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EIFL-FOSS: Free and Open Source programme

Improving ICT infrastructure in libraries

EIFL FOSS DISABILITY TOOLS CASE STUDY: NATIONAL LIBRARY OF SERBIA



CASE STUDY

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KEY ACHIEVEMENTS

- Established a dedicated centre for serving blind and vision-impaired patrons.
- Offer a variety of FOSS and paid-for tools for disabled patrons to use to access library resources.
- Plans to develop a service to provide more accessible versions of library holdings.

INTRODUCTION

Free and Open Source (FOSS) software can be readily used in many areas of computing, and particularly in libraries. FOSS tools exist for library automation, repositories and searching tasks, amongst many other areas. One area where there are many free and easy-to-use tools available is in providing an accessible service to disabled patrons.

A wide range of tools is available, ranging from on-screen magnifiers to support patrons with low vision in using electronic catalogues or the internet; tools to change the colour of the screen background or text, for those with colour blindness or vision impairments; tools that read aloud any selected text on the screen (known as text-to-speech) for those with low vision, low literacy, or who simply prefer to listen as they read; and even screen-readers, the tools which enable computers to be operated by people who are blind. A step-by-step guide to some of the more common tools, including detailed instructions of how to install and use them, can be found on the EIFL FOSS web pages: <http://www.eifl.net/disability-tools-step-step-guide>.

In 2011 The University of Zimbabwe Library conducted a pilot project, led by Sub-Librarian Yeukai Chimuka, to discover how the use of these tools could support their disabled patrons. The full report from this project can be downloaded here: <http://www.eifl.net/system/files/201201/eifl-fosscasestudy2011disabilitytoolszimbabwe.doc>

BACKGROUND

Since 2000, the National Library of Serbia (NLS) has provided educational opportunities to librarians in the country about serving about serving print disabled patrons, especially those who are blind and vision impaired. In 2009, the NLS also established the Centre for Blind and Visually Impaired People. Initial plans were for a reading room for people with sight problems. However, the idea developed into the establishment of a Centre that would not only lend reading material, but also produce it, as well as educating patrons and librarians in using specific hardware and software. At first, the Centre had been intended to serve patrons with vision impairment only but later this idea broadened; the Centre developed into a place for all people with any problem dealing with library materials in black print. The Centre opened in 2011 and is well equipped. In addition to a wide variety of assistive hardware and software (including JAWS, a highly featured paid-for screen reading software tool), they offer the no-cost open-source (FOSS) screen reader NVDA.

PROJECT

NVDA (FOSS SOFTWARE) ALONGSIDE JAWS (PAID-FOR SOFTWARE)

In recent years it's been the case that the most of the blind people in Serbia use JAWS at home and on their personal computers. So NLS had to provide the possibility for them to use it in their library, too. But, the library was also aware that the other libraries in Serbia, especially in underdeveloped environments, are not able to provide the funds for JAWS, so NLS decided to encourage them to offer free (FOSS) tools

as a part of their services.

As a part of their campaign to improve library services for the blind across Serbia, NLS delivered a series of presentations and demonstrations of their services all around the country, and decided to try to inform librarians and the users in the smaller libraries that they could offer very important services to their disabled users without any costs.

That's why they also had to try with NVDA in the National Library of Serbia. But most of their users are still much more familiar with JAWS, especially those who have been using it for many years. They are not very interested to leave it and change to NVDA. One of the most important reasons for that is that they have already got used to the commands in one system and using it they consider a routine. On the other hand, disabled people who have advanced IT skills are very interested in trying new possibilities and discovering new devices and programmes.

BLIND VISITORS AND TRAINING IN USING SCREEN-READERS

Most of the people who are coming to the National Library are those who already have IT skills. The profile of the NLS library is different than for public libraries where blind users are coming to spend free time and improve their skills. They come to NLS either to learn something particular for their studies or to research for their MA or doctoral studies (the same reasons that persons without disabilities are using the National Library, in fact). Since 2000 NLS has made presentations and seminars in the public libraries in Serbia about this topic, both for the librarians and disabled users, and these seminars are the opportunities for practising screen-reader skills with them together. But within NLS they are not organizing such educational services, because there seems to be no demand for it.

It's also important to note that the Library for the Blind in Belgrade has the role of a public library for people with low vision. It is the organizational unit of the Blind Union of Serbia, the organization that has a long lasting tradition in education of this population, so they already organize workshops of different kinds to vision disabled persons.

Those who are IT literate and are interested in this topic are also exchanging information among themselves regularly, through the mailing lists especially.

