SAPIE
A Japanese National Online Library Services for Persons with Print Disabilities

Naoki Jin
Committee on Digital Books Sapie Network,Japan.

Abstract:

The following is outline of my speech.
  1. Demonstration of SAPIE
  2. Current status of SAPIE and Information Provision for the Visually Impaired People in Japan.
  3. History of SAPIE
  4. Future Agendas for SAPIE

Keywords: SAPIE, NAIIV, DAISY, Print Disabilities

Today, I am very honored to have the opportunity to introduce an internet-based library, called SAPIE which is operated by NAIIV for users with visual impairments and print disabilities. NAIIV is an acronym for "National Association of Institutions of Information Service for the Visually Handicapped.
 NAIIV, an NPO organization, consists of 101 institutions including braille libraries, and we work together to provide various resources for the visually impaired in Japan.

1.Demonstration of SAPIE

Firstly, I would like to demonstrate how to use SAPIE on an iPhone.
Although SAPIE is accessible world-wide, we are currently able to provide our services only in Japanese language.

Now let me show you the actual pages of the SAPIE Library. As you can see, we have 7 menus on our search engine. The menus include books in braille, DAISY, thematic search, detailed search, and popular books.

We will choose detailed search. About Egypt, the most popular in Japan is the pyramid. There are also many books on pyramids. Let's Find a book on the pyramid.

First, I type "pyramid " in the author section of the search engine.
As you can see, the computer shows a list of 31 results related to this word.
From among them, I am going to choose the DAISY version of "The pyramid speaks".
All users are able to use this service up to this point.
From here, only the registered readers can proceed, meaning that only those who have visual or print disabilities have permission to download or read the materials.
If you are running a program called Voice of DAISY, it will automatically convert the material into speech after selecting the item.

2. Current status of SAPIE and Information Provision for the Visually Impaired People in Japan.

SAPIE was established in 2010 as a renewed internet library system.
The name is originated from the Latin word "Sapientia", which means "knowledge".
Over 380 organizations and institutions such as braille libraries, public libraries, volunteer organizations, and university libraries are using this system and the number is still growing. While around 140 institutions and organizations upload braille and DAISY books to SAPIE, other 240 simply download books or use lending services without uploading their contents.

 As of today, around 720,000 titles are registered on SAPIE.
 Among them, about 200,000 titles on braille data, 88,000 titles on Daisy data, and 7,000 titles on text DAISY can be downloaded on personal computers, special devices, and smart phones.
Other hundreds of thounsands of books such as braille books or audio books on CDs or cassettes can be borrowed for free by post.

The number of visually impaired SAPIE users is currently 16,000, and the number is increasing by 1,000 annually.
 In total, around 80,000 visually impaired people in Japan are using our book lending system.
 （Cf. According to the survey of physically disabled persons in 2018, the number of physically disabled, age 18 years or older is estimated at 312,000 nationwide. And Japan Ophthalmologists Association estimates there are 1,640,000 people with visual impairment in Japan.

 The annual usage of our service through SAPIE in 2018 is as follows:

*Lending services through SAPIE
  Users of lending braille and audio books by post: 80,000 people
  Lending braille books: 42,000 titles
  Lending audio books: 670,000 titles

 *directly using of SAPIE
  Useres by download or streaming: 16,000 people
  Download of braille data: 680,000 times
  Download and streaming of Audio DAISY: 3,430,000 times
  Text DAISY; 272,000 times

Also, the braille books and daisy audio books produced by public libraries can be downloaded from the National Diet Library through SAPIE.

This system is free of charge for individuals who are visually impaired.
As for the institutions and organizations, we ask for 40,000 yen for an annual fee.

3. History of SAPIE

The Proto-type of SAPIE is the "Braille Forum" which Japan IBM implemented in 1988 as a part of its social contribution activities.

In 1994, the downloading of braille data was opened not only to organizations but also to the visually impaired individuals.

In 1995, the management moved to NAIIV.

In 2004, Japan Braille Library and Nippon Lighthouse started its internet delivery service for daisy recorded books

In 2010, in response to a request from NAIIV, SAPIE was established by combining braille and DAISY with the financial support from the Japanese government.

4. Future Agendas for SAPIE

(1) Financial problem
In order to maintain SAPIE, NAIIV bears 30 million yen annually.
This includes personnel expenses, support for the visually impaired, expenses to maintain and update the system or software, costs to hold workshops to improve braille, Audio DAISY, and Text DAISY.
From this year, we can receive some financial support from the national government. However, the difficult situation has not changed.

(2) Increase of users by ratification of Marrakech Treaty and by revision of the copyright act
Under the Copyright Act in Japan, those with print disabilities are also permitted to use audio books or digital books on the internet.

SAPIE is open to all with print disabilities.
However, only around 400 people with print disabilities are actually using our system.
One of the reasons for this is that local governments limit the users of library for the blind only to people with visual impairments and not to those with print disabilities.
The revision of the Copyright Act and the ratification of the Marrakesh Treaty have made it possible for people with "a physical disability that gets in the way of effectively holding books, turning pages or focusing on the pages" to use SAPIE.
I expect that the situation will be improved in the future.

(3) Price reduction of communication expenses and further spread of DAISY online services
As of now, most of the SAPIE users are utilizing our system through the internet and personal computers.
In Japan, this results in a monthly expense of several thousand yen.
If SAPIE was used on a smart phone, it would cost over 10,000 yen monthly in total.
 Also, we provide a DAISY online service which can be used without a personal computer, but it requires a specialized device whose use is somewhat complicated.
This is one of the reasons why DAISY online has not been widely utilized.

In order to increase the user of SAPIE, we need to address two things.
First is to provide discount for those with visual impairment, when using the internet and mobile communications to access SAPIE.
Secondly, there is a need for a more user-friendly equipment to access DAISY online.