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ACCESS TO LEGAL INFORMATION IN KOREA

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Submitted in fulfillment of the requirements
for the degree of Doctor of Philosophy

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LIST OF ABBREVIATIONS

CALR	Computer Assisted legal Research
CITE	List of Citations of the documents
CLIC	Canadian Law Information Council
CLIS	Computerised Legal Information System
CONIT	Connector for Networked Information Transfer
DACOM-NET	Network operating by Dacom Corporation
DBMS	Data Base Management System
ENGEN	English General Library
FLEXICON	Fast Legal Expert Information Consultant
FULL	Full text of retrieved documents
GCC	Government Computer Centre
GLA	Government Legislation Agency
HiNET-P	Network operating by Korea PC Telecom
IBI	International Bureau of Informatics
KAIST	Korean Academic Institute of Science and Technology
KLRI	Korean Legislation Research Institute
KPAA	Korean Federation of Attorneys' Association
KWIC	Key Words in the text
LIRES	Legal Information Retrieval System
MGA	Ministry of Government Administration
NA	National Assembly
PSDN	Packet Switched Public Data Network
ROK	Republic of Korea
SCS	Supreme Court System
SEGMTS	Segments of the documents
SI	Statutory Instruments File
STATIS	Combined STAT and SI Files
STAT	Statutes file
VAN	Value Added Network
VAR KWIC	Variously controlled Key Words in the text

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DECLARATION

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ABSTRACT

The aim of this project is to establish a desirable information environment adjusting to need and behaviour of legal professional in Korea. For this purpose, present situation of information sources in printed form and computerised systems were examined.

Printed sources were evaluated based on commonly used criteria title by title. Operation of the two systems, LIRES and SCS, was described based on written documents and on interview with the system designers.

Professional's attitudes toward legal information, information sources, and computerisation were surveyed. Responses made a distinction between groups of practitioners and professors to compare the results. Differences in attitudes towards library, information sources, and information seeking habits between two groups were identified.

Capabilities of the computerised systems were analysed and compared with the potential users' needs and behaviours as found by the survey. Also, functions of the two systems were analysed by practical use of them, which was carried out by application of five legal questions to each system.

According to the analysis, it was identified that the problem of search method which was a main factor of users' dissatisfaction with the printed information sources, could not be completely cleared up by the systems.

For development of the information sources, improvement of search method of printed sources was suggested. Also, advancement of the two systems in the direction of utilisation of computer capacity for searching and of expansion of input data adjusting to potential users' needs was recommended.

In addition, in order to maximise the use of the two systems, integration of them, by connecting them to the Dacom-Net, and then to the distributed database system as an efficient interface was recommended.

The configuration required of such an interface was demonstrated by the example of an experimental system, CONIT.

CHAPTER 1 INTRODUCTION

1.1. Motivation and purpose of the research

The trend to ever greater complexity in social interactions requires ever greater use of the law to control these interactions. Thus the law and its sources are important in all countries. These trends result in the increased use and complexity of the law and require improved sources of access. The law is required to be equitable and predictable, to respect the past, and to be efficient to use (Pausley, 1990). Keeping legal data orderly is necessary not only for these purposes, but also for the public to be protected equally and for the professionals to perform their work reasonably and efficiently.

In Korea, the field of legal information is not fully recognised and developed either in the law or in the library and information science area. The following trends indicate that the law is perceived as very important; the relative importance of law in the scholarly world, the preference of law to other subjects by students, and the social status of legal professionals. Therefore, legal information must be fully developed in Korean society.

Through personal experience as a law librarian, the author learnt of the problems relating to legal information from users and librarians. There have been many complaints involving problems in using legal sources and libraries from the users' standpoint, and there have been difficulties in dealing with law-related subjects from the librarians' standpoint.

It can be assumed that these predicaments derive from the problems associated with legal information sources, and are interrelated with problems of legal education and with the situation of the

library. Information sources which include valuable primary legal information, are published by government agencies. They produce the primary information and its sources as part of their work.

These sources have been published in accordance with customary practice, without any effort to meet the needs of efficiency and to improve the general situation. In order to solve the problems presented by sources to both users and librarians, and to develop their level of usefulness, the current situation of legal information sources, both in printed and computerised form, should be analysed in detail.

The main objective of this project is to maximise access to legal information. In addition to an analysis of the status quo of information sources, an investigation of information users' needs and behaviour was carried out. As the main users of legal information are legal professionals, the investigation was carried out on them. The professionals' attitudes towards legal information may be closely related to the education and training they received. Therefore, in order to understand their needs and behaviour sufficiently, a study of the legal education system was required.

A precise understanding of the situation can enable the problems to be tackled and a desirable environment to be developed. In order to comprehend the current situation clearly, combined methodologies were applied. These are, actual examination of the printed sources, observation of the computerised systems and interviews with the people involved in systems design, and a survey of legal professionals' information needs and behaviour and their attitudes towards the library.

This project was one of legal informatics, which has evolved recently as a discipline applying computer technology to the law. Legal informatics is consequently concerned with the improvement

of legal research methods for efficient legal education, systematic legal research and successful legal practice. Research in the legal informatics field has not been carried out in Korea, so this project has a special purpose, that of introducing legal informatics. Also, this project, which made an overall analysis of the legal information environment, can be used meaningfully as a starting point for further study and to make a case for the implementation of the systems described.

Recommendations are suggested for the maximisation of access to legal information. These are formulated based on the analysis of the present situation, on general theory and on the advanced examples, and are expected to contribute to the improvement of the legal information environment in Korea.

1.2. Organisation of the thesis

The information environment surrounding legal professionals is interrelated with the legal system, the professional system, and the existing information sources.

The thesis is grouped into 5 parts. Chapters are combined with each other according to the interrelationship between them.

The first part, consisting of Chapter 1 and 2, is a prologue to the thesis.

The second consists of Chapters 3 and 4. Chapter 3 concerns the general theory of the Korean legal system, government agencies relating to legal information, and the sources of law. All of them are the bases for an understanding of the information sources described in Chapters 4 and 9. However, computerised information sources (Ch. 9) are separate from this part and are combined with general theory in CLIS (Computerised Legal Information System).

The third part, consisting of Chapters 5, 6, and 7, deals with the legal professionals' information needs and behaviour. Ch. 5 is about the Korean legal professional system which is useful in understanding Ch. 7. Ch. 6 is about general theory of their needs and behaviour and Ch.7 is about Korean professionals' attitudes.

The fourth part consists of Chapters 8 and 9. Ch. 8 is about the general theory of CLIS and Ch. 9 is about the Korean systems.

The fifth part consists of Chapters 10 and 11. Ch. 10 contains a summary of research and Ch. 11 contains conclusions and recommendations.

To sum up, this thesis is a study of information sources both in printed form and in CLIS, and on the legal professionals' attitudes towards information and its resources. In order to compare the survey results of the professionals' attitudes with the existing two systems, the study of the CLIS was undertaken separately from the printed sources and followed the study on the general theory of CLIS.

A summary of each chapter in the thesis follows:

Chapter 1 introduces the motivation for and the purposes of this project in the Korean legal information environment. Also, a summary of all the chapters, centering on the main issues being raised by the thesis, is given.

Chapter 2 describes the methodology which was applied to the research of the printed information sources, of the information needs and behaviour of legal professionals, and of the CLIS.

Chapter 3 gives the background information which is required for an understanding of legal information and its sources, and its relationship to the issues. The structures and functions of these

agencies are described, in order to comprehend primary legal information which results from governments' activities, and its sources which are a result of the government agencies' work. Also, the sources of law are explained in order to understand the value of legal information and its sources.

Chapter 4 introduces the primary legal information sources in printed form. The values and problems of the information sources may be related to the archival data and the process of generating legal information. So, the formation procedure and conservation of legal information are examined. Also, the sources of statutory or case law which are published by the government agencies, are evaluated according to the checklist.

Chapter 5 describes the Korean legal professional system including the education and training of professionals, and their functions and roles. This is studied as a basis for understanding the professionals' information needs and behaviour.

Chapter 6 explains the general theory of the legal professionals' attitudes toward information. Especially, the importance of information in their work was stressed in relation to malpractice. The characteristics of their information needs and research processes are described divided into practitioners and scholars. This is useful in understanding the Korean professionals' attitudes towards legal information and to compare their attitudes with general trends.

Chapter 7 delineates the results of the survey of the Korean professional's attitudes towards legal information and its sources. The survey was carried out by questionnaire and the data collected was analysed statistically. The findings of the survey were compared with the functionality of the Korean CLISs.

Chapter 8 describes the general theory of CLIS. The benefits of using CLIS are compared with those of a manual search. In order to comprehend and to analyse the functionality of the Korean systems, as well as to develop them into more desirable systems, the functions of CLIS in various aspects are introduced.

Chapter 9 gives the analysis of the two existing computerised systems, LIRES and SCS. First of all, an overview of each system centering on the developmental background, and the operation and functionality of each system is described. Then, comparative analysis of each system based on the attitude of professionals towards the legal information and on the practical use of the system, is explained. To facilitate their use, proper measures for an integration of the two systems and the construction of a distributed database through a data communication network is suggested.

Chapter 10 gives a summary of the research carried out in Chapters 4, 7, and 9. Attitudes of professionals towards the libraries and information sources, and their relationship with legal research training are illustrated. Also, the examination of printed sources, and the analysis of LIRES and SCS are summed up.

Chapter 11 provides the proposals for the improvement of information environments and the recommendations for facilitating the use of the two systems. Finally, in order to maximise access to legal information in Korea, the application of new information technology is suggested.

CHAPTER 2 METHODOLOGY

The major objectives of the project are to examine the present situation of the legal information field, to compare it with the legal professionals' attitudes, and finally to improve the situation of the environment to maximise access to legal information. In order to meet these objectives, the research needs to be carried out in various ways, each of them requiring different methodology. Therefore, in this project, several kinds of research methodology and analysis were adopted.

The theoretical studies which are the basis for understanding and developing these main researches, were carried out based on the existing literature. The scope of them are the outline of the Korean legal system (Chapter 3) and professional system (Chapter 5), the general theory of information needs and behaviour (Chapter 6) and of the computerised legal information system (Chapter 8).

Methodologies applied to the main researches covered in Chapters 4, 7, and 9 are explained as follows.

2.1. Analysis of printed legal sources

It can be assumed that the users' difficulties in obtaining pertinent legal information and the librarians' obstacles in providing relevant legal information services efficiently are derived from the problems inherent in the information sources. In order to clear up the problems, an understanding of the present situation relating to the information sources is a prerequisite. These problems could come through the process of formation of the sources.

Therefore, an investigation of the formation and conservation of legal information was undertaken based on the written rules and

documentation, and was supplemented by a staff manual and an understanding of customary practice acquired by interviewing the staff concerned.

The problems which the users experience are derived from real end-product publications. Titles covered in this Chapter are limited to the primary sources which are published by government agencies, because they can be considered as useful sources of law and can be used as primary accessing tools for legal information. Representative comprehensive tools among them are used as a basis for input into CLIS.

Information sources are divided into two categories, sources for statutory law and case law, and each title belonging to these is listed with a description of its history, contents and structure, and the government agencies participating in its publication. In addition, the advantages and disadvantages of each title were evaluated. In order to evaluate each title as an accessing tool for sources of law, the following criteria were applied; frequency and updating, cumulation, archival data on which based, arrangement and index, description of each entry (i e, language used, full-text or abridged text), scope, authority, and distribution.

