ABSTRACT
                This paper reports on trends in cataloging in Thai
libraries, focusing on the use of information technology as a tool to
accelerate the organization of resources, the benefit of cataloging resources
available from the Internet, and cataloging policy for Internet resources.
The introduction discusses cataloging Thai documents, managing foreign
documents and CIP (Cataloging in Publication), and USMARC and AACR2
(Anglo-American Cataloging Rules, 2nd edition). An overview of original
cataloging tools is provided in the second section, including name authority
files, corporate entry list, subject headings for Thai materials, and Thai
language text retrieval software. Cataloging electronic resources is
described in the third section, including the use of metadata for creating
World Wide Web resources, future directions toward searchable Web-based
information service, and using Dublin Core. The fourth section addresses
shared cataloging, including: Thai List, a project to incorporate university
library catalogs into a single, national bibliographic database; Journal
Link, a database of Web sites of science and technology journal publishers;
the National library and the National Bibliography; and international
cooperation. The introduction of information on metadata into cataloging
courses in Thai library and information science schools is noted in the fifth
section. (MES)

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Metadata and trends of cataloging in Thai libraries

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Abstract

A status of cataloging in Thailand shows a movement toward the use of information technology. The international standards for cataloging are being used and modified to effectively organize the information resources. An expanded scope of resources needed cataloging now covers cataloging the web resources. The paper mentions Thailand's participation in the international working group on the use of metadata for libraries.

Paper

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1. Introduction.

The libraries in Thailand have a dual responsibility in cataloging : Foreign and Thai materials. Most libraries are using the Library of Congress and Dewey Decimal Classification. The U.S. MARC and AACR2 are commonly adapted to implement by the computerized libraries, particularly by the academic and special libraries. The integrated library system and the access to the international cataloging services such as the OCLC's and cataloged data from OPAC that are available from the Internet as well as the data from CIP - Cataloging in Publications have facilitated a great deal Thai librarians' routine cataloging work. Cataloging our local resources revealed some difficulty yet rather challenging. Thai catalogers faced with such problems as insufficient classification numbers for Thai subjects, and the subject headings do not provide terms for local use. For computerized systems, Thai libraries have difficulty in text retrieval of the data written in the Thai language as well as in data inputting because the Thai OCR - Optical Character Recognition level of performance is still not satisfactory. Leadership in cataloging research in Thailand is the Subcommittee on Technical Services and the Subcommittee on Information Technology under the Academic Libraries' Cooperation Committee. The projects are compilation of Thai subject headings, an authority list of Thai corporate names (government offices and state enterprises), and the Thai translation of U.S. MARC and AACR2.

This paper reports on the trends of cataloging in Thai libraries, with an interest in the use of the information technology as tools to accelerate the organization of resources, the benefit of cataloging resources available from the Internet, and the discussion on cataloging policy for the Internet resources.

    1.1 Cataloging Thai documents. A fast development in the use of IT in Thai libraries have reflected enormously the increased need to use the libraries by the students, academic and researchers. Thai users have relied on the imported information resources from foreign vendors and publishers for a long time (with the exception to the Thai language collections, which have served the Thai library users by the manual and OPAC searching). Local information received relatively less attention in terms of database development despite the importance of the Thai government documents, manuscripts and rare books, complementary memoirs for the deaths, Buddhist teaching and history that represent a unique collection of Thai information. These collections need original cataloging . The best way to access the Thai information now is to search the libraries' OPAC from the National Library of Thailand, and to search the Thai academic libraries'OPAC from the Internet. But , because most Thai information were published in the Thai language, users can access the Thai language computerized catalogs by downloading the Thai fonts from Netscape and Internet Explorer to be able to read the message displayed on the screen. But searching is however limited to terminals with the Thai character keyboards.

    1.2 Managing foreign documents and CIP. All Thai libraries purchase a number of foreign books that need cataloging. It is simple enough for many libraries that subscribed to OCLC catalogs to just retrieve the cataloging data for the acquired books and add the data to their records. Some libraries retrieved the cataloging data such as the classification numbers and subject headings from other libraries's OPAC. There is a number of libraries that do not have access to the Internet and need to catalog and to use the CIP for creating their catalog records.

    1.3 U.S. MARC and AACR 2. Thai libraries have accepted the international Standards: the U.S. MARC and the Anglo American Cataloging Rules for cataloging both Thai and foreign materials with necessary modifications.

