

# Product-Sharing and Outcome Generation: New Contributions of Libraries to Research, Learning and Professional Development in Japanese Context\*

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## Contents

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|--------------------|-----------------------|
| 1. Introduction    | 3. Outcome Generation |
| 2. Product-Sharing | 4. Conclusion         |

## ABSTRACT

The author analyses the challenging activities of Japanese libraries in this decade by launching two keywords; “product-sharing” and “outcome generation.” “Product-sharing” means that libraries share knowledge, skills, and records which are produced as the result of the services or in the process of activities. And “outcome generation” means that libraries generate any efficiency or effectiveness through their services to users. Using these concepts, reported are the current situation and aspects of Japanese libraries which try to make various contributions to the society; research and learning of the people, and education and training for professional librarians, and so on.

In the analysis, the author shows some examples of “product-sharing” at first, including the records of reference transaction and the multi-functioned online public access catalogue. Especially, focused is on the various possibility and adoptability of the Collaborative Reference Database System of the National Diet Library of Japan. This system is one of digital reference service in Japan, and the database of reference transaction records is expected to be useful for research and academic studies as knowledge-base of professional librarians. And the system is also expected to be a platform for LIS education and professional development in the e-learning environment.

Secondly, as the examples of “outcome generation”, explained are the problem-solving-type activities, and provision of the collection about books on struggling against disease and illness. A few examples of outcome in the problem-solving-type activities are these; increase of sales in the services for shop managers, business persons, and entrepreneurs, contribution to affluent daily life by providing the local information services to residents and neighbourhoods, and etc. And for both the patients with serious cases and their family or those who nurse them, books about other persons’ notes or memorandum are the greatest support, and sometime healing. The author discuss the ‘raison d’être’ of these activities focusing on public libraries in Japan.

Keywords: Product-Sharing, Outcome Generation, Library and Research, Japan

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## 1. Introduction

### 1.1 Libraries in Japan

Before talking about main topics, I would give you the overview of Japanese libraries briefly.

#### 1.1.1 Public library

Public libraries are mainly settled by local governments on the basis of “the Library Law.” As this law is made under “Social Education Act”, Japanese public library has a mission of providing services as an educational institution. Settlement of public library itself is not obligatory for local governments. According to *Japanese Library 2009: Statistical Annual* (<http://www.jl-a.or.jp/statistics/2009pub.html>), the number of the local governments having at least one public library is 47 prefectures (100.0%), 793 cities and Tokyo Metropolitan wards (98.4%), 528 towns and villages (53.1%). For the number of library buildings including branches is 3,164 in total.

#### 1.1.2 School library

School libraries are necessarily settled in all schools in Japan; that is, every primary school, every junior high school, and every senior high school including schools for students with special needs have the facility for reading and learning with printed and digital media. According to *Basic Statistics on Educational Institutions, 2009* reported by the Ministry of Education, Culture, Sports, Science and Technology, there are 22,258 primary schools, and 10,864 junior high schools, and 5,183 high schools and 1,030 schools for students with special needs. Therefore in total, there should be more than 39,000 school libraries in Japan ([http://www.mext.go.jp/b\\_menu/toukei/chousa01/kihon/kekka/k\\_detail/\\_icsFiles/afieldfile/2009/12/18/1288104\\_1.pdf](http://www.mext.go.jp/b_menu/toukei/chousa01/kihon/kekka/k_detail/_icsFiles/afieldfile/2009/12/18/1288104_1.pdf)).

#### 1.1.3 Academic library

There is no unique law on academic libraries. But, “Standards of Higher Educational Institution” requires that every university, college, and other higher educational institutions have their own academic library system. According to *Basic Statistics on Educational Institutions, 2009*, there are 773 higher educational institutions; that is, 86 national, 92 by local governments, 595 private. In addition, there are a lot of junior college libraries ([http://www.mext.go.jp/b\\_menu/toukei/chousa01/kihon/kekka/k\\_detail/\\_icsFiles/afieldfile/2009/12/18/1288104\\_2.pdf](http://www.mext.go.jp/b_menu/toukei/chousa01/kihon/kekka/k_detail/_icsFiles/afieldfile/2009/12/18/1288104_2.pdf)).

#### 1.1.4 Special library

There is a wide range of special libraries in Japan. Companies and corporations, both public and private bodies, foundations and organizations have their libraries. We could not obtain the correct number of them, but we know that the number of special libraries belonging to Japan Special Library Association is around 1,800 (<http://www.jsla.or.jp/eng/index.html>).