2.2 Survey of legal professionals

Access to legal information is mainly required by legal professionals. The present situation of information sources and its improvement should be examined and developed based on the professionals' attitudes. The survey was carried out in order to investigate the professionals' attitudes towards legal information as a whole.

The target population of this survey was limited to legal scholars and practitioners. As they are traditionally the main users of

legal information sources, either statutory or case law, both were the subject of investigation in the survey. The 88 professionals consisting of 44 scholars and 44 practitioners were chosen as a sample based on the guidelines established by the author. In order to contribute to the main aims of this project, the improvement of access to legal information, professionals who are involved in the development of and are interested in legal information systems, and who take an active role in legal research were selected.

In selection, recommendations by the "representative" professionals who could be considered as the most appropriate sample in each category of profession, was followed. 44 scholars among 450 professors (nearly 10%) were selected, and 44 practitioners were chosen among 1,063 judges, 2,135 attorneys, and 815 prosecutors. In order to compare the differences between the two groups, the same number of respondents were chosen.

The survey was carried out by questionnaire. This aimed to examine legal information and attitudes towards it in the Korean context, so the questions reflected the unique Korean system and its operation. Therefore, the creation of the questionnaire required advice from two law professors. To facilitate communication between the author and the respondents, it was prepared in the Korean language.

According to usual practice (Burton, 1990), the questionnaires started with personal questions and proceeded from general to specific questions in logical order, with questions relating to the same topic being grouped together.

In order to meet the main goals of the survey, that is, identification of the information environment and its development, the following questions were included;

- . general attitudes towards legal information and research
- . kinds of legal information required

- . questions on statutory law information and its sources
- . questions on case law information and its sources
- . questions on doctrine
- . best way for effective legal research
- . views of computerisation

Distribution of the questionnaires and their collection was done through a "representative", so replies could be obtained from all respondents without any "unit non-response" (Payne, 1990).

Quantitative data must be described, summarised, aggregated, compared, and analysed and interpreted in arithmetical ways (Peacock, 1990). The data collected was analysed by statistical techniques in order to identify and understand any patterns, with the help of an expert in statistics. Among the data collected, valid data was analysed statistically. A non-response derived from an unwillingness to answer a particular question or an invalid response was indicated as "frequency missing" in every table.

As the various types of questions were included for the examination of needs and behaviour multilaterally, several techniques were applied which were relevant to analyse the questions according to their aims. In order to quantify the data, and to discover and quantify the relationship between variables, simple frequency tests, Chi-square, and F-test (two-way ANOVA, Analysis of Variance) were applied. The results by F-test were verified by Sheffe's Test for Variables. The results of the survey were analysed statistically using SAS (R) LOG VSE SAS 5.16 (1986) applied to a main frame computer (IBM - 4331 DOS/VSE). SAS is a package for statistical analysis in social sciences like SPSS.

The questionnaire was prepared from the beginning of October to the end of November 1988, and was distributed and collected from the beginning of December to the end of February 1989. The data collected was put in order, processed and analysed from the

beginning of April to the end of May 1989.

2.3 Analysis of computerised legal information sources

The capabilities of computerised systems can be evaluated in several ways. In this project, the two existing systems, LIRES (Legal Information Retrieval System) and SCS (Supreme Court System), were analysed in three ways.

First, an overview of the two computerised systems was given based on written reports and documentation, and the operation of the systems was studied based on the observation of them and on interviews with the staff who participated in the system analysis and design.

Second, LIRES and SCS were analysed according to the potential users' information needs and research behaviours, and their view on the computerisation of legal information. The findings of the survey (Chapter 7), regarding the potential users' attitudes towards the kinds and types of legal information, search methods, system mode, management of the systems, etc. were compared with the current situation of each system. Even though a study of the potential users' attitudes to a system should be made prior to its construction, this did not happen when LIRES and SCS were designed. Furthermore, the systems have actually not been widely used, and only a few professionals have experience in using them. Therefore, the capabilities of the two systems and the adaptation to users' attitudes were compared and analysed based on the survey results.

Third, the capabilities of LIRES and SCS were examined by practical searching on specific legal problems. The actual application of legal questions to the systems is useful in understanding their operations vividly and examining their capabilities precisely.

Five questions were prepared by the author with the advice of a law professor who has experience in using CLIS. In order to compare the systems at the same level, keyword searching was conducted, and the same keywords were applied in LIRES, SCS, and LEXIS. The occurrences of every keyword, the combination of search terms, and the use of operators were examined.

Based on the search results, a comparison between the capabilities of LIRES and SCS and between those two systems and LEXIS was done. LEXIS is the best known databases in the legal profession and is one of the largest database in the world (Susskind, 1992). Although comparing the two systems with LEXIS at a semi-operational stage is may be limiting, it can provide sound recommendations for improvements of the systems. For maximum efficiency, searches on the two systems were undertaken by the system designers with the author in attendance, except for the LEXIS searches which were done by an intermediary, a law librarian at a legal institute in the U.K.

A method of integrating the two systems by connecting them to the Dacom-Net, and then to the distributed database system was examined based on existing literature. The configuration required of such an efficient interface was demonstrated using the example of an experimental system, CONIT.

CHAPTER 3. OUTLINE OF THE KOREAN LEGAL SYSTEM AND THE SOURCES OF LAW

3.1. Principles and structure of the Korean government

3.1.1. Basic principles ruling over the government

In democratic society, government power is generally divided into three parts based on the principle of separation of power. Therefore, legislative, judicial and executive power are distinguished and vested in separate branches, these being Legislature, Judicature, and Executive. The purpose of this is to keep a 'check and balance' between them, and thus to protect civil rights.

In Korea, there are three branches: National Assembly, Court, and Executive. Legislative power is vested in the National Assembly, consisting of representatives. Its main function is to make law (statute) of a general and abstract nature through which to rule the nation. Judicial power is given to the Court, which is composed of judges and has the authority to interpret and apply the law to legal disputes. Executive power is vested in the Executive which has the authority to administer and execute the law in society. This is exercised by public officials.

To sum up, all functions of the three branches are related to the law, that is, law-making by the Legislature, interpretation and application of law by the Judicature, and enforcement of law by the Executive. As the power of each branch is authorised by law and the performance of its functions is involved with the law, so the acquisition of relevant information is a prerequisite in order for it to operate efficiently.

Another basic principle is the protection of civil rights. According to the Constitution, the people's rights are equally

protected, so the right to know and the right to access information, as well as the right of fair and quick trial should be protected. According to these rights, it can be interpreted that the people have the right to access legal information and to get it efficiently in order to facilitate fair justice.

3.1.2. Structure of the Korean government in general

The structure and function of the Legislature, Executive, and Judicature are prescribed by the Constitution and statute law.

3.1.2.1. Structure of the Legislature

The Legislature specified by the National Assembly is composed of representatives and is authorised to enact law. The structure and function of the N.A. are prescribed in the National Assembly Act and the Act of the Secretariat of the National Assembly. In order to perform its functions, standing committees are established, and regular or temporary plenary sessions are held.

The legislation is created from the basic rules regulating the people's rights and duties. Therefore, the representatives should participate in the legislative procedure actively and do their best to make law reflecting the will of the people. For this, they have to collect information relating to the legislation either by themselves or with the help of expert advisors employed by each standing committee.

3.1.2.2. Structure of the Judicature

The Judicature generally consists of three levels of court, the Supreme Court, the High Courts, and the District Court and its branches. The Supreme Court is the last court to adjudicate legal disputes and it make the final judicial decision. It consists of 14 Justices. Under the Supreme Court, the High Courts are

established in four regions. 14 District Courts are established under the jurisdiction of the High Court, and 41 branches are under the jurisdiction of the District Courts. The structure, jurisdiction, and function of the court are prescribed in the Court Organisation Act.

Apart from the ordinary court, there are special kinds of courts, such as the Military Court, the Constitutional Court, and Family Court in Seoul.

3.1.2.3. Structure of the Executive

The Executive is headed by the President. In order to assist the President and to control the ministries, a prime minister is appointed by the President. Important national affairs and policies are discussed and decided by the Cabinet Council which is composed of the President, prime minister, and ministers. There are 16 ministries divided by subject. The structure and functions are prescribed by the "Government Organisation Act".

3.1.3. Government agencies relating to legal information and their functions

3.1.3.1. Agencies in the Executive

The Executive, whose major function is the execution of existing law in social matters, is heavily involved with legislation as well. Several agencies belonging to the Executive participate in the production of statutory law.

a). Government Legislation Agency

The central body for legislation within the Executive is the Government Legislation Agency (GLA). The Regulation of Government Legislation Agency, defines itself as an agency which coordinates

and controls the government legislation plan as a whole, and performs the functions relating to legislation.

The Department of General Affairs of the GLA prepares the original script of statutory law, submits the bill proposed by the Executive to the National Assembly, and follows the promulgation procedure. Legislative staff in the Legislation Coordination Office prepare the draft of the bill, examine it, and interpret the existing law. In addition, the arrangement and systematising of statutory law, and the confirmation and classification of statutory law in force are also carried out by this Office.

The Legislation Research Bureau is divided into two divisions, the Legislation Research Division and the Statutes Dissemination Division. The Legislation Research Division conducts the translation of statutory law, and the preparation and management of the statutory law card. The Division also carries out the computerisation of statutory law. The main function of the Statutes Dissemination Division is to collect statutory information, and to compile and publish the statutory sources.

b). Ministry of Government Administration

The Official Gazette of the Government is published by the Ministry of Government Administration. It is used as a medium for the promulgation of statutory law. Newly enacted or revised law is published here for the first time and it is later utilised as a basis for the publication of collected statutory sources and for input to CLIS.

c). Public Prosecutor's Office

The Official Gazette of the Prosecutor's Office which is edited and published by the Department of Planning, includes statutory and case law information useful for the prosecutor's work. This is

collected and chosen by Researcher at all levels of the Public Prosecutor's Office.

d). Korea Legislation Research Institute (KLRI)

Established under the Government Legislation Agency by the Regulation of Korea Legislation Research Institute in 1990, the KLRI aims to acquire and manage legal information systematically, and disseminate it efficiently to whoever needs it. Therefore, KLRI reproduces the primary sources published by the GLA and supplies them to subscribers.

3.1.3.2. Agencies in the Legislature

In order to assist the legislative activity of the representatives and to administer the National Assembly, the Secretariat of the National Assembly has been established. As a substructure, The Proceedings Bureau and Record Compilation Bureau has been instituted for the management and publication of records produced during the legislative process.

The Proceedings Bureau consists of the Department of Proceedings Management and the Department of Bills Management. The former publishes the Gazette of the National Assembly and provides information about bills and about the promulgation of statutory laws. The latter receives, prints, and delivers the bills, and files the history of the bills, together with the bills as passed. On the other hand, the Department of Stenography belonging to the Record Compilation Bureau edits and issues the proceedings of the standing committees and plenary sessions. Proceedings include useful information for understanding and interpreting the law.

3.1.3.3. Agencies in the Judicature

Judicial decisions are made at all levels of the courts. The most

valuable judicial decisions are selected and published to form case law. The management and control of judicial records is the function of the Office of Court Administration. Based on the Rule on the Organisation of the Court, the Judicial Researcher performs a central function in selecting and editing the case law which is included in the Judicial Gazette. The Department of the Compilation of Case Law in the Research Bureau carries out the compilation of case law sources.