2. Original cataloging tools

2.1 Name authority files. Thai names have their own characteristics. Persons are recognized by their first names and not the last names nor the family names. There are personal names with royal titles and with titles of nobility as well as names with religious ranks. The National Library of Thailand is responsible for compilation of the guide to use the Thai personal names. (1)

2.2 Corporate entry list. A Cataloging Librarians Working Group under the Subcommittee on the Academic Libraries Cooperation published the second and revised 1998 edition of " A List of Thai Government and State Enterprise Entries for Cataloging the Thai Language Materials ". The electronic list is planned to be available from Thai academic libraries' Web sites in the near future. (2)

2.3 Subject headings for Thai Materials. Most Thai libraries use the Thai Library Association Subject Headings, Library of Congress Subject Headings, Sears List of Subject Headings, and the subject authority list compiled by the Cataloging Librarians Working Group under the Subcommittee on the Academic Libraries Cooperation. The group meets every two months to work on the added new headings for incorporation with the existing list. (3) For specialized subject headings, the Library and Information Center of the Bank of Thailand compiled a Thesaurus of Finance and Banking terms for their use in cataloging the Thai materials. The Siam Cement Information Center constructed a thesaurus of Building and Construction Materials for use with their in-house specialized database. Water Buffaloes Thesaurus was compiled by Kasetsart University Main Library for the database run by Kasetsart International Buffalo Information Center. The Thai Culture Thesaurus was the only thesaurus created in the Thai language, by the Office of the National Committee on the Thai Culture. At present a common use of tools for subject indexing is by manual process. Only a few libraries started to install the thesaurus list in the system in electronic format.

2.4 Thai language text retrieval software. A status of cataloging the Thai language Materials depend on manual indexing. The automatic indexing for full-text search for the Thai language requires a lot more research still, in order to solve several problems such as the appropriate word breaking, and the effective use of operators for limiting and expanding the search. The written Thai language has some special characteristics, for example the way the language is written without word-breaks, and there is no sign when sentences end. Besides, syllable breaking in words can cause mistakes of meaning in truncated searching the problems have results in a number of backlog, non-catalogued materials. In August 1999, a revised version of full-text search engine developed for use with the Thai and English language databases is due to be completed by the technical team of Technical Information Access Center (TIAC). This will result in the improved full-text searching for precatalogued materials, before controlled terms indexing can be completed.

3. Cataloging electronic resources: metadata and Dublin Core Initiative.

Thai libraries provide a growing number of electronic resources. A concept of digital libraries has encouraged many libraries to implement the electronic library and information services more seriously. Access to the universities' OPAC has become widely available throughout the country while a number of special libraries of the government allow the public to search their library collections by the Internet access. Through the government's homepages, the public is able to receive the important information more easily. And this means a number of government publications have been distributed on the www, from the libraries and from other information services. In general the information was prepared by using HTML and the commonly available browsers, however only a few Web sites created meta tags for the

databases. To give the example of the tables of content service for subscribed journals, libraries now image-scanned the content pages and distributed them on their web sites. Users can browse but search the current contents of their new journals.

3.1 The use of metadata for creating www resources. It is interesting to note the Fact that traditional database searching gave different results from web browsing. A few Thai libraries namely King Mongkut Institute of Technology North Bangkok and Technical Information Access Center (TIAC) realize the need to create effective, searchable databases so that users can benefit the most from searching their databases and without having to spend long time browsing and discovering irrelevant information. TIAC library created the databases using HTML and commercial software (Microsoft Access™) in conversion of the data prepared with meta tags for the data structure. The available tools from the Internet Information Server and SQL are used to enable free text searching in English and in Thai. (4) Librarians preferred to serve their users with the structured databases for web-based searching, but the methods require some professional knowledge and training in computer programming. Thai libraries, which do not have technical support from the computer programmers, can manage to develop the databases at very limited extent.

3.2 Future directions toward searchable web-based information service. Special Collections of digitized information will be managed more and more by the libraries. A National Science and Technology Development Agency - NSTDA's planned S&T Information Resource Center aimed to create the database of web resources using the standard metadata, Dublin Core, with RDF and XML. Another project under study is the Asian Institute of Technology's graduate student thesis on multiple language database of digital theses. Chulalongkorn University has also made another pioneer movement that the university information resources will be produced more in a digital based. The university libraries then will extend the responsibility to cover the management of access to web resources. The Centers of Academic Resources (CAR) of Chulalongkorn University has joined the OCLC's CORC Project after having realized the need for well organized information resources available from the Internet. The beginning era of Chulalongkorn's second century means also a change into a web-based educational system, a virtual library and the electronic scholarly communications. CAR announced the plan for the next decade that she will lead the faculty, researchers and students to develop the future information resources. Metadata and other standards for creating digital information will be the task that CAR takes as her responsibility to inform and to train people within the university. (5)

3.3 Using Dublin Core. Technical Information Access Center, National Science and Technology Development Agency (TIAC/NSTDA) has participated in the Dublin Core Metadata Working Group since 1996. A translation of the Dublin Core 15 Elements into the Thai language was completed and registered with the multiple languages Dublin Core Working Group. (6) Technical Information Access Center, Kasetsart University, and Asian Institute of Technology and Chulalongkorn University organized four workshops on metadata and Dublin Core Initiatives in Thailand. The library communities began to discuss a need of training on database creation using metadata and Dublin Core. It is interesting to note the collaboration works of the academic librarians under the Subcommittee on the Academic Libraries Cooperation especially the work of the cataloging librarians who have spent years after years constructing tools needed for good cataloging such as the authority lists of Thai names and Thai subject headings. Their work will be available in the electronic format for facilitated use with machine-readable cataloging by Thai librarians and by other creators of information in other countries who are interested to learn the Thai studies. Cataloging practice will be able to use such created tools more easily in managing library information in electronic form.