#### 1.1.5 National library

In Japan, national library is the National Diet Library (NDL) of Japan. It serves to not only the Diet and but also the people in Japan. It is the unique legal deposit library, and has the function of bibliographic control to the publications in Japan. These few years, digital contents providing and database making have been strongly insisted in. As the national library, NDL has a main building in Tokyo and another building in Kansai as central libraries. In addition to these, International Library for children's Literature is established as a branch in Tokyo. This library system is the biggest one in Japan, so the number of the staffs in 2009 is around 900 (<http://www.ndl.go.jp/en/index.html>).

## 1.2 Keywords

In this presentation, by launching two new keywords, I would report that Japanese libraries begin challenging activities and contribute to research, learning, and professional development in librarianship. Keywords are “product-sharing” and “outcome generation”, which for these few years I have proposed to use in order for the analysis of the phenomena in Japanese libraries. They are parodied the existing words; “resource sharing” and “income generation.”

### 1.2.1 Product-sharing

I do not think that I need explain “resource sharing.” This word have been used in the professional literatures on library and information studies for long times in discussing the mechanism of collection development, shared cataloging, interlibrary loan and so on. The relation between “resource sharing” and “product-sharing” could be the one between input and output of library activities. The former intends for the assets which libraries have already held for the preparations of user services. A way of thinking of utilizing those assets in multiple libraries leads to “resource sharing.” In the other hand, the latter intends for the goods which was produced after daily library works, or anything which is noticed in the process of providing library services.

“Product-sharing” means that libraries share knowledge and skills, and records and information which are produced as the result of the services or noticed in the process of activities (Oda, 2007b). Of course, “product-sharing” could be achieved, when multiple libraries clearly identify such sort of product itself, when they have definite consciousness to share it each other, and when they try to create any system for using it mutually.

### 1.2.2 Outcome generation

“Outcome generation” rhymes to “income generation”. There is no conceptual relation between two words. I am happy if you think with the mind of my wits. But, in fact, both are similar in nature of working and in background. It was the first half of 1990's that I came across “income generation”, when I stayed in the United Kingdom on sabbatical leave for one year. At that time, “income generation” was aimed as a part of the public library policy of British Government. It was a way of thinking to try that public libraries contributed to finance; that is, they do not only use the expense but also earn any money. I found that some established their library shop, some rented various spaces of the library building to citizens and regional enterprises, and some tried to provide the fee-based library activity. I could not show a conclusion whether this policy was effective or not, but for me this looked unique to seep away the traditional image of library. Important thing which I recognized here is that public libraries in the United Kingdom grope for new course and direction. We have to evaluate that they seek the possibility of new direction, which anyone thought neither realistic nor practical.

We have to think about output and outcome, too. In Japanese public library, especially in 1970s and 1980s, people make much of output, and light of outcome. No, it may be said that outcome was rather negative. “Not to consider or think about the purpose of the user” had been dominant in the management of the public library. Most librarians were interested in how many volumes of books they could offer to their communities, not for what people would consult documents, borrow books, and read materials. As a result, the most important activity for public librarians was lending service, because this service was easy to confirm output. They recognized that lending service is more important than reference service, events for children and so on. And a lot of professional librarians engaged in the works of circulation.

In my opinion, this brought undesirable situation to the development of library profession. Users thought that main work of public librarians was lending service, that public librarians were workers at circulation desk, and that activities of public libraries were so easy that anybody could do (Oda, 2007a). In order to change this situation, various measures were proposed and libraries

began trial and error in 1990s. “Outcome generation” is one of results in these efforts.

We have to take note to the nature of this keyword. To be sure, “outcome generation” is new concept which I apply for the analysis of present situation of Japanese public librarians. However, the library activities to generate outcome are not so new. A lot of them have been provided for long times. This means that what libraries noticed and realized is the significance of “outcome generation.”

## 2. Product–Sharing

### 2.1 Products in the Library

In this chapter, at first, I would talk what sort of products the libraries produce in their activities, and I would show you the example of product-sharing. Among library activities, I take up two ordinary services; lending service (circulation) and reference service (answering enquiries or “ask a librarian”).

#### 2.1.1 Product of lending service

Lending service itself produces some products. Of course, such products are different from numeric output, e.g., the number of books borrowed and the number of users registered. Products of lending service are whole lending records and bibliographic data about books and other materials which users borrow and use. When these records and data are stored and accumulated in library management system or multi-functioned OPAC, they are able to be used more effectively than they are separated.