Assistants to the Justices who belong to the Supreme Court and aid the Justices by means of research on specific cases and on judgments, edit the case law. Edited case law is sent to the Examination Committee of Case Law and later is included in the Collection of the Supreme Court Case Laws.

The Computer Unit belonging to the Planning Coordination Office conducts the computerisation of case law.

3.2. Characteristics of the Korean Legal System

The Korean legal system is characterised by the multiplicity of origins of the law. It is a combination of several elements, such as Korean tradition, and civil law and American tradition. Various influences compounded in the legal system are derived from the influence of foreign law in the process of the formation, operation and development of the modern legal system.

3.2.1. Characteristics derived from the formation of the legal system

No country in the world can exist without some influence from others. This means that every country could be interrelated with, receive influence from, and affect others in terms of its legal aspects. Generally, law is classified into native law and received law depending on the origin of it.

According to the Korean Law Dictionary (Kim, 1981), native law means the traditional law, which has been developed in the nation's social background, based on customs and followed by the people as a social norm. Received law, on the other hand, means the formulated law, which has been formulated and developed by the influence of other nations' or peoples' legal systems.

Modernisation of the legal system occurred under the occupation of Japan. Accordingly, Korean law was influenced by Japanese law. After Japan annexed Korea in 1910, the Korean legal system followed the contemporary Japanese system, which was based on the German legal system. Therefore, modern law in Korea is based on the reception of civil law, especially German law, through Japanese law. Most Japanese law at that time was a direct translation of German law. Later, during the process of settling-down, it began to assume a strong Japanese character. This unique Japanese style of law influenced Korean law. Furthermore, the basic spirit of Anglo-American law and the method of interpreting it have gradually been adopted by the Korean legal system.

The establishment of a peculiar system which is a mixture of various legal elements, therefore, results in the difficulty of maintaining a consistency and harmonisation in the system itself, and of doing research efficiently because of the necessity for the pursuit and analysis of the origin of received law. In order to operate and maintain the received law, the origin of that system should be continuously referred to for the interpretation and application of laws, as well as the enactment and revision of a specific topic. Therefore, it is necessary for the legislators, legal practitioners, and legal scholars to investigate and research the foreign law.

However, the foreign laws have established and developed in their own cultural and customary background, and could hardly be adapted to the Koreans' sense of law exactly. Accordingly, legal

professionals have to acquire information on the system itself, and on the interpretation and operation of the system, and use it in their practice and research activities. The nature of law derived from the reception of other laws has affected the information needs and behaviour of legal professionals.

3.2.2. Characteristics derived from the operation of the legal system

The operational characteristics of the legal system may be derived from the legal system itself and from the legal professional system.

Under the written law system, it is the rule that all the laws should be prescribed in written legal texts. Although case law is categorised as unwritten law, it exists in the form of written material which is composed of the language used by judges.

Therefore, the language used either in written law or in unwritten law is the basis of understanding and interpreting this law. The Language used in legal documents contains a large number of legal technical terms which have special meanings in the law field. Therefore, the connotation of legal terms used in the legal text would not be easily understood by the public, and may be differently understood by the professional. So, it brings about different interpretation and applications of the law, and thus results in differing views of doctrine and precedent.

The problems of language may be derived from the attribute of language itself, the attitude of language users, and the origin of law using that language. In Korea and Japan, the Chinese character is a constituent element of their language in addition to their unique characters, called Korean Hangul, and Japanese Hiragana and Katakana.

As described above, Korean law has been much influenced by Japanese law. Consequently, many Japanised Chinese characters are translated and used in Korean law. Some of them have different meanings from the pure Chinese language, as well as from the native Korean language. So, the gap between the meanings intended in legal documents may give rise to confusion.

Since the 1960s, a policy for the rearrangement of legal terms has been adopted. So, improper terms such as Japanised and abstruse legal terms have been revised, and the Korean alphabet has come to be used exclusively in legislation and judicial decisions.

Legal documents written only with the Korean alphabet (Hangul) lead to another problem, that is, the question of homonyms. Words described using the Korean alphabet may contain quite different meanings.

For example, gongsa (공사) can be translated in four different ways using Chinese characters:

- . 工事 - construction work
- . 公司 - company
- . 公私 - public and private affairs
- . 公使 - diplomatic minister

The legal text either in the written law or unwritten law, is formulated by those persons who are entitled to do so. They normally have a high status and strong power in the bureaucratic society. They resist an outsider's advice on improvements as it threatens their status.

Language in the legal text is used not only to communicate the meaning, but it also functions to protect civil rights. It has been stated that "A simple legal text can protect civil rights easily, an abstruse one is a sign of autocracy" (Han, 1974).

However, in fact, the abstruse terms have often been used in statutory law and case law, and judgment documents have been

written using long sentences. The result is that their meaning cannot be understood easily.

Problems derived from the language used affect the method of legal research. Legal terms used in the legal text need to be interpreted appropriately according to the situation, and are utilised as access points to retrieve relevant legal matters.

3.3. Sources of law

3.3.1. Definitions

In Black's Law Dictionary, source of law is defined as the origins from which a particular positive law derives its authority and coercive force, and the authoritative or reliable works, records, documents, editions, etc. to which we are to look for an understanding of what constitutes the law.

Source of law means the origin of law, which is provided as an authority to decide "what is a law?", but generally, it is used as a tool for cognizance of the law or the legal pattern of existence. In this sense, sources can be divided into two groups, written law and unwritten law, based on the mode of being or expression of law.

Section 1 of the Civil Code in Korea prescribes the order of sources of law applicable to legal matters as the written law, customary law, and reasons. In addition, this provision not only describes the kinds of sources of law, but it also formally authorises the unwritten law as a legal source of law.

Furthermore, it explains the order of legal effect as follows; that the written law has a primary legal force, and customary law and reason can have legal force when there is no proper written law or when customary law and reason are required to interpret and apply the written law.

3.3.2. Kinds of law and their legal effects

3.3.2.1. The written law

In the Korean Law Dictionary, the written law is defined as the law which is presented in literal form, especially in documents. Sometimes, it is called enacted law, because it is codified and enacted into an Act by the legislative procedure.

Under the Civil Law System, the written law has several advantages, as follows (Ko and Jun, 1961);

- a). It makes clear the context of law.
- b). It keeps the national legal system orderly.
- c). It ensures the stabilisation of legal order.
- d). It makes the legal effect of one's legal actions predictable.

On the other hand, the written law has disadvantages as well (Ko and Jun, 1961);

- a). It cannot respond to social change immediately, so that a shortage of law can arise.
- b). The written law takes codified form and may become rigid.
- c). As the legal provisions are expressed in general and abstract sentences, so the text in written law requires interpretation in order to be applied to a specific legal matter.

To sum up, the written law, on one hand, should include the contents of law, and the meaning and import of law concretely and clearly. On the other hand, the written law should be prescribed in generic and abstract form, because the objective of written law is binding upon the people as a whole. In order to apply the abstract provisions to a certain case, interpretation of the law is required. This is carried out by government bodies belonging to the Judicature and by legal scholars.

In any case, the interpretation should not infringe on the basic spirit of the law. Therefore, a form of standard or guideline for the interpretation and application of law is necessarily required, and in this sense case law may function as a standard.

The structure of the written law in Korea takes an hierarchical form, like a pyramid. The Constitution lies at the apex, and below it the statutes, statutory instruments and regulations exist in this order. The legal effect of each one follows in this sequence.

3.3.2.1.1. The Constitution

The Constitution is the foundation law by which all other laws are constituted. Due to its nature of fundamentality, the highest legal force is vested in it, and more rigid procedure for its establishment and amendment is required than for other laws (Chapter 10 of the constitution).

3.3.2.1.2. The statutes

The statute is enacted based on the Constitution in order to embody the basic spirit of it. The statute has a strong legal force as provided by the Constitution, and thus it provides the basis for the legislation of the statutory instrument.

The National Assembly is authorised to enact the statute. The statutes enacted are mostly concerned with the regulation of social affairs and with the protection of the peoples' rights and interests.

3.3.2.1.3. The Statutory Instruments

As the statutes usually lay down fundamental principles, so more detailed and particular provisions are necessary to apply them to specific situations.

Based on the legislator, statutory instruments are divided into two groups, one is the decree which is made by the President, and the other is the ordinance which is made by the Prime Minister and the Ministers.

Statutory instruments are classified into mandatory laws and executive laws on the basis of the contents of the law and the objectives of the legislation. The mandatory laws are made for the items which are delegated by the statutes, and the executive laws are made for the items which are required for the execution of statutes.

A statutory instrument is termed a subordinate law, because of the inferiority of its legal effect to the statutes. There is a difference in legal force between statutory instruments. That is, a presidential decree is stronger than ministerial ordinances in legal effect. This is a reflection of the priority of executive power.

3.3.2.1.4. Regulations

The National Assembly, Supreme Court, Central Committee of Election Management, and the Board of Audit and Inspection are authorised by the Constitution to make the regulations for the organisation and administration of those bodies.

The regulations made by them should be enacted within the limits of the statutes and decrees, and have the same legal effects as ordinances.

3.3.2.2. The Unwritten Law

The Korean legal system, generally, adopts the unwritten law as a source of law as well. The unwritten law has not been formulated in the legislative process and does not form statutory law. It has

been generated through other procedures, such as the customary or judicial process, but it has the nature of social norm.

General and particular customs having legal force, and the rules, principles and maxims established by judicial precedents are categorised in the unwritten law.

3.3.2.2.1. The customary law

Society is controlled by various norms, one of them being a customary practice. A customary practice can only acquire legal value and become a customary law, if fulfills the necessary conditions as follows (Jang, 1981) :

- a). It should have existed continuously for a long time.
- b). It should acquire the legal conviction that it has legal values.
- c). It should not be contrary to the social orders and laws.

In practice, customary laws have been applied to legal matters, and some of them have been incorporated into the written law and case law.

3.3.2.2.2. Reasons

The Reasons are social norms with which most persons in society comply without any question. There are many provisions corresponding to the reasons in the statutory law, such as good faith, good morals, public orders, and social common notions etc..

Judges have a responsibility to proclaim what is the spirit of the law in litigation. They cannot refuse a judgment, even if there are no proper provisions or detailed provisions applying to the legal problems faced. In this case, they have to judge in accordance with the reasons. Since the reasons are expressed in abstract and general terms, the contents of them are clarified by

the judicial decision.

3.3.2.2.3. The case law

Case law consists of the precedents made by the court. Therefore, judicial decisions are binding upon the parties to the controversies from which they result, and they are the result of adversary proceedings before a decision making body (Cohen, 1976).

The principle of the 'doctrine of stare decisis' which is the policy of courts to stand by a precedent and not to disturb a settled point (Black, 1979), is adopted in the common law system. It has several advantages when it is adopted (Cohen, 1976);

- a). People similarly situated should be similarly dealt with.
- b). Judgments should be consistent, rather than arbitrary.
- c). One may predict the consequences of contemplated conduct by reference to the treatment afforded to similar conduct in the past.

As a result of the reception of the Civil Law System, the following principles relating to case law have become a part of Korean legal thought.