4. Shared cataloging:

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Libraries have for a long time attempted to establish a Cooperative cataloging in order to avoid duplication of effort that several libraries have to catalog the same titles uneconomically. Sharing the catalogued materials now means more than reduced duplicated efforts but also sharing the investment cost through shared collections from virtual access of libraries throughout the country.

4.1 Thai List. The Bureau of University Affairs has initiated a project to Incorporate the university library catalogs - OPAC into a single, national bibliographic databases. (7) All the public universities will access the resources, books and journals as well as audio-visual materials and CD-ROM databases from a single search. Planning for the operational project involves the integration of the various types of computer technology, the universal intellectual property rights, and the methods of delivery service and suitable payment schemes as well as professional training.

4.2 Journal Link is a database of a list of web sites of science and technology journal publishers compiled by the library of the Faculty of Science, Chulalongkorn University. Included in the database is a union list of science and technology journals in Thai libraries. Journal Link opens for the science libraries to join its membership and to be able to search the database freely from the Internet. Members can also update their own journal holdings through a decentralized network from the Internet . This initiative is very useful for the interlibrary loan and for document delivery service. Resources from science journals can be located and updated more quickly and shared more widely. Journal Link's movement in the future is to offer the table of content service, and members will be able to order full articles and payment can be processed by the electronic process. (8)

4.3 The National Library and the National Bibliography. The National Library of Thailand is in charge of national bibliographic control. It is by law a depository library of all books and journals published in Thailand. OPAC searching is available for service at the National Library in Bangkok and from branches in the provinces. An awareness of the Thai Internet resources has been noted, but the movement into the organizing access to the available web resources by using the metadata, by the National Library is still in an initial stage.

4.4 International cooperation. Indexing Thai materials is technically difficult and costly for foreign libraries. The language barrier, and insufficient reference tools for indexing has encouraged a consortium of Southeast Asian Studies librarians overseas to seek for cooperative indexing project with Thai libraries. A cooperation between Technical Information Access Center (TIAC) and the University of Washington is one of the Thai indexing projects that is planned to be operate as a database using the Dublin Core Metadata Elements. (9) The database will be a case study of shared cataloging and indexing by using the expertise of the Thai librarians, and the technology provided by the U.S. library. Users from both parties can access more information, faster and more accurately.

5. Library education.

The current cataloging courses offered by the library and information science schools in Thailand do not yet offer specifically teaching in the digital libraries, metadata and organization of web resources. Some courses on information storage and retrieval cover the evaluation methods of the databases searching analysis and the issues on the use of metadata were introduced to the students. The schools of library and information science at Chulalongkorn University, Chiang Mai University and Sukhothai Thammatirat Open University included a new topic on metadata for cataloging library resources. The metadata concept has also been introduced to the Information Technology courses offered by the Asian Institute of Technology, Mahidol University, and Kasetsart University.

6. Conclusion.

A fast movement of the IT world has caused the "On Site Libraries" or the "Physical Libraries" a so-called threat as to be removed or replaced by the "Digital Libraries." Thai librarians began to feel the impact from the changes. First, the new integrated library system forced librarians to learn new technology and to become computer literate. Then, in the Internet world, library users began to look for the information they need by browsing the cyberspace. People said that " Digital Libraries will replace the paper libraries", "nobody needs to go to the libraries", and "everything is accessible from homes via the Internet". Ironically, however, the concept of metadata and digital libraries reflected the fundamental knowledge of librarianship. Discussion on organized access to the digital resources emphasizes the simplicity, and the interoperability of universal implementation. The International library community discussed all the topics, and many problems were solved. Librarians can see the new look of libraries in the digital form. But, librarians' job is never changed. Librarians must provide digital library resources, catalog them, and teach users to find the right information from the digital libraries.

Endnotes

1. The National Library of Thailand . A Table for Cataloging Thai Authors. Bangkok, N.D.

2. Subcommittee on the Academic Libraries Cooperation. A report of the Cataloging Working Group presented at the annual conference on the Academic Libraries Cooperation. Chiang Mai, Mae Jo University, 1998. (In Thai)

3. Subcommittee on the Academic Libraries Cooperation. A report of the Cataloging Working Group presented at the annual conference on the Academic Libraries Cooperation. Chiang Mai, Mae Jo University, 1998. (In Thai)

4. Technical Information Access Center. (http://www.tiac.or.th)

5. Chulalongkorn University. Centers for the Academic Resources. A draft plan for library and information policy for the implementation of Chulalongkorn University Plan for Year 2000. Bangkok, 1999. (An interview).

6. A Thai translation of the Dublin Core 15 Elements (http://www.tiac.or.th)

7. Subcommittee on the Academic Libraries Cooperation. A report from

the annual conference on the Academic Libraries Cooperation. Chiang Mai,

Mae Jo University, 1998. (In Thai).

8. Chulalongkorn University. Faculty of Science Library. Journal Link (http://www.sc.chula.ac.th)

9. An agreement in process for approval by the University of Washington and Technical Information Access Center. 1999.

NOTICE

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