CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Index is one of the best tools that help in finding the needed information from any sources, be they printed or otherwise. Previously, much intellectual effort was required in producing an index for a certain printed material, e.g books. The arrival of computer technology has changed this because it speed up indexing while insuring more accuracy. Archive works like many other fields, are influenced by computer.

In the United States of America, many systems have been created and developed for archive works since 1966, i.e. the Termatrex Information Retrieval System, Keywords In Context (KWIC) Indexing, Master Record of Manuscript Collection (MRMC) I, Selective Permutation Indexing II (SPINDEX), and Co-operative Document (CODOC).

The Bank of Thailand is also planning to use computer in manipulating its archive holdings. It has applied automation to some of it routine activities for nearly twenty years and has its own computer installed at the Systems Planning and Operations Office. At present, it is ready to expand the computer facilities to cover other activities within the Bank. The first computerized assistance to its archive works was designed to facilitate documentation. It was used during the survey of the Bank's numerous documents in 1979, due to the fast increasing number of documents accumulated within the Bank. Previously, these documents had been handled manually. Since then, the idea of applying computer to other archive works has been outlined and planned.

The plan calls for an all round feasibility study in all aspects. The pilot project, with an aim to design and produce computerized index of some archives samples while simultaneously creating a data base for the on-line retrieval, is put into action for the first time. Considered as part of the pilot project is a survey on the users' viewpoints towards the print-outs.

The methodology used in this pilot project is an experimentation study. Four steps included in the study are: documentary research, system analysis, keying the data into the data base and production of the required print-outs, and survey of the users' viewpoints.

This project makes use of the UNESCO's Computerized Documentation System / Integrated Set of Information System (CDS/ISIS) in creating the data base for the on-line retrieval and in producing the index. The designing of input and output requirements was approved by BOT's archivist, Mrs. Benjamas Tontiyaporn, and the computer hardware and software were provided and prepared with the help of the Library System Analyst, Mr. Vachira Suritpinyo of the Asian Institute of Technology (AIT). Two hundred archive samples were prepared and keyed into the created data base through the on-line terminal at AIT. The output requirements consist of four types of off-line print-outs, namely, list of titles, list of keywords, abstracts, and index. These print-outs are then bound together with the users' manual to form a 'Printed index'. Another type of output requirement designed, some are provided by CDS/ISIS, is the on-line retrieval format. The information search of this created data base can be made through the AIT's terminals by the use of CDS/ISIS retrieval language which relies mainly on Boolean expressions and text facilities. Sample of retrieval strategies and retrieved searches are attached to the 'Printed Index' and are entitled

'Displaying the Possible Retrieval Strategies through the On-line System'. Both parts are then bound together as 'Index to 200 Archives'.

In implementing this project, three groups of users are selected to view the print-outs and make suggestions through three sets of questionnaires prepared specially for each group. The first group consists of twelve economists and researchers from various BOT's sections and from other institutions. The second group comprises twelve archivists and librarians from various archive institutions and libraries in Bangkok. These two groups view the 'Printed Index'. The third group consists of six system analysts from BOT, who view 'Displaying the Possible Retrieval Strategies through the On-line System'.

The results of the survey from each group of users are as follows: The general users from the first group register their level of satisfaction for the 'Printed Index' at 'highly satisfied' and 'moderately satisfied', The ratio is 6:6. The majority of the archivists and the librarians from the second group is 'highly satisfied'; only one of them is moderately satisfied'. The ratio is 11:1. Most of the system analysts from the third group who view 'Displaying the Possible Retrieval Strategies through the On-line System' are moderately satisfied. Only one is not very satisfied and the last one is highly satisfied.

The first two groups prefer the use of English to Thai; and are in favour of improvements of the printing format, the users' manual; and rearrangement of some parts of the print-outs; to complement the 'Printed Index'.

The system analysts recommended the use of 'field name' instead of 'text _ _', various levels of keywords, of 'and'; 'or'; 'not' instead of '+'; '*'; '¬'. They also suggest that assigning a serial number to a record retrieved by a certian search for further reference would make the on-line searches more effective.

This project would yield a better result if the recommendation on the points presented below had been included in the study.