- a). A court is bound primarily by Codes and Statutes.
- b). A judicial decision is nothing but a product of the interpretation of Codes and Statutes.
- c). The judicial decisions per se have no binding effects as precedents for subsequent decisions.

Based on these principles, the doctrine of stare decisis is not adopted as a matter of theory, and thus whether the case law should be accepted as a source of law is a controversial issue among legal scholars in Korea.

The following reasons are commonly illustrated in support of the negative view:

- a). Under the division of powers, judicial activities should be limited to the interpretation and application of laws.
- b). When judges make a judicial decision, they are not obliged to follow the case law but the statutory law.
- c). Legally, the judicial decision of the Supreme Court has an enforcing power above that of the lower court in that case.
- d). The provision which lists the kinds of source of law does not mention case law, although unwritten law is a broader category which does include case law.

In Korean law, case law is not prescribed in the provision on the source of law (section 1 of the Civil Code) and it is not officially adopted as a source of law. But, in fact, case law, especially the decisions of the Supreme Court, is highly regarded as an important source of law by practitioners and scholars. It is derived from the supremacy of the Supreme Court which makes a final judicial decision.

Essentially, a decision of the court has a validity only in that case, because case law is based on the judgment of a certain case. Thus, it may be natural to assure that the case law is a peculiar and specific law, and has a limited legal effect. But, it is desirable that a similar case should be treated in the same way by the consistent interpretation of law in order to keep the coherence and uniformity of legal order. It is also natural to give authority to the case law, because it is generated by an authoritative agency to protect the legal order and by a consensus among the persons concerned in the case.

Generally, judges tend to follow the court's opinions as expressed in existing case laws. Among them, the decisions of the Supreme Court are widely recognised as laws which have strong binding authority in every case in litigation.

Traditionally, mediation and reconciliation have been the prevailing methods of settling legal disputes in Korea. The amount of litigation and case law is smaller than in the common law countries, even considering the different legal systems.

Moreover, the situation of Korea is gradually changing. Today, the more that society becomes complex and diverse, the more complicated social relations become, and thus the more cases are pending in the courts, which cannot be resolved by statutory law and require more unwritten law. Customary law and reasons are prescribed formally as the sources of law. In practice, it is common that they tend to be mingled with case law and presented in the form of case law, rather than be used independently. Therefore, case law is emphasised and used more than customary law and reasons in Korea.

Case law is not only regarded as a result of the interpretation and application of law in a specific case, but it can also be considered as a form of new law where there is no statutory provision. Therefore, the universal rules included in the precedents should have binding force as law.

3.3.2.2.4. Legal Doctrines

Normally, statutory law is written in abstract, philosophical and ideological texts using legal terms. Therefore, a concrete interpretation of law is required to apply law to a specific legal matter.

The interpretation of law is performed by legal professionals, either practitioners or scholars. Especially, Korean legal professionals tend to stress the precise interpretation of each provision within the context of a systematic jurisprudential framework (Song, 1983).

The interpretation conducted by scholars is called legal doctrine, and this is done by the theoretical and systematic analysis of legal provisions. Some of these are treated as the common legal doctrines which are approved by the most scholars. Sometimes, they are incorporated into written law or judicial decisions.

The written law is the exclusive basis for judicial decisions, thus judicial decisions must derive from the provisions of statutory law. Therefore, the quest for the will of the legislator is the main object of judicial interpretation. When written law is provided clearly, judges can easily understand the legislative will through a literal interpretation of the words. When it is not clear enough, judges should use a logical interpretation, in order to find the legislative will based on the spirit of the law.

For a reasonable interpretation, they refer to scholars' views, called legal doctrines. Under the Korean legal system, this is especially emphasised in scholarly and practicing fields. This tendency may be an influence on legal education which centres around textbooks; textbooks, mostly, are comprised of the interpretation of provisions.

CHAPTER 4 PRIMARY LEGAL INFORMATION SOURCES

4.1. Overview of Primary Legal Information Sources

4.1.1. Definition of primary legal information sources

It can be said that the information required by legal professionals is largely about the "source of law" relating to the legal matters faced by them. This kind of information is principally included in the primary legal information sources.

Most of these are published by governments, because legal information is the result of government activities such as the legislation, interpretation and application, and execution of laws. Thus, a government will usually produce legal information and publish it in printed records, and information sources produced by government will be used as a basis for the establishment of new information.

It is well known that the written law is a fundamental source of law under the Civil Law System, and this is different from the Common Law System under which statutes and judicial decisions are both recognised as sources of law. Even though the judicial decision is not formally recognised as a source of law under the Civil Law system, it is regarded as an important legal information source and used in legal research very frequently.

The primary legal information source may be compared to the secondary legal information source. The primary source is the collection of law itself, which is issued by a branch of the government or a government body. On the other hand, the secondary source is a publication which includes an explanation of and commentary on the primary information and makes easier access possible.

Professionals, in the first instance, refer to primary legal information sources for their legal research, because these sources provide authoritative information. The functions of the primary legal sources, statutes and cases, is explained as follows.

Statutory sources are used for statutory retrieval, bill drafting, bill status reporting, preparing fiscal reports, and automatically publishing bills at the end of a session (Larson and Williams, 1980). In addition, presumably, there are many cases where the statutory sources are used by professionals in their work.

Cohen (1976), on the other hand, stressed the importance of case law and its study and described the reasons for this.

- a). to understand the Supreme Court' views on the contents of case law
- b). to speculate on prospects of future judgments
- c). to examine the case law, comment on the weakness and error included in case law, and attempt to improve the case law

A collection of law, either statutes or judicial decisions, should be the most important information source to be referred to by professionals, and thus the organisation of law by systematically adjusting to the users' needs and behaviour should be a major element in facilitating the use of the collection. Due to the nature of law, it cannot be static and fixed, but should change according to changes in society. As a result, law should be continuously enacted and revised, and primary information sources are arranged chronologically in order to meet users' needs for current information.

Cases and Statutes arranged chronologically are of little use to the lawyer, who is faced with legal matters concerning a particular subject. We must have some means of retrieval based on the legal subject or the legally significant facts in which we are

interested. This need is met by a variety of finding tools.

Besides these primary sources, there are secondary sources for statutory and case law information. Secondary material is not a simple record of raw texts. It includes the processed information based on original texts for special purposes and special readers. Textbooks, commentaries, etc. belong to this category, and include the interpretation, application, and explanation of statutory and case law. They are useful for finding the sources which are related to the legal problems currently being faced, so they are widely used by legal professionals. The most representative secondary source is the digest which is used as a case finding tool and referred to most frequently (Cohen, 1976).

Although secondary sources are considered as useful sources for legal research and used frequently by Korean professionals, in order for consistency with other chapters the primary legal information sources are discussed. Primary sources, especially the representative ones, such as the Official Gazette and the Judicial Gazette, are used as bases for input into the Korean computerised legal information systems in Chapter 9 and for the survey of the professionals' attitudes towards information sources.

4.1.2. Kinds of primary legal information sources

Primary legal information sources are broadly divided into two categories. One is a source of statutory information and the other of case law information.

Statutory sources include all kinds of written law generated by the government's legislative activity, and case law sources include judicial decisions generated by the court's judicial activity. Both of them are regarded as indispensable information sources for legal research.

Depending on the publisher, primary sources are distinguished into official and commercial publication. Usually, primary sources are published officially by the government body which produces the information, thus these can be named as original sources of the law and can be regarded as authoritative sources. But they are distributed to a limited readership, and are difficult to access. In order to make them widely available, therefore, primary sources are published unofficially, based on the original text. The commercial versions are by far the more popular among practitioners and scholars, because they include a wide range of annotations, tables and other aids to legal research which are conspicuously absent in official publications, as well as being easily accessible.

The codes are a representative example of commercial version of the statutes. They are a subject compilation of the current public general statutes and have some advantages for the searcher as follows (Cohen, 1976).

- a). Promptness with which they appear.
- b). Regularity with which they are brought up to date.
- c). Annotations they provide.
- d). The text of relevant statutes as an official code.
- e). The abstracts of the judicial opinions which have interpreted, construed or applied each section of the code, together with citations to the texts of those opinions.

Also, primary legal information sources can be divided into sources for raw data and processed data. Normally, an official publication includes the original raw data and a commercial publication includes the processed data. As mentioned above, processed information on statutory law is included in the codes, and processed information on case law is found in the commercial version of reported case law.

In Korea, many types of codes are published commercially and include useful information for legal research. On the other hand, there is no digest. This reflects the tendency in legal research and education for more emphasis to be placed on the interpretation of legal texts rather than a case law, although the situation is changing.

4.2. Formation and conservation of information sources

Legal information is composed of the pure version of the law and processed law. Processed law is a result of the explanation, interpretation, and evaluation of law, and is produced by government bodies for performing their functions as determined by the law. It is later published in order to be freely accessed by the people.

Two basic primary legal information sources for statutory law and case law, are made available by the government. The currently enacted statutory law and decided case law are published in the Official Gazette of the Executive and the Judicial Gazette of the Judicature. They are the first publications including current information with authority, so they are considered as basic sources for statutory and case law. For easy access to statutory and case law information, an edited form of the sources are published based on the these sources. Data collected is organised and systemised for easy access and the collection is published frequently in loose-leaf form to provide current information.

In this sense, primary legal sources are complete records of original legal information and are authoritative and basic tools for finding the raw texts. Information sources for statutory and case law are regarded as the most important tools by legal practitioners and scholars.

The due process of law is a fundamental principle for the achievement of the rule of law. The processes for producing legal information, such as the legislative and judicial processes, should follow the provisions of the law. Therefore, the law should prescribe those processes even to their particulars.

In fact, this is often not the case, and thus certain processes follow the customary practice.

Legal information produced in relation to the performance of duties by government bodies should be conserved in good condition in order to be easily accessible by users. But, there is a tendency to preserve it with closed access, so that it can be used only for operational purposes in the organisation concerned.

4.2.1. Legislative Procedure of Statutory Law

Statutory law is a basic form of law in Korea. It is laid out in texts with a specific format and is subject to certain formalities by the bodies who are authorised to enact the law.

In a continuously changing society, the statutes made by the Legislature cannot affect social change instantly. It is not only unnecessary and improper to enact partial and detailed matters in statutes but also it is almost impossible to do this in a highly specialised and complicated society. Therefore, there is a tendency to delegate this authority to the agencies in the Executives. They can make the detailed subordinate law, and respond quickly to social change. The sharing of legislative power is a more flexible and efficient way to meet a change of circumstance and to prepare for an emergency, and thus it is generally adopted in the present age. In principle, general and abstract rules are covered in the statutes enacted by the National Assembly, and the specific and detailed regulations required for the enforcement of statutes are prescribed in the statutory instruments enacted by the Executive.

Article 75 of the Constitution prescribes the President's power to make the 'Presidential Decree' within the scope of the items delegated by and for the execution of statutes. And the 'Ministerial Ordinances' made by the Prime Minister and Ministers are elucidated in article 95 of the Constitution. Ordinances are based on statutes and presidential decrees, and are related to Ministers' authorities on the matters under their jurisdictions.

The legislative processes of statute, presidential decree and ministerial ordinance are quite different from each other, and in each case should strictly accord with the due process of legislation prescribed in the law, and agencies participating in these process should cooperate with each other.

