Abstract:

This paper aims to provide the success and influence of the new national policy in Korea for open access in overcoming copyright issues and the information divide problem. It appears that all the information on the web is open to everybody, but the valuable information is often not easy to find or access, due to the usage fee and copyrights. Even if certain information is open to everybody, its value is different depending on the users’ ability to accommodate or to create by themselves. In this context, this paper deals with some exemplary cases with other libraries in this paper, in which not only the information is provided to everybody equally, but also better access opportunities to high quality information are provided.

Under the supervision of IMF (International Monetary Fund), from the end of 1997 to 2001, Korean society has had to work for economic breakthrough. Since then, the importance of knowledge management has emerged. Economic workplaces and economic policies have worked at creating more practical added values. To accomplish this goal, logic dictates that; “Everybody, including individuals, companies and the government, should be armed with knowledge.” Through these steps, Korean society has transformed into a knowledge-based society.
“Information society” is defined as a society where emphasis is put on the fact that knowledge is processed, distributed and preserved in the mechanical form of information. It values the information technology power, in other words, the technical ability of creating, distributing and preserving information. Meanwhile “knowledge society” emphasizes characteristics of knowledge which cannot be delivered by information itself, in other words, semantic or creative characteristics of human beings. It is a society that values the creation of knowledge. Therefore, in a knowledge society, the creation of knowledge is key, individuals are more important than organizations, and individuals’ creativity is the core ability.

To create a library environment that fulfills the requirements of a knowledge society and digital environment, the National Library of Korea opened its Digital Library in May 2009. The building, which is environmentally friendly, consists of three ground floors and five underground floors. It has spaces to provide digital materials and services to users, and departments for the library's digital projects. Two of the underground floors have the preservation stacks, and the users’ space has about 500 computers, equipment, digital video gallery and conference rooms for the use of digital resources.

There is not a single volume of any book in the user spaces in the digital library. This change of the library's inner space makes a deep impression on the library's patrons, and internally made us think again about the function and role of the National Library of Korea in the future. In addition, we realized we need to modify related laws and systems to accommodate these changes.

In this paper, I would like to address the success and influence of the new national policy in Korea for open access in overcoming copyright issues and the information divide problem. It appears that all the information on the web is open to everybody, but the valuable information is often not easy to find or access, due to the usage fee and copyrights. Even if certain information is open to everybody, its value is different depending on the users’ ability to accommodate or to create by themselves. In this context, I would like to share some exemplary cases with other libraries in this paper, in which not only the information is provided to everybody equally, but also better access opportunities to high quality information are provided.
1. Establishment of legal bases

Since 2004, the National Library of Korea has been involved in the OASIS (Online Archiving and Searching Internet Sources) project and has collected digital resources including web sites and web documents which are freely available on the Internet. To get legal support for the collection of commercial online digital materials, the library law and its sub-rules were revised in March of 2009 and they have been in effect since September 2009. As of the end of April this year, we have collected 470,000 digital resources, among them 54,000 items which are provided publicly with the consent from their creators.

The current law is an amendment of the existing law, expanding the notion of “library materials” to add a new clause for the collection and preservation of online materials. It also includes a section for the creation of an environment where the materials for visually impaired and other disabled people can be made and distributed effectively, and for the improvement of information access rights for minorities (alienated class of knowledge information). In addition to the online material collection clause, the revised library law added a new clause to establish a “Library Material Review Committee” to review important issues such as library materials’ selection, types, formats, and compensation. Based on the new law, the National Library of Korea has a plan to collect about one million items, from electronic books and magazines to video, image and audio materials, in 2010.

At the same time of the library law revision, the copyright law, which ties closely with library services, was also changed in March 2009, to establish a legal foundation for effective library management in a digital environment.

New clauses for the collection and preservation of online materials

The new law expanded the notion of “library materials” from the offline media of the past into the “contents”, in order to embrace online materials. It allowed the National Library of Korea to collect and preserve online materials served in Korea, accommodating the global trend of knowledge information creation and user environments. To make it supported by the copyright law as well, the revised copyright law, which included a base clause to permit the National Library of Korea to collect and preserve online materials, was proclaimed in March
2010. Now the Digital Library of the National Library of Korea has the legal foundation to collect and preserve online materials in a stable manner. Meanwhile if collected online materials are commercial, special measures are taken not to harm the right holders, in such ways as making appropriate compensation to them for the materials.

