CHAPTER 5

CONCLUSIONS AND DISSCUSSIONS

1. CONCLUSIONS

The objective of this study is to investigate factors influencing online database usage among undergraduate CMU students at the Central Library, Chiang Mai University. This chapter aims to discuss the significant detail, reach conclusions, and provide discussions. All conclusions and discussions were organized and presented in 4 parts; 1) Biographical data of the respondents, 2) The status of the online databases usage at Chiang Mai, University Library, 3) The respondents' needs from online databases service, and 4) The problem of using online database.

1.1 Biographical data of the respondents

The findings on biographical data of the respondents reveal that the respondents comprise of 203 females and 89 males. The majority of the respondents are the second year students. The rest are, in order of number of users, the first, the fourth and the third year. The largest group of respondents study in Faculty of Humanities. The second largest group studies in Faculty of Science, and the third and fourth group are Faculty of Political Science and Faculty of Engineering. Regarding the Internet skill, over half of the respondents have more than 5 years of experiences of the Internet skill.

1.2 The status of the online database usage at Chiang Mai,
       University Library

As for the status of the online databases usage at Chiang Mai University Library, most of the respondents have experience in using online database service for more than 3 times during the period of enrollment on the campus. There are a small number of respondents who never use this service. In terms of the frequency in using online database service, nearly half of the respondents used this service two or three times a week. The smallest group of the respondents used this service once a semester. Interestingly, few respondents use online database service daily. Some respondents report that they occasionally use this service only to complete the tasks assigned by their lecturers. For ways of learning how to use the service, the majority of the respondents learn from their friends. The rest of them were instructed by their teachers, reading from computer screens, attending the training course provided by library, and experimenting themselves. Some respondents reveal that they acquire the searching method skill from other sources such as their parents, the library's handbills, Info & Report (LS) course, and outsiders. According to the purposes of using the service, most of the respondents use this service for 2 reasons; first, to search for information to be used for writing reports, theses, and Independent Studies. Second, the service is used to supplement their lessons. Only a small group of respondents use this service in order to update the academic progress.

With regards to the using rate of 9 multidisciplinary online databases available in the Central Library, only 2 significant rates have been found, which are "*never*" and "*rarely*." In detail, the respondents rated 5 multidisciplinary online databases as "*never*" including *Blackwell Synergy, H.W.Wilson, ProQuest Digital Dissertations, Taylor & Francis, and Thomson Gale Testing & Education Reference Center.* 4 multidisciplinary online databases are rated as "*rarely*" including *Academic Research Premier, Annual Reviews, ScienceDirect, and Thai Theses Online.*

1.3 The respondents' needs from online database service

The findings on the respondents' needs from online database service reveal that a need which is identified in a *high* scale is a need for user instructions, library assistant staffs, brochures introducing new databases, better space allocation of computer searching area, print-out service, an increase of the Internet downloading speed, and provision of more computers, respectively.

1.4 The problems of using online database service

Problems that are examined in the questionnaire comprise of 4 aspects, which are network and searching method, convenience, service equipment, and searching results.

For network and searching method aspect, there are 2 levels of problems which can be categorized as *low* and *medium*. At a *low* level, the respondents' problems include lack of the Internet skill and lack of the service introduction. At a *medium* level, the problems reported are lack of training, lack of user instruction, lack of commands used in searching method, lack of knowledge and scope of each database as well as titles of databases.

For convenience aspect, there are 2 levels of problems which can be classified as *low* and *medium*. At a *low* level, problems found include protocols before using service, low speed of the Internet, and amount of computer sets. At a *medium* level, the problems reported are lack of public relation, outdated contents in databases, lack of library assistant staffs, inadequate service hours, and location.

Regarding service equipment, there are 2 levels of problems which can be categorized as *low* and *medium*. At a *low* level, the respondents comment on electrical supply. At a *medium* level, the problems consist of lack of computers, outdated model of computer, low speed of the Internet, and inconvenience in print-out service.

For searching result aspect, problems are found and identified as *medium* scale and those problems include insufficient list of results, irrelevant information obtained, and insufficient application of information obtained.

The above findings will be incorporated into the discussion of the study with the goal to provide solid answers to the key questions of what the present status of online database usage by CMU undergraduate students at the Central Library, Chiang Mai University is and what the factors influencing the use of online databases by CMU undergraduate students at the Central Library, Chiang Mai University are.