The legislative procedure of statutes consists of the introduction and examination of a bill, and the promulgation of law. In this process, the National Assembly carries out its duties in collaboration with the Executive. Statutory instruments are made by government bodies in the Executive without the participation of the National Assembly in the legislative process.

Reporting in the Official Gazette is used as a promulgation procedure for statutory law, and the laws reported come into force 20 days from promulgation. A serial number is assigned to each law in order of printing it in the Gazette.

Every agency which participates in the legislative process should keep a systematic file of the original records which are generated in the performance of its function. These records can be utilised as useful information sources for its own work and as an information service for others. It can be used as a basis for producing primary legal information sources.

Records produced in the legislative processing of all levels of statutory law are organised and kept in Government Archives and

Records Services, and provided for public services.

Also, the Government Legislation Agency which functions as a pivotal agency in the legislative process of the Executive, keeps information files on the enactment, revision and repeal of law. The GLA prepares the original scripts of statutory law and keeps them in several places, and produces a microform version in order to conserve the material safely in the long term. For convenient and speedy use, a set of promulgated laws is furnished in chronological order.

Since 1974, the 'statutory law card' has been filed and utilised for the GLA's unique roles such as drafting and examination of statutory law. It gives information about the interrelations between laws, so it is very useful for examining related law. The 'statutory law card' consists of two parts. One is 'the main card of law' which is arranged by the Korean alphabet according to the name of an act and includes basic information about the law. The other is 'the reference card for legislation' which includes reference information, such as special issues concerning the law, and the items revised and the reasons for revision.

The National Assembly also keeps files. The Department of Bills Management prints the bills and distributes them to the people concerned, maintaining files of the 'history cards of the bills'. This includes most of the information about bills, such as the history of each bill received in the NA and its result, the reason for its introduction, and its main point.

Meanwhile, proceedings of the plenary session and standing committee giving the results of the examination, discussion, request and vote, are recorded everyday in session, and distributed to the representative and the people concerned.

4.2.2. Judicial procedure of case law

Judicial power in Korea is invested in the Judicature, which is represented by the Court at all levels. Primarily, the Judicature is an agency which produces authoritative judicial decisions and declares "What is a law?" in relation to a specific legal dispute. In other words, the functions of the court are to clarify and expound the law, and consequently to develop the law.

Therefore, the performance of its functions can be measured by the degree of promptitude in conducting the judicial process, by the degree of clarity and adaptability to the legal matters faced, and by the degree of fairness, accessibility and credibility of the judicial process.

Litigation, requesting authoritative judgments on a specific legal dispute, are broadly divided into three categories, civil procedure, administrative litigation, and criminal procedure.

Civil procedure is concerned with disputes about legal effects which relate to the right of persons. It settles the legal problem by law and finally decides a judgment on the legal right and obligation of each party. Administrative procedure is concerned with disputes of peoples' rights provided by public laws. It applies the administrative laws and upholds their legal rights. Criminal procedure deals with actions which are deemed by the law to be public wrongs and are punishable by the state in criminal proceedings. By these procedures, the extent of national punishment in a specific criminal case is clarified.

Under the Korean legal system, courts are divided into two categories, civil court for civil procedure and criminal court for criminal procedure. There are no separate courts for administrative procedure, and thus administrative cases are covered in the civil courts.

In fact, it is possible that judges make mistakes in deciding a case pending in court. In order to guarantee a reasonable judgment, the opportunity to correct the mistakes of other judges and to ensure the consistent interpretation of law is provided. The judicial system in Korea adopts 'three instances of court'. There are three levels of court standing in the order of Supreme Court, High Court, and District Court with several Branches.

Therefore, legal disputes instituted as lawsuits are principally adjudicated three times from the District Court or a Branch of the District Court through the High Court to the Supreme Court, although the administrative cases are twice adjudicated from the High Court to the Supreme Court.

Judicial decisions are prepared in written documents. The 'reference notes on the writing of judgment documents' was established by the Office of Court Administration in 1991, and suggested guidelines for the preparation of ideal Judgment Documents in civil and criminal cases.

Judgment Documents which are prepared by judges involved in the decision of cases, are written in various sizes and writing style. Their length normally depends upon the complexity of the legal matters concerned and of the proofs and testimonies provided, and upon the contents of the decision made by the court. Therefore, some documents are written in one page, others are written in more than ten pages.

Generally, Judgment Documents include the following items;

- . The name and address of each party (defendant and plaintiff)
- . The text: conclusive part of the judicial decision which functions as a standard for determining the scope of its effect and a basis for compulsory execution.
- . The objects of instituting a lawsuit and appeal: used for determining the scope of effect of a decision.

- . The reasons: the facts asserted by the parties, application of laws to them, and procedure coming to the text in detail.
- . The date of completion of pleading
- . The court: the specific court to which the judges signed and sealed on the judgment document belong.
- . The sign and seal

When a judicial decision is made, all records created in the civil and criminal procedure are systematically arranged and are sent to the appropriate sections designated by the 'Rule on the organisation of the court' in each level of the court. The appointed sections in each court organise and file these records. The 'Rule on the management and conservation of judicial documents' stipulates the establishment of a Judicial Archive in every High Court in order to manage judicial documents efficiently and to protect them from damage.

A Judgment Document of all cases is extracted from the case records and filed separately for conservation in these Judicial Archives. In particular, the Judgment Document of all cases of the Supreme Court, except for criminal cases is reproduced in microfilm and conserved in Judicial Archives. This is because the Supreme Court case law is so important that easy access to and complete conservation of it should be ensured.

Meanwhile, the records of criminal cases are sent to the Prosecutor's Office which is a counterpart of each court, without delay. They are conserved in the appropriate designated section. When a final judgment of a criminal case is made by the Supreme Court, three copies of the records are sent to the Public Prosecution's Administration. Each of them is sent to every level of the Prosecutor's Office that has participated in that criminal case. The original record of the criminal case is transferred to the prosecutor's office who first recognised the case and initiated the investigation.

There is another kind of record prepared by each prosecutor. To follow the development of the case, every prosecutor prepares and retains the "Card of trial procedure" of each case.

4.3. Evaluation of each title

Easy accessibility and availability of law can be achieved by its publication. In Korea, many kinds of statutory and case law sources are published by the government agencies, most of which are the producers of original legal information and are in a advantageous position to obtain up-to-date information quickly. Thus, publication of these sources is their role as authorised by law.

4.3.1. Methodology of evaluation

Each title belonging to the primary legal information sources and published by governmental agencies was evaluated. Sources are classified into statutory law and case law sources, and each title belonging to these is listed with a description of its history, contents and structure, the government agencies participating in its publication.

In addition, advantages and disadvantages of each title were evaluated. For evaluation, following criteria is applied: frequency and updating of publication, cumulation, archival data based, arrangement and index (search modes), description of each entry (i.e., language used, full-text or abridged text), scope, authority, and distribution.

4.3.2. Statutory law

As explained above, many government agencies participate in the legislative process in order to carry out their functions, such as the introduction, examination, and promulgation of law. As part of

their duties, they are required to inform the public of information produced and acquired, thus they publish several kinds of primary sources.

The Government Legislation Agency publishes very important sources. This is because the GLA is a principal legislative agency in the Executive and plays a major role in the examination of all kinds of bills. As a result, the GLA deals with the statutory law generally and can obtain current and historical information about statutory law. The GLA also has a responsibility to inform the general public about the law and to instruct laymen to aid their understanding of it, and to edit it so that it can be accessed easily by users who need the information. In the performance of its duties, the GLA publishes several kinds of valuable sources shown in 4.3.2.2, 4.3.2.3, 4.3.2.4, and 4.3.2.5.

On the other hand, the Ministry of Government Administration publishes the Official Gazette which is used for the promulgation of all kinds of new statutory laws.

Moreover, the National Assembly publishes primary sources based on the data collected during the examination of the bills of statutes introduced to it, and on the information secured by the passing of bills.

All of primary sources for statutory information described in this section, are published by government agencies taking the form of government publication.

4.3.2.1. Official Gazette of the Government

The Official Gazette of the Government is an organ to notify and inform the people of matters nationwide. It is published daily by the Ministry of Government Administration. The Minister of Government Administration takes charge of editing and distributing

it, according to the 'Rule on Official Gazette' and 'Enforcement Regulation on Official Gazette'.

The Official Gazette comprises of 18 parts which include formal information and public matters. The most important part among them is on the statutory law. As publication of the original text of all kinds of law in the Official Gazette is an indispensable procedure for promulgation and for their legal validity, so it is not down to the editors' discretion whether to include them in the Official Gazette or not.

This reports the law comprehensively, so enacted and revised law, and repealed law are covered without exception. Therefore, treaties, regulations and by-laws, as well as statutes and statutory instruments are included in full-text. As mentioned in 4.2.1, MGA reports statutory law in the Official Gazette as a necessary procedure for the promulgation of law based on the data provided by the GLA.

The Official Gazette is used as a basic tool for updating of LIRES which is a computerised legal information system for statutory law in Korea described in Ch. 9. Statutes and statutory instruments are extracted from it and edited in the format applicable to the system. That is, the text of the Official Gazette using either Korean Hangeul or Chinese character is transformed only into Korean Hangeul which is adjustable to LIRES.

Due to the arrangement by item, access to each issue by specific subject is not available. The "Monthly list of Official Gazette" is arranged alphabetically by subjects and is useful to identify article relating to the subjects.

Each law, normally, consists of the 'main body' and the 'incidental rules'. Information included in each law covered the Official Gazette is shown in sample entry (Table 4-1).

(Table 4-1: Sample entry of the Official Gazette)

* Title of the act (Date of the first enactment, and the
attribute of law and the number of act)

History of the revision
(the date of revision and
the number of act)

Chapter 1 Title of the chapter

Section 1 (Title of the section)

Subsection 1

Division of subsection 1

Chapter 2 Title of the chapter

The incidental rules

Section 1 (Title of the section)

The tables and formats

Distribution should be efficient in order to achieve the primary purpose of issue. The Official Gazette is distributed to central government agencies, local government agencies, and government-sponsored corporation free of charge in order to be used for official use. According to the section 14 of the 'Rule on Official Gazette', they have a responsibility to conserve this. In order to distribute widely, a subscriber-based distribution is primarily adopted. The MGA designates the distributor, whose duty is to set up the distributing agencies nationwide, and manages them efficiently.

4.3.2.2. Legislation (issued every ten days)

Due to its function to produce important legislative works in all areas of statutory law, the GLA holds an advantageous position in securing current information on a newly enacted law, as well as on the intention of legislation and the legislative procedure. Accordingly, the GLA publishes several kinds of sources in order to provide useful legislative information to those who are concerned with the execution and application of law, and to the public.

Since January of 1957, the "Monthly Legislative Bulletin" published until 1961 when publication stopped on account of retrenchment, and restarted in 1962. Frequency has been changed from monthly to every ten days since 1980, so as to publicise the new laws as quickly as possible. The scope of this has extended from covering the full-text of the new statutory law and simple explanation of the important law to covering more information.

In order to be used as a reference source by the people who are involved in law-related work, the Legislation includes background information about the new legislation and its main objectives. Sometimes this includes the tables which illustrate contents of the new law and its interpretation compared with old law since

1970.

Furthermore, in order to aid the popularisation of law, law included in the Legislation is explained in plain language to make it understood easily by the laymen. Therefore, the main purpose of this publication are to provide reference information relating to the new legislation and to popularise it to the public, as well as to provide the full-text of the new law quickly. Processes such works as editing, publishing, and explaining the law are performed by the Statutes Dissemination Division based on the 'statutory law card' file.

