipsnio tikslas – išanalizuoti skaitmeninės įtraukties didinimo veiklų įgyvendinimo situaciją Lietuvos viešosiose bibliotekose, atskleisti pagrindinius bibliotekų patiriamus iššūkius ir numatyti galimybes skaitmeninės įtraukties didinimui. Atlikus mokslinės literatūros analizę, straipsnyje pristatyta teorinė bibliotekų veiklų skaitmeninės įtraukties didinimo srityje koncepcija. Mokslininkai, nagrinėjantys viešųjų bibliotekų veiklas skaitmeninės įtraukties didinimo srityje (Real, Bertot, Jaeger, 2014; Real ir kt., 2015; Beyne, 2018; Strover ir kt., 2020; Real, 2021), pažymi, kad viešosios bibliotekos yra vienos svarbiausių organizacijų, prisidedančių prie skaitmeninės įtraukties didinimo,

teikiančių nemokamą prieigą prie IKT ir interneto, organizuojančių skaitmeninių kompetencijų tobulinimo veiklas visuomenės nariams, kuriančių ir siūlančių prieigą prie skaitmeninių paslaugų, produktų, įgyvendinančių kitas skaitmeninės įtraukties iniciatyvas, pavyzdžiui, projektus, renginius, pirmiausia orientuojantis į skaitmeninės įtraukties stokojančias tikslines grupes. Tačiau šioje veikloje viešosios bibliotekos gali susidurti su sunkumais: kaip išlaikyti skaitmeninės įtraukties iniciatyvų tvarumą, pasiekti tikslines auditorijas ir pritaikyti paslaugas prie besikeičiančių vartotojų poreikių bei išorinės aplinkos reikalavimų, ypač netikėtose, krizinėse situacijose. Todėl svarbu numatyti galimus šių iššūkių sprendimo būdus. Tai ir buvo atlikta šiame straipsnyje, analizuojant Lietuvos viešųjų bibliotekų 2017–2021 m. tekstines ir statistines veiklos ataskaitas.

Analizė atskleidė, kad visos Lietuvos viešosios bibliotekos per pastaruosius 5 metus vykdė šias skaitmeninės įtraukties didinimo veiklas: teikė nemokamą prieigą prie IKT ir interneto, siūlė skaitmenines paslaugas, pavyzdžiui, prieigą prie elektroninių katalogų, elektroninių knygų ir duomenų bazių, vykdė veiklas (organizavo renginius, edukacines veiklas), skirtas bendruomenių, kuriose veikia, narių skaitmeninėms kompetencijoms tobulinti. Daugiau nei pusė viešųjų bibliotekų kūrė ir vartotojams siūlė skaitmeninius produktus bei organizavo virtualius skaitmeninių kompetencijų tobulinimo mokymus. Bibliotekų, siūlančių virtualius mokymus bei renginius, skaičius ypač padidėjo 2020 m. ir 2021 m. dėl COVID-19 pandemijos ir jos metu taikytų kontaktinių paslaugų ribojimų. Atlikta analizė parodė, kad daugiau nei 90 % Lietuvos viešųjų bibliotekų, vykdydamos skaitmeninės įtraukties veiklas, daugiausia dėmesio skyrė tokioms grupėms kaip senjorai, vaikai ir jaunimas, bei organizavo joms skaitmeninių kompetencijų mokymo veiklas ir edukacinius užsiėmimus. Ir tik mažiau nei pusė Lietuvos viešųjų bibliotekų, organizuodamos skaitmeninės įtraukties veiklas, orientavosi į suaugusius gyventojus, negalią turinčius bei darbo neturinčius asmenis.

Ši analizė leido įvertinti ne tik esamą skaitmeninės įtraukties didinimo situaciją, bet ir nustatyti pagrindinius iššūkius, su kuriais šioje srityje susiduria Lietuvos viešosios bibliotekos. Pirmasis iššūkis susijęs su skaitmeninės įtraukties veiklų tvarumo ir tęstinumo užtikrinimu. Pastebėta, kad pasibaigus dideliems nacionalinės apimties skaitmeninės įtraukties didinimo projektams ir jų laikotarpiu gautam finansavimui bei veiklų įgyvendinimo tęstinumą palikus viešosioms bibliotekoms, jos dažnai stokoja materialinių, žmogiškųjų ir kitų išteklių bei nepajėgia išlaikyti tokio paties šių iniciatyvų įgyvendinimo tempo. Šią problemą būtų galima spręsti ieškant papildomo finansavimo iš kitų šaltinių, pačioms bibliotekoms inicijuojant institucinio lygmens, mažesnės apimties projektines veiklas, plėtojant bendradarbiavimą su kitomis organizacijomis (pavyzdžiui, NVO, švietimo įstaigomis, kitomis kultūros organizacijomis, privataus sektoriaus įmonėmis ir pan.), suinteresuotomis didinti skaitmeninę įtrauktį. Dar vienas iššūkis, su kuriuo susiduria Lietuvos viešosios bibliotekos – nepakankama skaitmeninės įtraukties didinimo veiklų orientacija į negalią turinčius, darbo neturinčius asmenis bei suaugusiuosius. Pažymėtina, kad viešosios bibliotekos turėtų labiau rūpintis šiomis tikslinėmis grupėmis, įtraukti negalią turinčius, darbo neturinčius asmenis į savo siūlomas skaitmeninės įtraukties veiklas, skaitmeninių kompetencijų, medijų ir informacinio raštingumo mokymus, kurie buvo ypač aktualūs COVID-19 pandemijos metu, ir liko aktualūs dabar, tęsiantis krizinei situacijai Ukrainoje.