2. Discussion

Online database service provided by the Central Library of Chiang Mai University is not being utilized to its optimum potential. To illustrate this statement, the research findings regarding the present status of online database usage demonstrate the rare experience of the respondents in using the service. Majority of the respondents have used the service more than 3 times since they first enrolled in the university. 8.7% of the respondents have never used the service. These figures reflect the slight utilization of online database service. In consistent with the research finding, the statistics obtained from Users' Report of Chiang Mai University Library indicates the rate of using online database service as unsatisfactory. Online Databases Users' Report of Main Library, Chiang Mai University, indicated the significant statistics of the service using rate in 2000, the first year of launching online database service. The service was used at the rate of less than 5% of all undergraduate students. The percentage slightly increased to 7%, 9%, and 10% in the year 2001 to 2003. This statistics shows the trend of using service that it is still not being chosen as a tool for information searching as it is supposed to be.

In the year 2004, 9 multidisciplinary online databases were available and yet over half of the respondents admitted that they have never accessed these databases. From the comparison of using rates of 9 multidisciplinary databases, the overall present status and frequencies indicate that 5 databases are *never* used and 4 databases are *rarely* used. The slight usage of the service clearly reflects that the service is not popular or directly involved in their process of information search. In other words, the academic resource has not been ultimately utilized resulting in the waste of huge

budget spending to maintain the service. To move towards the academic excellence or to be able to compete with other world-class universities is still elusive since the quality of human resource is not fully developed in terms of academic intelligence. Evidently, there are some factors that still influence the users and those factors will be discussed below.

The factors found from the research findings that influence the use of online database service can be listed as follows:

- lack of public relations
- lack of user instructions
- lack of online database training
- lack of the service introduction
- lack of knowledge about commands used in searching method
- lack of knowledge about using keywords for searching
- lack of knowledge about scope of each database
- lack of knowledge about databases' titles
- lack of Internet skill
- lack of library assistant staffs
- inconveniences of service protocols
- inadequate service hours
- lack of computers
- outdated computer model
- low speed of information retrieval
- inconvenience in print-out service
- electrical supply
- insufficient lists of results
- irrelevant information obtained
- insufficient application of information obtained

To address these problems properly and effectively, the solutions are possible when the consideration is based on the needs of the respondents for online database service which are identified in a *high* scale including users instruction, library

assistant staffs, brochures introducing new databases, better space allocation of computer searching area, print-out service, increasing of the Internet downloading speeding, and provision of more computers. This research proposes recommendations as guidelines towards the improvement of the service.

3. Recommendations

The recommendations aim to improve 3 aspects which are public relation, personnel, and facilities. These recommendations are not absolute solutions, but only serve as ongoing process of improvement of the service.

Public Relations: It is recommended that the Central Library produce and distribute pamphlets promoting online database service. In this introductory pamphlet, it should contain basic information explaining features of online database as well as the benefits from using this service. The students should be provided with the pamphlet when they first enrolled in the university and it should be available at the main entrance of the Central Library. For user manual, clear instructions should be produced in a format of interactive CD-Rom, which is distributed to the students at the same time of distribution of the pamphlet. With CD-Rom format, students can learn how to use the service properly and conveniently. High quality of CD-Rom can reduce the need for training, or even replace it, which consumes human resources and huge budget.

Personnel: It is recommended that the Central Library provide assistants to assure the service operation and to give advice on technicality. Another option is to employ students who have understanding and skills in the service from Library Science or related fields to perform this duty on a regular basis.

Facility: The atmosphere and equipment for the service should be more comfortable. In this point, the recommendations proposed are not aimed to directly address the problems found from researching, yet they are observations obtained from official visits to many domestic or international libraries during 1999-2004. The

suggestions made here are to attract more users to the service available as the respondents suggested atmosphere and equipment be urgently modified. To begin with, the searching booth should be separately placed in wider space to reduce distraction from other searchers. The searching zone should provide more relaxing atmosphere via the use of a lighter color room and furniture. Classical music should be played to help searchers enjoy using the service. More computers in recent model

should be provided to minimize technical problems that might occur from searching process and to support higher speed of information retrieval. For the Internet download speeding, if possible, the university should allocate budget to increase a higher speed. The searching unit should provide a print-out service to help students collect needed information more easily. Presently, the print-out service is not available and the searchers can only read from screens.

If these recommendations are considered and implemented, it is possible that the service is improved and directly responds the users' needs. Resources in the Library will be, as a result, utilized to its fullest capacity as more users are satisfied with the service. It is hoped that, through these means, the number of users will increase and the service will be satisfying.

4. Recommendation for further research

Generally, undergraduate students might not be the main group who needs to conduct research comparing with Master's Degree and Doctorate Degree students. The demand for searching information by the former is comparatively less than that of the latter. As the students whose studies mainly rely on researching, these students should also be targeted to find out the using rate of online database service, opinions, feedback, as well as suggestions for further improvement. So far, no research on online database service has been conducted with these groups of students. Questionnaire or interviews should then be launched to obtain the results from these targets. To achieve the ultimate accuracy of the result, populations for the study on database usage should be selected and categorized according to their fields of study.