In order to achieve the major purpose of the publication, the Legislation is distributed widely. The GLA distributes it free of charge to the smallest administrative unit of the local government, such as "Dong" and "Eup". The KLRI also distributes this to the institutions free of charge, and sells to the subscribers.

4.3.2.3. Collection of Law of the Republic of Korea

Under the written law system, all areas of social life are regulated by statutory law. The more a society is complicated and specialised, the more a law needed to control social relationships is generated, and the more legal information is emphasised.

The first comprehensive collection of statutory law was made to organise the law which were enacted after the formation of government and the Korean war. It was composed of three volumes.

On 1, March 1963, a revised edition consisting of 16 volumes was published in order to cover a large quantity of laws which were enacted by the "Special Act for Readjustment of Repealed Laws". Since the publication of the main body, more than 70 supplements were issued over the next ten years. It was too bulky to handle

easily and its effect was reduced because of its incomplete filing, damage and its becoming obsolete.

Therefore, in November 1974, a third edition consisting of 28 volumes was published. Each volume is arranged by legal structure, so it is difficult to access without knowledge of legal structure. This work concentrates its efforts on convenience of use and full coverage of legal information. So, it includes an index volume (vol.28) which gives a table of contents by each volume and part, and the title index of all laws by the name of the act.

At the end of December 1989, a completely revised new edition was published consisting of 50 volumes. This is classified based on the subject and nature of the law, and the government agencies relating to that law. The last volume (Vol. 50) includes the index.

The Collection covers all kinds of statutory law and treaties. Information covered in the Collection is the full-text of law and the history of revision of the law, which is the same as of the Official Gazette, as shown in (Table 4-1). The Collection has been used as a basic source for the construction of LIRES.

In this, statutes are written in a mixture of Korean Hangul and Chinese character, and statutory instruments are written only in Korean Hangul. So, transformation of statutes to Hangul has been required in the input stage to LIRES.

In order to adjust to the change of law and to adopt the statutory law in force quickly, the Collections of Laws of the R.O.K. is published in loose-leaf form based on the "statutory law card". Thus, the addition of new law and the removal of repealed law can be easily done. In order to remain up-to-date, supplements are issued monthly.

If these supplements are not filed quickly and accurately and are not maintained effectively, the value of the Collection might be decreased.

Guidelines for the edition, issue, and dissemination of the Collections of Law are prescribed in the 'Rule on the Edition and Issuance of the Collection of Laws'. The rule provides a scope of items to be covered in it, issue of main body and supplement.

The Collection is distributed to the government agencies free of charge by the Statutes Dissemination Division in the GLA, and to the organisation or individual subscribers through the KLRI.

The work relating to the Collection of Law is carried out by the Statutes Dissemination Division in the GLA. In 1981, the Society for the Edition and Diffusion of Statutory Law was founded to edit the Collections of Laws for sale and disseminating them to the subscribers. The 1990, the Korea Legislation Research Institute was established and merged with it.

4.3.2.4. Collection of the History of Law of the R.O.K.

Law is double-sided, one side is a necessity for stability and the other is for immediate adaptation to social change. The law at this time is based on and developed from the rule in the past, and thus the law can be fully understood and interpreted adequately through an understanding of its history. History of a specific law is about the contents of the law in its first enactment and its revision thereafter. This is very useful information in conducting research on the legal system in the past, as well as in handling a specific case which occurred at a certain time.

The method of revision of law in Korea is not the addition of a new item to the existing law, but the deletion, insertion and amendment of items or phrases in existing law. Therefore, only the statutory laws in force are covered in the Collections of Laws,

and for information about the history of laws, other sources should be used.

In 1965, the Editorial Committee on the Collections of the History of Laws of the R.O.K. was established by legislative staff in the GLA, and published the Collections of the History of Law of the R.O.K. in 15 volumes.

In 1978, a revised edition was published in 27 volumes, which covered the statutes valid at 1, January 1978. It was planned to add the statutory instruments in supplements. Among repealed laws, only the law which is important for the historical research of law was included. It followed the same structure as the Collections of Law, and published in loose-leaf form. The supplement is published annually.

It includes the full-text of the revised and repealed laws arranged numerically by the date of promulgation in a certain law. At the top of each act, the 'history of act section' was presented and provides the number and the date of promulgation. In the 'reference section', a summary of the revision and other reference information is given. These are based on the file of the 'statutory law card'.

Edition, issue, and dissemination of the Collection of the History of Law is carried out by the same method as the Collections of Laws.

4.3.2.5. Current Law of the Republic of Korea (English edition)

In international society, there are close relationships between the multinationals, and thus it is necessary for a law of a certain country to be known to others.

In 1983, the Government Legislation Agency published an English version of Korean law in order to cope with this need. Later, the Korea Legislation Research Institute took this over, and edited and published a revised version in 1992. It consists of 6 volumes and 24 parts classified by legal area.

Only parts of laws included in the Collection of Laws of the R.O.K. are chosen for inclusion. Laws included are mostly statutes and a few statutory instruments (147 statutes, and 41 presidential decrees), which are closely related to civil life, the peoples' rights and duties, and to the basic structure and function of the government agencies and other public institutions.

Translation of the text into English was carried out by legislative staff in the GLA with consideration to the opinions presented by each Ministry of government. Later, KLRI took over that work.

Information covered in this source is the full-text of law and the history of revision in English translation, which is the same information as in the Official Gazette (Table 4-1) in English. For easy access, alphabetical indexes by Korean and English titles are appended for the acts included in each volume, not for the whole work. It is published in loose-leaf form, and supplements are issued quarterly.

**4.3.2.6. Gazette of the National Assembly,
Collections of Law Passed by the National Assembly,
Proceedings of the National Assembly**

The National Assembly is a central legislative agency which deliberates on the bill introduced, and decides whether it is carried and established. Records generated through this process become publications in which procedural information, discussion and statutes passed are recorded. Therefore, the publications can

provide useful information for understanding the law sufficiently, as well as for meeting the new law quickly,

The National Assembly also publishes the Gazette. This is published daily in session and weekly out of session. The Gazette consists of 22 items, of which the sections of 'the bills' and 'the promulgation of statutes' provide legislative information about the bills and the statutes in full-text. Edition, issue, and distribution of the Gazette is charged by the Proceedings Bureau and carried out based on the 'Rule on Gazette of National Assembly'.

Since 1974, the Department of Bills Management has compiled and published the Collections of Law Passed by the National Assembly every session. This includes statutes which have been deliberated and passed in session with an alphabetical index arranged by title of the bills.

Debates about the bills carried out in the standing committee and the plenary session are recorded in the proceedings, and used as supplementary materials to understand the background and intention of legislation. For these purposes, "Proceedings of the plenary session" and "Proceedings of the standing committee" are published at the end of every session. The preparation, publication, distribution, conservation, circulation, and copy service of the proceedings are prescribed in the 'Rule on publication and conservation of the proceedings of the National Assembly'.

According to the rule, background information required for understanding the legislative history must be included in the Proceedings. For instance, the process of examination, summary of the bill draft and questions and answers about it, essentials of the debates, gist of the modified bill, results of the examination, and a comparison of the old law with the new law are illustrated.

The Record Compilation Bureau is in charge of works relating to the proceedings. Guidelines for works are provided in the 'Rule on the Practical Preparation of the Proceedings'.

Proceedings are compiled in numerical order of the number of the meeting and session. For convenient searching, a list of items treated in every meeting and alphabetical index of items is made in every session. Complete proceedings are bound in two sets, proceedings of the plenary session and standing committee, divided into the number of the N.A. and the session.

4.3.3. Case Law

Compared with the common law countries, the publication of case law is underdeveloped in Korea. Song (1983) analysed the reason for the existence of so few case books into two factors. One is that law students in Korea usually are not required to have detailed knowledge of judicial doctrine. The other is that judicial decisions are not the starting point for Korean legal studies. These are effectively the same thing.

If a case has not been reported in any publication at the time of research, it is very difficult to access it. Cohen (1976) pointed out three kinds of reporting systems, the official reports, national reporter system, and the annotated reports. Among them, the official report system is taken in Korea.

Case law is the sum of authoritative decisions made in specific cases. So, the factual matter included in the text of case law is very important. An understanding of the factual background information from which the judicial judgment is derived is, as it were, a basis from which to study case law. A judicial decision which is the conclusion of a specific case, is grounded on the factual matters, so that the logical foundation of a judicial decision should be analysed and commented on in a fact-oriented

method. For this purpose, case law sources should include the factual information as well as the legal judgment, and in addition to the judgment document they have to include the reasons for appeal to a higher court.

4.3.3.1. Judicial Gazette

As an organ of the Judicature, the Judicial Gazette is published semi-monthly by the Research Bureau of the Office of Court Administration. For the publication of the Judicial Gazette, the 'Rule on the publication of the Judicial Gazette' was formulated in 1987. The rule provides guidelines for the edition, issue, and distribution of the Gazette, although it is not sufficient.

The Judicial Gazette is comprised of 5 sections and gives vivid information about the operation of the Judicature. Among them, the 'statutory law section' and 'case law section' provide useful legal information. The former gives statutory laws concerning the Judicature, and the latter gives new judicial decisions by the Supreme Court. Since 1974, important Supreme Court case law is chosen and published in the Judicial Gazette.

In order to understand the value of the Judicial Gazette as a primary case law source, the editing procedure for case law should be examined.

Judicial decisions created in the Supreme Court are sent to the Judicial Researcher. Transcripts of the Judgment Documents are transmitted in diskette form by each Department in the Lawsuit Affairs Bureau. The Judicial Researchers select valuable judicial decisions to be included in the Judicial Gazette, and then edit them in the format required. The addition of the 'title of the case' and 'major point of the case', the statutory law related, and the case law referred to the original record is carried out in the editing process.

Due to insufficiency of the 'Rule on the publication of the Judicial Gazette' in providing detailed selection criteria for the reported cases, the Judicial Researcher established a "Guideline of edition and selection of case law for preparation of the Judicial Gazette" in 1991. This is not a rule with legal effect, but a reference source for operational purposes.

More useful information relating to the preparation of case law sources is described, i.e., the kinds of case law source, the selection criteria for reported cases in the Judicial Gazette and the Collection of Case Law, and the reference information for reporting. Still, the selection criteria for case law which is covered in the Judicial Gazette is not clear.

According to the Guideline, the Gazette must include the reports of the case law which contains the actual judgment of the Supreme Court. The selection work is carried out by the Judicial Researchers. As the guideline does not provide clear criteria, whether the case law is selected and reported or not depends on their own discretion.

In fact, more than two third of Supreme Court case law is covered in the Gazette. In order to meet the users' needs for current case law, it is desirable to include as much case law as possible. Those not included are nevertheless archived and made as accessible as possible.

In the USA, a detailed standard for selection of reported cases is published by the Advisory Council on Appellate Justice. According to this, cases such as those laying down a new rule of law, or altering or modifying an existing rule, involving a legal issue of continuing public interest, criticising the existing law, and resolving an apparent conflict of authority are selected (Slade & Gray, 1984).

In the U.K., the following six basic criteria were adopted in relation to the selection of cases for reporting (Brown, 1989).