New clause for mandatory submission of a “digital file” for the disabled

The law allows the National Library of Korea to mandate submission of ‘digital files’ of necessary books which are considered important for reading, learning, occupational knowledge and general education. Making Braille books or audio books for the disabled requires high cost and a long time, because the contents should be input manually again. Because of this, the Library has not been able to provide books in demand to the disabled users in a timely manner. This issue could have been solved if the digital files of those books had been mandated to be submitted by the publishers. Now the newly revised law provides the legal base for the mandatory submission of digital files and for compensation to the publishers to make this a win-win situation for the library, the disabled and the publishers.

Expansion of information access opportunities for “knowledge information poor”

The law lets the central and the local governments partially or fully support the compensation fee for copyright for online materials for the disabled, senior citizens and the poorest citizens who get a government subsidy for basic living. This recognized the fact that even for the small amount of money, the “knowledge information poor” could give up their access to knowledge information because of the copyright compensation fee, so it should be paid for by governments.

New clause in the copyright law about the copying right for the online material collection in the National Library of Korea

With the rapid development of information technology, creation of information and user environments are quickly spreading online, but compared to offline materials, the management of these online materials, of which creation-destruction cycle is short, is rather weak. Therefore, a new model “beyond copyrights”, which invigorates creative activities
without blocking the enjoyment and communication of knowledge and culture in the new environment of digital network, became necessary.

So, the copyright law revised in March 2009, according to Article 20 Section 2 in “library law”, allows the National Library of Korea, which is the general and legal collection agency for the national documents, to make copies of the collected materials, if those online materials are available for public use through information communication networks and considered valuable to preserve at the national level. In addition, it allows the Library to copy, distribute or transmit published written materials, in a designated format for visually impaired people and others, at specific facilities.

Based on these legal foundations, the National Library of Korea pursues its new functions and roles to provide better opportunities for users to use digital information.

2. **Beyond “equality” to “better opportunity”**

In 1970, Alvin Toffler talked about information flood, and now we are talking about a knowledge revolution. While a multitude of information comes in every second over the digital network, digital poverty does not disappear; rather, the gap of digital divide gets even wider. There are two types of digital poverty: one is the difficulty of access to the digital information due to lack of equipment or devices to view digital contents, and the other is the difficulty of using the information even if they are hardware and contents available. The National Library of Korea is trying to solve both issues.

**Digital Library Portal Service (Dibrary portal)**

Dibrary Portal (www.dibrary.net), the online service space of the National Library of Korea, was launched in May 2009 to give anybody the use of its high quality digital contents freely. “Dibrary portal” widely connects and collaborates with various knowledge information organizations such as public institutions and non government groups, not only libraries, both domestically and internationally, which hold valuable digital contents, in order to create an access based cooperative service.
“Dibrary portal” provides an integrated search service for more than 100 million items of digital knowledge information and is connected with about 1,250 domestic and international institutions, including the full-text database of 390,000 books that the National Library of Korea holds and the digital contents that the Library purchases, subscribes, creates or collects. Among those 390,000 digitized books, 240,000 books are still copyrighted, while 150,000 books have expired copyrights, and in total they reach about 110 million pages. This is about 20% of our target collection for the entire digitization project.

The core contents of “Dibrary portal” are the following:

- **Academic Information:** bibliographic information of the National Library of Korea, full text database, web database, Naver book information (Naver is one of the most popular internet portal in Korea)
- **Professional Information:** OASIS (for national documents preservation), cultural contents, science and technical information, national archives, national knowledge resources, Korean standard information, patent information.
- **Foreign Information:** open academic information, academic journals, academic conference proceedings abroad

In addition to the main portal, there are four specialized information services, including the disability portal, policy information, local information and diverse culture information, to provide user-centered customized contents. These contents are open to the world using OAI (Open Archive Initiative) protocol on the web and connected and shared with about 1,000 institutions world wide.