1. All of the input and output requirements should be prepared and printed in Thai instead of in English. To complete this project, nearly all of the archive samples are translated from Thai into English. Corrections in language structures have to be made before the data can be coded in the work sheets and keyed into the data base. Some concepts included in the archive samples may be omitted at this stage. Furthermore, it took nearly a year to complete the preparation of the archive samples data. This project was implemented at AIT through the use of CDS/ISIS where English had to be used at both input and output stages, it was initially assisted by an Australian; Mr M. Sherwood; and later by Mr Vachira Suritpinyo, both Library System Analysts. Hence, English proved more convenient. It would take less time in preparing the data and also be more convenient for the users in using the outputs, both off-line and on-line, if the Thai language is used.

2. The keywords from the titles and abstracts are not sufficiently provided so as to cover all topics included in some archive samples. Those archives which have a similiar point of view may be accessed in through different keywords, depending on the terms used. To overcome this weak point, 'Enriched keywords' or broader terms should also be assigned to each archive sample, while relying on the authority list such as thesaurus. The enriched keywords will increase the recall in each search because they represent the 'subjects' varied in the archives. Another good point of the enriched keywords is that their amount will increase by much due to the development of subject fields, while the number of keywords taken from titles and abstracts will be increased due to the increase of the archives. Both keywords and enriched keywords

can be used together at different levels of search. Enriched keywords provide a broader recall but keywords taken from titles and abstracts provide a more specific one. This project has been prepared with a field of 'ENRICHED KEYWORD' in the Field Definition Table (FDT) at field 16. Lacking an authority list, this field was then omitted, but their field in FDT was still kept.

3. The survey of the users' viewpoints and suggestions towards 'Displaying the Possible Retrieval Strategies through the On-line System' would yield a better result if this group of users had operated the on-line searches themselves. Their opinions towards CDS/ISIS would have changed if they had been familiar with its wide range of capabilities. It is impossible not only to let them operate the search at AIT but also to transfer the data of this project to BOT data base, because BOT's computer system is different from AIT's IBM 3031.

If the Bank of Thailand approves of this project and is ready to apply it to the Bank's archive works, it is recommended that some changes in the print-out format be made. They are as follows:

1. In the list of titles; the articles preceding the titles should be accompanied by '^' symbol at the input stage to prevent the computer from sorting them by those articles which could result in those titles being arranged at the wrong places.

2. The use counts in the list of keywords should be placed at the index entries in the index instead, in order to inform the users of the exact amount of titles covered by that index entry. This way the users will not need to count the accession numbers. They only have to concentrate on the keywords provided in the list of keywords.

3. Another space should be provided for field 05, 'YEAR RANGE', for a position of '.' (fullstop). This field has been prepared with nine characters but it does not include the fullstop, which could

clearly separate the field of 'YEAR RANGE' from that of 'QUANTITY'.

4. In printing format, one record should be presented in one page. Splitting some parts of a record to the following page is inconvenient to the users. To solve this problem, changes in the computer programs are necessary. This is only when the print-outs are used without reprinting.

5. The space between the abstract field and the next fields, i.e. language; building; type of materials; and row and shelf number, should be increased by one or two lines. This applies to the field of keywords as well.

Suggestions for Further Study

The further study should be focused on the following topics:

1. The feasibility of transferring and modifying of archive data base of this project to the Bank of Thailand. For more convenience, a computer terminal should be installed at the archive building.

2. Evaluation of searching capability by the use of some other systems in comparison with CDS/ISIS, i.e. the ESCAP Bibliographic Information System (EBIS). This is to provide more choices for the Bank of Thailand to apply a better system for the handling of its archive holdings.

3. Performance evaluation. This should mainly aim at the on-line retrieval in order to know the extent of the recall and the precision of a certain search. To make the study more complete, as many as archive samples should be selected at random.

4. Study of cost-effectiveness. This is to facilitate the Bank of Thailand in outlining its plan to apply the computer to its archive works.

Implementation of the Study

If the Bank of Thailand concurs with the results of this project, the next step should be focused on the feasibility study of transferring the data of this project from AIT's to BOT's data base. This will not only get the project rolling, but also will prepare the way for further study suggested.

The result of this project, with or without additional changes; can also be applied to other archive repositories and information centers, since their nature of work is not much different from that of the Bank of Thailand.