- a). It makes new law by dealing with a novel situation or by extending the application of existing principles.
- b). It includes a modern judicial restatement of established principles.
- c). It clarifies conflicting decisions of lower courts.
- d). It interprets legislation likely to have a wide application.
- e). It interprets a commonly-found clause.
- f). It clarifies an important point of practice or procedure.

Reporting of the case is comprised of adding the 'title of the case', 'major point of the case', and the statutory law and case law referred to. The 'title of the case' corresponds to the heading of the 'major point of the case' and can be used as a tool for locating necessary cases. On the other hand, the 'major point of the case' gives the gist of the case law extracted from the 'reasons of judgement' and clearly represents the nature of the case law.

In the Judicial Gazette, all the information created during the reporting process is included for ease of searching the pertinent cases and references. For understanding of the case law sufficiently, the full-texts of judgment documents are included. The title of the case and major point of the case are written in a mixture of Korean Hangul and Chinese character, and the full-text of the Judgment Document is in Korean Hangul only.

The 'title of the case' is listed in the table of contents of each volume with the date of decision and the number of the case. The construction of the main text of the Gazette is as shown (Table 4-2).

(Table 4-2: Sample entry of the Judicial Gazette)

- 1). The major point of
the case on issue 1
- 2). The major point of
the case on issue 2

The date of the decision
The section of court
The number of the case
The name of the case

Statutory law referred to
(The name of the act and the section)

Case law referred to
(Reference to the Judicial Gazette
or to the Collection of the S.C.
Case Law)

Plaintiff (Prosecutor)

Defendant (Accused)

Original Judgment
(The court, the date of decision,
and the number of the case)

The text

The reason

Chief Justice
Justice
Justice

The case law covered in the Judicial Gazette is listed in the table of contents of each issue. It is classified by subject, and is arranged chronologically by the date of decision and then numerically by case number in each subject. For ease of searching the pertinent case, the title of the case is provided. For convenience of use, annual and quarterly indexes are published. The index is alphabetically arranged by statutory law referred to, and is connected with the "title of case law" and the number and page of the Judicial Gazette.

The Judicial Gazette is considered as a valuable source and highly utilised by legal professionals. Due to its frequent publication (semi-monthly), current case law can be provided, and due to its comprehensive coverage, more case law can be made available than through the Collections of Supreme Court Case Law.

The cases covered in the Judicial Gazette and the SCS are exactly the same. Both sources are based on the diskette from the Judicial Researcher. So, all the cases reported in the Gazette are input into the system.

The Judicial Gazette is published 4500 copies. These are distributed freely to judges, administrative officials in the Judicature, offices in the court, offices in the Executive and the National Assembly, and others, except for 900 copies for conservation. Fee-based distribution is performed by the distributor who is designated by the Department of the Compilation of Case Law. Subscribers can get the "case law section" extracted from the Judicial Gazette.

4.3.3.2. Collection of the Supreme Court Case Law, Collection of the Supreme Court Case Law decided by All Justices

In 1953, the value of the Supreme Court case law came to be

realised as important legal information, and the Collection of it started to be published. Since that year, the Collection has been published quarterly. The 'Regulation on the Examination Committee of Case Laws' was enacted by the Supreme Court for the publication of the Collection of case law. The Examination Committee is composed of the Chief Justice and Justices of the Supreme Court who are entrusted to carry out the selection of judicial decisions which will be included in the Collection.

In order to keep a consistent selection, the Guideline mentioned above provides selection criteria for reported cases which are covered in the Collection. According to this, the cases are chosen based on the following criteria:

- a). Valuable cases as precedents
- b). Addition of detailed judgment or ground of argument to the existing precedents
- c). Application of precedents to the new case
- d). Important cases to be referred from lower court

After the final decision of a case, the Justice who is the main examiner of that case, reviews whether it is pertinent enough to be included in the Collection. Then, he asks the Assistant of Justice to edit the 'title of the case' and 'major point of the case' which form the basis of the draft to be sent to the Committee. The drafts collected are transmitted to and examined by the Committee. Copies of the judgment documents are sent to the chief examiner. The drafts passed by the Committee are sent to the Department of the Compilation of Case Law, are put in order, and are published in the Collection three times a year.

The Collection of the Supreme Court Case Law is divided into three parts, criminal, civil and special, and is arranged numerically in the order of the date of decision. However, the date of decision is not appropriate as an access point, because the users normally do not have a prior knowledge of it before searching, and they

prefer to access it by subject.

At the beginning of each book, 'Lists of cases included' is added and gives the number of the case, the name of the case, the title of the case, statutory laws referred to, and pages, as well as the date of decision. The title of the case and the statutory laws referred to can be used as access points to locate the relevant cases relating to the research topic.

Information included each case law covered in the Collection is the same as in the Judicial Gazette shown in (Table 4-2). Language used in the Collection is also the same.

The more the number of cases covered in the Collection increases, the more the search for adequate cases is difficult and time consuming. Therefore, a cumulative index of Supreme Court case law covered in the Collections was published. It is arranged by the statutory laws referred to and gives the title of case, the date of decision, the number of the case, and volume, number, part and page of the Collection.

The distribution of the Collection is carried out in the same way as of the Judicial Gazette. 2,250 copies are published, among them 170 copies are used for conservation and 2,080 copies are distributed to the people who are authorised. In order to meet the needs of legal professionals who are working out of the Judicature, fee-based subscription is available. At present, there are 400 subscribers.

A judgment of the Supreme Court is divided into two kinds. One is conducted by the body which is comprised of more than two thirds of all Justices, and deals with the important cases, such as judicial review or the change of existing case law. The other is conducted by the section which is composed of three Justices, and deals with ordinary cases except for the important cases mentioned

above.

The Collection of the Supreme Court Case Law by All Justices published annually divided into the civil cases, criminal cases, administrative cases, patent cases, and election cases.

In addition to the information provided in the Collection of the Supreme Court Case Law, the reasons for appeal and the full-text of the original judgment are included. The arrangement and description of each entry in this source is the same as the Collection of the Supreme Court Case Laws.

4.3.3.3. Collection of the Lower Court Case Law

Under the Supreme Court, the High Courts and District Courts and their branches are established as lower courts which function as the prerequisite prior court to the Supreme Court. Among judicial decisions conducted by the High Court and the District Court, the important ones are chosen and published in the Collection of Lower Court Case Law three times a year.

The criteria used for selection are described in the introduction of the source as follows;

- a). valuable cases as a precedent
- b). typical judgment or decision for a certain type of case
- c). cases with useful information for legal research
- d). cases to be referred from the lower court.

It is divided into four parts, that is, civil, criminal, administrative, and family trials, and the cases are arranged numerically by the case number in each part. In order to search the pertinent cases efficiently, the table of contents of each part provides information, together the title of the case, the statutory law referred to, the date of decision and the number of the case, the court which made the decision, and the result.

Each entry describes the name of the case, the court, the date of decision, appeal to a higher court, the title and major point of the case, the parties, the original court, statutory law and case law referred to, the text and the reasons.

For easy access, the cases covered in this, the Index to the Collection of Lower Court Case Law was published in 1989 covering the cases from 1984-1988. It consists of two parts, six primary subject areas of law and the others. Each one is arranged alphabetically by the name of the act and the section, and lists the cases referring to that act and the section in the order of the date of decision and the number of the case.

Each entry gives the full-text of statutory law, and provides the date of decision, the number of the case, the volume and page number of the main source, and the results of the decision.

It is written in the mixture of Korean Hangeul and Chinese characters. Distribution is done by the same way as other sources mentioned above.

4.3. Collection of the Summary (Major points) of the Supreme Court Case Law

In fact, the more the case law has been cumulated, the more the location of appropriate case law is difficult. There is a necessity to have finding tools and to locate pertinent cases easily and quickly.

As described above, the judicial decisions of the Supreme Court are reported in the several sources with full-text. Although those sources include the summary data, such as the title of the case and the major point of the case, it is not easy to browse through them among the bulky texts.

The Collection of Summaries of Supreme Court Case Law was published in 1985 in loose-leaf form, and updated every two years. It consists of 7 volumes divided by broad subject and subdivided into 16 parts. Subdivision is made with consideration of the Collection of the Laws of the R.O.K. and each part is arranged alphabetically by the name of the act and section referred to and then numerically by the date of decision.

Such information as the title of the case, major point of the case, the date of decision and number of the case, and the reference to the source which includes the case law, is described in each entry.

4.3.3.5. Official Gazette of the Prosecutor's Office

Since January 1983, the Prosecutor's Office has published the Gazette in order to diffuse and develop practical materials. It is issued monthly based on "Guidelines for publication of the Official Gazette of the Prosecutor's Office". The Gazette provides useful information for the prosecutor's work in the 'section of information for decision' and in the 'section of case laws'.

The 'section of information for decision' includes an interpretation of statutory law useful to decide the prosecution, samples of decisions by the Prosecutor's Office, changes in the case law, and the reasons for appeal in important cases. Unusual cases in the application of law and in adaptation to social change are especially included.

The 'section of case law' includes the case law, most of which is from the Supreme Court, but some of which is from the lower court. It is included because it can help the prosecutor perform his role. The full-text of the case law is normally provided, but sometimes only the title and major point of the case which is edited by the prosecutor are covered.

Besides these sections, there are other sections providing useful information to the prosecutors. Statutory laws of domestic and foreign countries which are related to the work of the prosecutors and to the judicial administration are included. Current statutory laws which are acquired by the staff dispatched to the National Assembly are included with the comparison of old laws and new laws.

The acquisition of data and the processing, issue and distribution of the Gazette are done by the Department of Planning, and 'The Examination Committee of the Materials' has been established in order to examine the data acquired and decide whether it should be included in the Gazette. Prosecutors at all levels of the Prosecutor's Office are appointed as the 'Researchers to collect the materials', and they choose and collect the initial decisions which are considered as valuable data.

For convenience of use, an annual index of monthly issues is published. The statutory laws, samples of decisions by the Prosecutor's Office, and case law included in monthly issues are searchable by the index. Except the index of case law which is arranged alphabetically by the name of an act and section, the index is not useful to locate a required item. It is because the index of statutory law and samples of decisions do not form a classified list by subject but a simple cumulative list arranged by the number of the Gazette.

It is published in loose-leaf form, and distributed to the prosecutors, offices, and senior government personnel working in the Prosecutor's office.

CHAPTER 5 LEGAL PROFESSIONALS IN KOREA

5.1. General View of Legal Professionals

In a "specialised" society, the professional is in a very important position to conduct the social functions required by society.

There are different views on the nature of a profession. Parsons (1968) defined the core criteria of a profession that the requirement of formal technical training, the mastering of cultural tradition and the development of skill, and the institutional means of making sure of such competence should be satisfied. But, Johnson (1977) viewed the profession as a peculiar form of the institutionalised control of certain occupational activities in which an occupational community defined client needs and the manner in which these were catered for.

Among the professions, the legal profession is distinguished from others in respect of the professional activity being law-related, and based on the application of legal knowledge and skills to actual legal situation. It necessitates the knowledge of securing the legal information efficiently and utilizing it reasonably in the professional work.

Since legal professionals built up their position in a similar way to medical professionals, it has been considered as a representative profession and nowadays lawyers play a leading role in consolidating the social status of professionals.