The lending record and the bibliographic data which a certain user borrows may be useful for himself/herself as just his/her memorandum. But, volumes of those records and data could be much important proofs of user needs and demands. They should be used for collection development, renovation of display or arrangement of books at shelves, and further decision making of the choice of library activities in future. In fact, linking to newly developed function of OPAC, not a few libraries have begun new activities and services to urge their customer’s interests. For example, like the interface of internet book shops, libraries let users to know that “other users read this book borrows those books”, when they search a book in OPAC. There are a lot of libraries that in their OPAC show “the best read” books during three months or half a year.

This product might be much more efficient when multiple libraries share them. However, its efficiencies and effects are only in libraries. It is hard or difficult to be effective for the general public. In other words, there is a limit that it contributes inside “the closed circle” of library world. Perhaps, as to this product, we have to discuss how to climb over the walls of this circle.

### 2.1.2 Product of answering enquires

Comparing the product of lending service, as to the product of answering enquiries, “the closed circle” may not exist. It has possibility of the contribution to general public as well as library world itself.

Answering enquiries is one of reference services, and directly provided to people with any question and problem to solve. A reference librarian plays a role of intermediary between users and library materials/information. In the process of supports and assistance to users, he/she applies his/her professional competences; knowledge on information resources, skills on information handling, attitude of librarianship, and etc.

So, if he/she leave the transcripts or transaction records which show the details of the process and procedure, when reading them, we could find in each case the knowledge, skills, and attitude about how to choose and evaluate reference sources or web sources, about how to use and take data-mining techniques or search methods, and about how to assess and judge accuracy or appropriateness of the contents and information.

This product is not so difficult to show the public, and is expected to contribute to the society in various ways. As answers to enquires have reliable and definite sources, so we can easily use them in research, learning and business.

## 2.2 Collaborative Reference Database System as Product-Sharing Network

Then, I focus on the example about product-sharing of answering enquires. In Japan, even if you check each library web page, you can find that most of prefecture libraries and comparatively bigger city libraries run a list of Q&A or a database on answering enquiries. In these web pages, we can easily obtain various records and data consisted questions from users, answers toward them, process of information handling or materials search, etc.

There appeared much more unique and precious example in Japan, that is, Collaborative Reference Database (CRD) System. CRD system was constructed in 2005 after three years trials. It has been hosted by the National Diet Library (NDL) of Japan, and managed collaboratively by growing

number of various libraries of all over the country; 335 public libraries, 134 academic libraries, 40 special libraries, and 10 NDL and its branches.

CRD consists of the following four files (sub databases).

- Database on Reference Questions and Answers (DRQA), which contains the records of answering enquiries in the member libraries
- Database on Reference Guides, which contains the information on how to search information sources on specific themes and topics
- Database on Guides for Special Collections, which gives information about collections on specific themes or on specific kinds of library materials of member libraries
- Database on Profiles of the Member Libraries, which contains the information on member libraries of the Collaborative Reference Database Project

Among these, DRQA contains transaction records of answering enquiries which the participatory libraries (member libraries) were enquired and answered. As the latest number of records, in July, 2010, we know that 46,828 cases are registered in this database ([http://crd.ndl.go.jp/jp/library/documents/stats\\_201007.pdf](http://crd.ndl.go.jp/jp/library/documents/stats_201007.pdf)).

### 2.2.1 Effect in library activities

NDL issues *A Guideline to Make and Publish the Records of Collaborative Reference Database* ([http://crd.ndl.go.jp/jp/library/documents/guideline\\_all\\_v1.2.pdf](http://crd.ndl.go.jp/jp/library/documents/guideline_all_v1.2.pdf)) for member libraries. According to this, this database is expected to offer the following effects;

- Use as information sources for libraries; when they accepts a same or similar question, records are available in order to obtain the answer itself or some clues of search.
- Use as information sources for all; records are available to solve any question and problem for not only libraries but also everyone.
- Use for the on-the-job training; in the training of answering enquiries, records are available for exercises.
- Use for professional education; in the education of library schools, records are available for practical exercises.
- Use for the improvement of reference service; records are available to improve and develop the quality of answering enquires, and renew reference collection and information sources.
- Use for public relations of libraries; records are available for an article of a library newsletter

and a library bulletin in order to explain this service.

NDL collects the evidence and proof of these effects. This result has not yet published, but as I am a member of advisory board for planning CRD, I had an opportunity of reading an interim reports. And I can tell you that a lot of member libraries describe and show positive opinions to this system.