**Free provision of digital contents to the poor and to people in remote areas**

From 2001 to 2004, the National Library of Korea established digital collection rooms in Korean public libraries with the support of public funds from Cultural Ministry and matching funds from regional libraries. Through this project, public libraries nation-wide could have hardware foundations for their digital collection rooms. To this foundation, the National Library of Korea provides its own digital materials and commercial databases. However, even after public libraries are able to provide various benefits and conveniences with the expansion of digital contents and digital equipment, there is still an issue of inequality that leaves some unable to enjoy these services.
With the revision of the library law and opening of its digital library in 2009, the National Library of Korea made a policy titled “National Library of Korea Knowledge Information Services Expansion Policy to All People in Korea” to expand its digital knowledge information services to the small libraries in farming, fishing and mountain remote areas and to help the “knowledge information poor” by providing aid in the payment of copyright fees, which are charged when they use digital materials.

Based on this policy as the first step, since February 2010, the Library started to provide the digital full-text information service to 351 small farming, fishing and mountain area libraries. As of June of this year, the second step of this service is to expand to 884 libraries, reflecting the high interest and supports from the local people.

Its major services include 1) a full-text/article level search service of the National Library of Korea’s digitized 390,000 digitized books and about 2,100 electronic journals, and 2) access to about 3,000 electronic books and electronic magazines purchased by the National Library of Korea through the small libraries. The services fully support the copyright fees for the use of digital information (transmission for reading) by the National Library of Korea and plan to reach 1,000 small libraries for the “knowledge information poor” in farming, fishing and mountain areas by the end of this year.

For better access opportunities, the full-text information digitized from its collections by the National Library of Korea and the electronic books collected by the Library will be added every year. This project will be expanded to 3,000 to 4,000 small libraries nation wide by the year of 2012.

In addition, the National Library of Korea provides the Edunet Service of KERIS (Korea Education & Research Information Service) based on the agreement with institutions to make its various contents available to the users in the small libraries. It includes integrated educational search services for teachers (Knowledge Town and Personalized Teaching Materials) and for students (Subjects Learning Support and Activities Learning Support). Therefore it is expected that visitors, such as students, who visit small libraries can search full-text articles and use the materials at the same place, to have a synergy effect.
We also provide an operating environment where small libraries can be connected together with the National Library of Korea’s digital library as the center, and we support “digital library inter-connection service” by stages since June 2010, which applies a web-based integrated collection management system to small libraries whose operation environments are poor.

**Offering Braille and audio books from the donated files by publishers and authors**

The materials for the disabled have expanded from mostly learning and literature to various areas such as literature, arts, society, culture and history and their media have diversified, with not only Braille and audio books but also Braille music scores. In Korea, among the annual publication of an estimated 50,000 items, only 2,000 can be accessed by the disabled via Braille, audio or large print books. In addition, out of the total annual book sales in Korea, children's books consist of over half, but very few are available to visually impaired children. Even when Braille and audio books exist, they are limited to a few places such as the Braille libraries and welfare centers operated by private organizations.

Since 2003, the National Library of Korea have made about 5,000 Braille files and provided them via the Dibrary portal, and will make an additional 2,000 digital braille files this year. However this number still falls short of meeting the visually impaired's reading desires. To address this, the National Library of Korea has established the “Audio Book Sharing Place” in June 2010, where disabled people can read and listen for free. The materials there have been converted into Braille, audio and large prints and donated through the “digital file copyright donation program” in which goodwill publishers and authors who have copyrights donate their works to the Library. To avoid any copyright infringement, technical security measures are put on all the donated books, prohibiting unlawful download.

There are an estimated 240,000 visually impaired people in Korea, of which only 2,000 can read Braille. Most visually impaired people can obtain knowledge information only from services which provide audio books, but even for that service, the burden of telecommunication cost makes them hesitant to use the audio information service. To make it easier for those visually impaired people to have access to knowledge information without economic concern, since July this year, the National Library of Korea provides a “book reading disability library telephone service,” in which 15 hours per month would be free with
a telecommunication voucher. It should be noted that the 15 hours is 50% of the average reading hours of visually impaired people per month. This program was set up by the National Library of Korea by sharing its role with KT (Korea Telecom), GKL (Grand Korea Leisure) and Korean Association for Visually Impaired People. At first, with 500 subscribers, the service is being provided at the phone number, 080-333-6688.