PLANS FOR OFFERING OTHER FOSS SOFTWARE

At the moment NLS does not offer any FOSS tools other than NVDA, but they are thinking about doing so. People with dyslexia are very interested in using their reading room. They have had a few organized visits (schools, the Union of People With Dyslexia), but at the moment they still can't offer the literature they are interested in. This means that although NLS may have contemporary equipment (devices and software) they haven't provided the content in the scope that is needed. They also have some plans about building a digital library for the blind, which will help to ensure a range of accessible formats available for all types of print impaired people. Then NLS may need other software (possibly including FOSS versions) such as text-to-speech software, screen magnifiers, and text/background colour change tools.

NLS is considering utilising DAISY Obi and Tobi in their future digital library. DAISY Obi is a FOSS tool with which you can produce DAISY audio (talking) books, whereas DAISY Tobi is another FOSS tool which authors DAISY and EPUB3 talking books. They are designed for a diverse range of users, from large-scale production houses to home users. These tools would seem to be ideal for NLS, as their idea is to use electronic legal deposit copies (about 50,000 PDF files at the moment), convert them into XML because of the structural metadata that helps disabled people use the file, and offer them to their disabled users.

The main target group for NLS is their blind students, who have difficulty obtaining the literature needed for their studies in alternative formats (especially students of law, for example, who need a lot of books

and work materials for their studies, or students of music or foreign languages). Generally speaking, there's not more than 200 blind and vision impaired students at the University of Belgrade, and even less in other universities in Serbia, but investing in providing the literature for this small group is a very important assignment for the library system; being open to improving access to the literature for this small group shows that society cares about people with disabilities and the willingness of those investing in education to support those who find the courage to learn in the conditions that are more difficult. Staff believe that activities like this may encourage more disabled people to enter university, which they believe would be a great objective to achieve.

RESPONSE

Disabled patrons have told the staff at NLS that they are happy to have such a Centre specialising in meeting their needs, and they hope it is going to be more developed in the future. But also it is inevitable that users have complaints, especially about the quality of the scanned text documents after using OCR (Optical Character Recognition).

OCR is a notoriously inaccurate way of producing electronic versions of printed texts and NLS can't always provide the necessary proof reading because of a lack of staff. Developing a digital library will reduce the need for scanning texts and using OCR.

Concerning NVDA specifically the reaction is generally positive, but users complain about the same things they complain about with JAWS: it's not completely trustworthy – for example sometimes it jumps to the end of a page immediately without having the command to do it, leaving the blind user wondering what has happened. Also, they are not delighted with the fact that different screen readers have different commands for starting applications, so they have to learn them from the beginning if they switch between JAWS and NVDA.

It is worth noting that the fact that the NLS is not a lending library presents a limiting factor when speaking about disabled patrons. They are a group that finds it very complicated to come to the library, especially regularly, even though the library offers many different possibilities that are important for improving their lives in the area of culture and knowledge. So, whenever possible, they ask staff to prepare the literature in electronic format and send it to them for using at home. That is one more element in the communication with the public that shows that their true needs are the needs for the accessible digital library, so NLS can provide a wide range of appropriate documents, including those that must be provided in restricted conditions because of copyright requirements.

FUTURE DEVELOPMENTS

As well as trying to obtain funding for the proposed digital library for the blind, in 2012, the NLS carried out research on the growth of library services to people with disabilities around the country. The research showed that all parent libraries in Serbia have developed some kind of library services for disabled patrons (such as purchasing screen readers, establishing cooperation with local organizations for blind or deaf people, and sending staff to attend courses and workshops about working with disabled people in libraries). So hopefully staff will be able to share what they have learned and continue to learn about providing services to disabled patrons and the role of FOSS in those services.

Also, in the future NLS plans to include the whole library system across the country in utilising the digital library for print disabled people. Since its content would be based primarily on the electronic legal deposit copies available only from the NLS (due to the *Law on the electronic legal deposit*), what needs to be addressed in the future is to try to find the legal and financial possibilities to share this content with this larger group of patrons. Staff are sure publishers would understand the importance of developing such a service for people with print disabilities in all the libraries. The first step towards achieving this goal is to inform the librarians in our system, who will later teach their own patrons how to use the free tools that are available to support their learning, study and research, and are especially important in developing environments. The review of case studies such as this one, that show the experience from different

surroundings in the world, could also be very helpful for those who intend to start using the FOSS tools in their libraries.

CONCLUSION

The National Library of Serbia is leading by example in developing specialist services for blind and vision-impaired patrons. By providing a blend of FOSS and paid-for software it is ensuring the widest possible range of needs are being met. Its efforts to spread good practice in this area across the libraries of Serbia will hopefully ensure that disabled citizens of Serbia will soon be using libraries in greater numbers than ever before.