### 2.2.2 Effect for the general public

As in CRD system, RSS feeder is incorporated, so we can know that the new record has been registered and published. This also means that records are able to be collected by the crawler of search engines. By not using the search interface of CRD, but just using Google and Yahoo, everyone accesses to the records of this database. This means that those who have no intention of using library enjoy the product of library services.

Let me give you rough data as an example. In Wikipedia of Japan (August 31, 2010), we can find that sixteen articles are wholly or partly written on the base of the descriptions shown in the records of CRD. Thinking these examples, it may be said that effect is much higher for the person who have clear intention of using library services, who have definite consciousness of expecting the contributions of library activities; e.g., for researchers and business persons, students and adult learners, and anyone with problem to solve.

### 2.2.3 Effect to professional development

One more effect which we could recognize is an application to professional development; the training program for librarians and LIS education. At the present time, training workshops and seminars are gradually increased in Japan. Among them, two types of examples using CRD for professional development can be found.

One could be called “self-training” of on-the-job. Trainees themselves browse and read the records of CRD at odd moments in their library. Ms Yoko Miyagawa, a reference librarian of Fukui Prefecture Library, reported briefly her experience and its effect (Miyagawa, 2007 & 2010).

Another is the workshop and seminar in which CRD system is used as a platform for learning system. This type is to intend to develop professional competence through experience to register the record which is the result of answering enquires. In fact, for these three years, I myself have struggled to develop this type of training program, and have tried the several experiments in public libraries. As a result of this, I can have some proofs that the program is efficient for



the development of a few skills and it is useful for raising the motivation of trainees (Oda, 2010). NDL has been also interested in the application of this system to professional development, and from this April, it began to provide the training version of CRD. This means that the significance of using this system as a platform is much higher in the context of LIS education and professional development in the e-learning environment.

### 3. Outcome Generation

#### 3.1 Proposal of Japanese Government

One of the backgrounds where a phenomenon of “outcome generation” appeared is a proposal to public libraries by Japanese Government. Since 1990s, Ministry of Education, Culture, Sports, Science and Technology has often organized some discussion and working groups, and has asked them to argue and propose about the ideal image or model of public libraries in the times of lifelong learning. Among a series of proposal documents, epoch-making reports, I think, is *Public Library in Future* (2006), which was issued in December 2006 by “Discussion Group on Libraries in Future.” This is considered as a sequel of another published in February 2000, *Public Library in 2005* (2000) by “Discussion Group on Regional Digital Library.” This report explains the *raison d'être* and necessity of public library in lifelong learning society, and proposes a few choices of strategies and processes for renovation. It also shows some concrete plans and introduces original and unique activities; assistance to business, assistance to local government administration, and assistance to school education, which are practiced in advanced public libraries. In my word, these activities are all based on the idea of “outcome generation.”

In addition, in January 2005, another group named “Research Group on Public Library as a Hub of Regional Network” published *Public Library as Regional Hub* (2005), whose tone of argument is the same as those reports in 2000 and 2006. The significance of this report is shown in its subtitle, that is, *Toward the Problem-Solving Oriented Public Library*. As examples of the activities for problem-solving of citizens, it contains health and medical information service, legal and local government information service, assistance to the pregnant and persons with the problem on nursing and child care, and neighborhood information service, as well as assistance to business and school education. Every activity shown here has the possibility of generating high and huge outcome.

## 3.2 Practices of Outcome Generation

In this section, I would show you four activities as examples of outcome generation in Japanese libraries; assistance to business, extensive information services, display and exhibition, and “tobyoki bunko” collection project.

### 3.2.1 Assistance to business

Year by year, the number of public libraries in Japan which have started assistance to business might be thought to grow. Of course, this activity itself is not so new. Some public libraries have provided business information to the community since early 1980s, though they did not use this name but just “reference/information service.” But, I think that this new name is important, because it contains the idea of “outcome generation” as well as “the identity of a thing is to be found in its name.”

Assistance to business includes a wide range of works, but, in Japan, two basic services are popular now. One is to offer documents, materials, information, and database to shop managers, business persons, and entrepreneurs. Another is to provide them a referral service in conjunction with local government, organization of commerce and industry, and so on. This activity is a typical example of “outcome generation”, because it is easy to understand its outcome.

However, at the time of beginning, not very few librarians criticized this activity: “There is no need to use new name.” “It is more important to provide services to the all in community equally, not a part of them.” “We should not consider users’ purposes, aims, and objective.” “It is unbelievable to serve persons who want to earn money by using citizen’s tax.” We know that to make this activity spread to nationwide was “to tread a thorny path.”