**Offering electronic book service for free**

The National Library of Korea collected 25,000 electronic books and started to provide them to digital library users in June 2010. We are collecting electronic books, considering their currency, demands, and preservation value among traded electronic books, under the premise that we can read new e-books published after 2008 in the digital library. Those e-books are freely readable by any users inside the library. In addition, a selection of 3,000 volumes of e-books are available for free in 884 small libraries in farming, fishing and mountain areas along with the digital materials made by the National Library of Korea. We plan to collect 47,000 e-books and one million items of e-journals, videos, music and images online, and do our best in many ways to make them available to the “knowledge information poor” and others more easily.

Providing such information to users, the National Library of Korea has run the information literacy education program every week to promote users’ information literacy since 2009. This program let users learn how to use different devices and databases without fear and to enjoy the digital experience.

**Pursuing collaborative digital library projects with foreign libraries**

Compared to those of western countries, the Korean information resources are not actively interchanged internationally. This may be due to the language barrier or the geographical distance, but it is thought that it’s because the Korean academic information and high class information are not internationalized yet.

At the conference, the three countries were able to come to an agreement about the project and hold discussions regarding future projects.

The three national libraries will decide upon metadata standards, to allow integrated searching among their collections and the shared use of digital resources, and will conduct a fundamental environment evaluation, such as setting up the server environment for a usable portal system for each library.

Once the fundamental environment is prepared, people in the three nations can search three nations’ information together at their national library portal. If you type keywords in order to look for certain information, you can easily search and use not only your own country’s information but also the other two countries’ information with the same subject and the classification. This would make it possible and easy to use rich digital information from either of those three countries.

Currently, the best examples of borderless large-scale digital library projects are Europiana and the World Digital Library Project. If this Korea-China-Japan collaboration project is realized and further developed into the entirety of Asia, it will grow into a large scale project that would enable the convenient use of Asian digital cultural heritage and knowledge information.

These three countries currently have different information environments in each national library. Therefore, they will continue to put efforts into standardizing their systems in the long run, while in the short term, they will focus on the establishment of interoperability to communicate among systems and data without any problem. Along with this movement, in 2010, the National Library of Korea joined the World Digital Library, which is operated by UNESCO and the Library of Congress of the United States, and plan to provide digital resources of Korea’s intellectual cultural heritage.

In addition, by making MOU (memorandum of understanding), the National Library of Korea is providing 240,000 volumes of digitized books (60% of its entire database), which are still copyrighted, to the foreign institutions for overseas use via Dibrary services.
3. Conclusion –Towards better information provision

All the projects mentioned above are based on open access assumption. Libraries should exist as open access environments where contents and applications are consistently accessible, regardless of devices. Libraries should continue to support this to enable all the users to access to the digital contents, in general, in a more effective and stable manner.

For libraries to be reborn with services providing better information, the role of knowledge experts is important. At the same time, the library service of the past becomes one which requires changes. If the library service so far has been centered on the book as a unit, the future library should focus on the extraction of information from a book and making the result accessible to all. Only when we value the physical information itself and make it into knowledge to provide to society, we can increase the societal value of libraries. In order for this to happen, the role of librarians as knowledge experts will be more important.

National libraries, from the perspective that they should pass down their nation’s documents permanently, have both a “Gutenberg Galaxy” and an “Electronic Galaxy.” Already the new electronic universe has become an important part of the library, and national libraries should make continuous efforts in order to guarantee the use of any forms of information by either this generation, or the next.

Lastly, it is important to consider the spirit of Universal Bibliographic Control (UBC), which was sought by IFLA in 1974 for knowledge sharing through interchanges of bibliographic information of libraries in the world, with the development of international information technology. Furthermore, using today’s developed information technology, if the national library of each country controls these two galaxies bibliographically, and interconnects various digital collections with each other based on open access, we can expect the realization of the concept of “The World Brain: a Permanent World Encyclopedia”, which H.G. Wells planned as the most perfect world wide memory device for the entire population of the planet, where all the human knowledge can be used anywhere in the world.

As the centers for public knowledge information, national libraries will become able to better disseminate high quality information in an era of knowledge revolution, and become the foundation which provides more stable and more credible knowledge to mankind.