At present, Japan Business Library Association offers various activities including the promotion of assistance to business, and training programs on business information services (<http://www.business-library.jp/index.html>). In April 2010, a further new project called “Toshokan Kaientai (Library Kaientai)” has just begun. “Kaientai” itself is the name of the guerilla unit in 1865-1868 which Ryoma Sakamoto, one of heroes in the end of Edo era established. I am not sure the reason, but, to hear this name “Kaientai”, we Japanese are often excited. The main purpose of this project is for public libraries to support the poor and persons with severe social problems. Not only Business Library Association but also Ministry of Education, Culture, Sports, Science and Technology show postures to cooperate this, and the following activities are proposed in web site of the Ministry ([http://www.mext.go.jp/a\\_menu/shougai/kaientai/1288360.htm](http://www.mext.go.jp/a_menu/shougai/kaientai/1288360.htm)).

- Introducing and providing books helping solution of troubles about labor and daily life, and holding an advisory conference
- Introducing and providing books useful for mental care, and holding an advisory conference and seminar
- Introducing and providing books about self-enlightenment, development of skills, license and qualification, and job recruitment
- Providing documents and materials about social support system by national and local government, and holding a seminar

### 3.2.2 Extensive information services

Most public libraries were used to have a strict regulation of handling reference enquiries. For example, they should not accept/answer reference enquiries about medicine and health, law and legal affairs. Ten years ago, this was ordinary. But now, I expect such regulation has been changed or abandoned. Of course, librarians are neither doctor nor lawyer. So they are not able to consult and advise the client and the patient. However, they can offer useful and plenty of information and materials on these subjects.

The public libraries which noticed such an excessive restraint have changed their regulations, and have extensively launched information services on various topics and themes. Tokyo Metropolitan Library and Tottori Prefectural Library are cases which provide positively health information service, legal information service, business information service, and so on (<http://www.library.metro.tokyo.jp/1v/1v008.html>, <http://www.library.pref.tottori.jp/>). This means that they began to focus on the purpose, aim, and objective of library users. And they have tried to provide services of generating outcome.

### 3.2.3 Outcome of display and exhibition

This picture is a scene of entrance of a town library. At right side, a few books are displayed with a signboard of “For the one worries blood pressure!” So, these books are for prevention of high blood pressure and heart disease. And then, what is it at left side? Indeed, this is a set of sphygmomanometer! High blood pressure is one of adult diseases for Japanese, and it has become a social problem. There are a lot of books on prevention of high blood pressure, and the recipe of cooking and foods for improvement of eating habits. However, people do not read such sort of books on their own initiative. They borrow them until their doctor instruct them.



Display and exhibition is a tiny contribution of changing this situation. People may not be interested in the books at fist. But, those who could take their blood pressure using the machine might reach for books on the table. This might be slightly peculiar. However, this generates outcome of making people to notice that health is important.

#### 3.2.4 “Tobyoki Bunko” Collection Project

Display and exhibition which I mentioned above is an example of using library holdings for “outcome generation.” Here, I would like to mention the power of collection named “tobyoki bunko.” “Tobyoki” are books of notes or memorandum about struggling diseases by patients themselves, and books of records and diaries on nursing patients by their family and friends. “Bunko” means just library or collection. And for both the patients with serious cases and their family or those who nurse them, these books give them various ideas and philosophy on mental attitudes to illness or diseases, as well as information about medical treatment. This collection has much impact on patients who suffer from the same diseases and their family who have the same worries about nursing. This means that it contributes to their mental care.

This project is an activity of “A Shelf of Health Information Project” which is voluntarily managed by about thirty doctors, nurses, and related persons. They make a bibliography of “tobyoki”, collect books, and send presentation copies to libraries nationwide (<http://tobyoki.info/index.html>). According to the comment of the director of “A Shelf of Health Information Project”, Mr. Yasushi Ishii, who is a librarian of a medical university library, a bibliography of “tobyoki bunko” contains 1,800 titles.

## 4. Conclusion

In this presentation, I talked about challenging activities of Japanese library by launching two keywords, “product-sharing” and “outcome generation.” There are a lot of library activities which contribute research, learning, and professional development. There are various services which generate outcome to the people. I insisted that these concepts are efficient to analyze the library activities in Japan. And they are important in future strategy for developing and changing Japanese libraries.

These keywords might be applicable to other library activities than Japan. To examine this should be the next step of my research. Also I would like to further consider and investigate the relations of two concepts. “Product-sharing” itself might generate any outcome to users. And outcome generated itself could be product of library activities.

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