Social activities in law fields are performed by legal professionals. The rule of law is established when the legal professionals carry out their social duties faithfully and conscientiously based on their professional ethics. The

responsibilities of the legal profession in society are strongly emphasised as a sort of trusteeship (Parsons, 1954).

The legal system is administered and developed by legal professionals, and thus the characteristics of the legal system affects the activities of legal professionals. On the other hand, the characteristics of the legal professional system influences the operation of the legal system. Therefore, the development of the legal system and the legal professional system are closely related to each other.

The core of the professional system lies in two areas (Parsons, 1968); the institutionalisation of the intellectual discipline in the social structure, and the application of these disciplines. The dichotomy of profession can be applied directly to the legal profession. It can be divided into legal scholar and practitioner, even though the division of practicing lawyer may be different from country to country, or the function performed by them may not be strictly separated from each other. Two groups of legal professionals contribute to the establishment of legal order and develop a legal culture through scholarly research or practicing activities.

It is common to divide practicing lawyers into three groups, the judges making judicial decisions, the prosecutors protecting the public interest, and the attorneys acting as defence advocate. They perform their duties centering around the court and are involved in the judicial procedure, thus the relationship between them is likened to 'three legs sustaining a big vessel'. This means that they are completely independent in terms of organisation and role, but they are closely related in the performance of their roles.

Legal scholars represented by law professors, are another group of professionals. They are researching the legal system through

systematic analysis and theoretical review. Legal practitioners and scholars are inseparably bound up with each other. For the development of the scholarly and practicing fields, information generated by scholars and practitioners needs to be interchangeable and influential to each other.

5.2. General description of legal professionals in Korea

Along with the Kap-o Reformation which occurred during the occupation of Japan in 1894 and is seen as a turning point toward modernisation, the modern judicial system was formed. With its introduction concurrent with modern legal education, a legal profession has appeared in Korean society.

Since the formation of the profession, it has been divided into two groups, legal scholars and practitioners, and practicing lawyers comprised of three separate kinds. Namely, the judges came into being by the Court Construction Act in 1895, the attorneys by the Lawyers Act in 1905, and the prosecutors by the Prosecutor's Office Act in 1906.

A clear distinction between the legal basis of the three categories has continued until today. At present, the qualification and responsibilities of legal practitioners are firmly laid down in written laws. Provisions about the judges are in the Court Organisation Act, about the prosecutors are in Public Prosecutors' Office Act, and about attorneys are in the Lawyers Act.

In contrast to the practitioners, there is no written law providing for the qualification and function of legal scholars typified by law professors, except for the control of Education Law and of the rules of each institution. Scholars are appointed by the universities to the department of law, college of law, or separate law course, if they are recognised to be qualified to

teach and research.

Qualification for the three categories of practitioner is identical. The candidate must pass the National Examination for Legal Practitioners, and then complete the training at the Judicature Research and Training Institute. After the training, they can be appointed to the judges or prosecutors depending on their preference, training results, and a quorum. The judges and prosecutors are civil servants, so the judges are appointed by the Chief Justice with the approval of the Committee of Justice and the prosecutors by the President at the request of the Ministry of Justice. The candidates who are not appointed as judges or prosecutors, can be attorneys. They carry out their social roles which have a public nature, but they are not civil servants, because they are not appointed by the government. Thus, they can do their duties freely and independently.

Although the status of legal professionals at the starting point is completely separate, the interchange of position between professional categories is enabled by law. According to the Court Organisation Act and Public Prosecutors' Act, the senior judges and prosecutors including the Chief Justice and Public Prosecutor-General can be appointed among the attorneys, professors and staff of public agencies, as well as the judges and prosecutors, if they are qualified to be practicing lawyers. But it is rarely done in reality, except that most judges and prosecutors who quit their position usually continue their profession as attorneys.

There is no rigid qualification for and procedure to be a law professor. For teaching and researching in the university, most law professors possess higher degrees.

Practicing and academic fields are completely separate, and the interchange of personnel between practitioners and professors is not conducted formally, even though a few people change their job

to its counterpart if they are qualified to do. This trend is to be expected, because the qualification and training of each one is different and the agencies which employ them are different.

5.3. Education and training of legal professionals

Law, comparatively, is considered as a conservative profession. Therefore, legal education and training especially stress accuracy, completeness and reliability. Lawyers are trained to depend upon their own inspection of statutes, decisions and other sources of law (Lloyd, 1986). As law is an intricate discipline, so education and training for these inspection skills are not easy.

Special education and training for obtaining professional knowledge and skills are prerequisite conditions for the profession. Legal professionals who want to function successfully, have to be trained and educated under the proper conditions. The goal of education and training will be accomplished when they are taught in sufficient detail for a long enough period under firm educational objectives in an authorised institution.

Execution of legal education is quite different from country to country where everyone has their own social and cultural background. Contemporary legal education in Korea has been conducted for a long time, and the institutions which are carrying out legal education amount to 65, taking the form of a department of law or college of law, etc..

Law schools are the primary agencies for legal education, but there are serious critical comments from inside and outside law schools as to whether they play their role sufficiently or not. The principal functions of law schools at present are merely to grant Bachelor of Law degrees and to provide a locus for legal scholarship. Actually, only a few graduates of law schools go on

to become legal scholars and practitioners.

There are many studies about legal education since 1955 by individual scholars, law schools, and professional associations and research centres. The first study was done by Dr. Jin-O Yoon entitled "An essay on the reorganisation of the law school" in 1955 (Seoul National University, 1988). The most intensive study of legal education was done by an American law professor, Jay Murphy, in 1963. It was published in 1967 entitled "Legal education in a developing Nation: The Korea experience" and has exerted an important effect upon later studies.

Most studies pointed out the following factors as major problems in Korean legal education:

- a). The period of education is too short to equip legal professionals with comprehensive knowledge of liberal arts and social sciences as well as the needed legal knowledge.
- b). The curriculum only consists of the fundamental law relating to the national examination for legal practitioners.
- c). The formal lecture system is normally used as an education method.

In addition to these factors, goals of education and training in legal research are also very important elements in this field. They are interrelated to the factors listed. Most problems included in legal education are derived from the goals of legal education.

5.3.1. Goals of legal education

There are written statements on the goals of legal education, which are prepared by associations of law schools or special committees on legal education. The clearly stated goals point the legal education in each educational institution towards the same direction.

In Britain, the objective of legal education was clearly stated. "The Report of the Committee on Legal Education" described it as "to enable to become a fully equipped member of the profession" (Lord Chancellor's Department, 1989a: Lord Chancellor's Department, 1989b). The Law society (1992) issued a consultation paper which proposed a dramatic increase in the amount of control over the content of law degrees which are recognised for the purpose of qualification as a solicitor.

Due to the danger of inhibition of the breadth and variety of teaching in law schools and impingement upon academic freedom, this proposal has been protested by the law schools (Unger, 1992).

In contrast to this opinion, there are views that lawyering skills must be brought into the curriculum at the academic stages (Card, 1990). Paliwala (1991) insisted that technology could provide the spark which can ignite the potential change to integrate the practical training and the academic elements.

In Korea, there is no written document or standard stating the educational goals in this way, so the discussion of the objectives of legal education has gone on for several decades. The main theme of debates can be summarised into two points of view, general education stressing the jurisprudence-centered social sciences, or professional education stressing the training of future lawyers. These two opinions are conflicting with each other, and both of them lack the rationale to be instituted in the present situation. So, a dualistic approach which is an integration of the two objectives, is prevalent among professionals.

The objectives of legal education should be decided with consideration of such factors as social expectation and demand, higher education and professional education in society. The aims and direction of legal education are not only closely linked with the internal elements, such as a period of education, and contents

and method of education, but also they are related to the external systems, such as the legal professional system and national examination system for legal practitioners. So, the discussion of the educational goal should be combined with the related issues.

The present situation of legal education in the university as a training institution for the legal professional, especially for practicing lawyers, is negatively evaluated. In fact, it is almost impossible under the present education system to train the students as professionals, because legal education conducted at undergraduate level, is organised in the same way as for any other subjects. Thus, it must follow the laws which regulate the essential educational elements, such as the period of education, the number of credit, ratio between liberal art and subject courses, and between required and elective courses.

Also, it is not necessary for the legal education to be done exhaustively by the law school, because a completely separate training institution for legal practitioners exists. All new practitioners who have just passed the National Examination, must enter the Judicature Training and Research Institute to be trained in the more practical fields.

Furthermore, in Korean law schools, very few professors are qualified to practice or have experience in the practical field, so it is very difficult to expect legal education to be conducted in a way deeply relevant to practice.

At present, only a few law students can be practitioners. It may be presumed that the students' major goal of entrance into the law school is to become a professional, especially a practicing lawyer. Actually, there are lots of applicants for the National Examination, which is extremely competitive and thus only a few applicants can pass. (Average ratio between applicants and passes

during 1981-1990 was 33.3 : 1).

Nevertheless, most universities stress a core curriculum covered in the National Examination and on teaching methods oriented to the National Examination. Legal education oriented to the National Examination is not reasonable in law schools, because the future of most graduates is rarely concerned with the National Examination directly. Further, legal education in law schools is not required for application to the examination, even though most applicants and successful applicants are graduates of law schools.

Only a few students can be scholarly professionals, in contrast to the practicing professional. The students who have abilities and interests in scholarly research, continue their studies at a higher level, and are trained in research and teaching to become law professors.

Besides a few students launching into professional careers, most graduates work in other law-related areas. In fact, not all law students want to be lawyers and many of them serve in government offices, banks, or other business corporations. Social demand for specialists in the law field, such as legal officials, judicial and executive scribes, tax accountants, legal specialists of the legislature, and legal advisors to banks and other business organisations, are gradually increasing. So legal education in Korea ought to set its objectives in order to adapt to these social needs.

5.3.2. The period of education

This has been a controversial issue among legal professionals for some time. The problems inherent in it can be compared to the medical professionals. Namely, the period of education for legal professionals is shorter than for medical professionals. Both the human body and social order are complex, so education in law and

medicine should be equally long. Yet, legal education takes the same number of years as general disciplines (non-professional). For cultivating qualified professionals, the increase of credits and educational period has been strongly suggested, but there is no sign of change.

The insufficient period of education results in the ambiguity of educational goals, and in problems of the content and method of education.

5.3.3. The contents of education (curriculum)

The curriculum, essentially, is composed of necessary courses for the achievement of educational goals.

Korean legal education results in limited credits in insufficient periods. It is inappropriate not only for securing the knowledge and skill required for the professional, but also for cultivating the qualification needed.

Most law schools are obliged to offer courses in basic law without any courses in specialised law fields, and courses on legal theory, but not on case studies. The general trend in the ratio of education in law schools is one-year liberal education to three-year legal education.

5.3.4. The methods of legal education

Legal professionals should be equipped with legal knowledge based on an appreciation of written laws, and with the skill to apply it to specific legal matters. In addition, they have to be trained in legal reasoning which is the basis to understand social phenomena in a legal context.

To educate them to the standard of competent professionals who are qualified to do their job efficiently, proper methods of education should be adopted and used. Especially, the method of legal education is directly related to the research behaviour of professionals.

Formal lectures based on texts either hinders the development of creativity and applicability, or it is not sufficient to impart the necessary legal knowledge and skills in the subject. This is because, lectures by texts aim at the precise analysis of each provision within the context of a systematic jurisprudential framework, and stress the interpretation of legal terms and concepts. The legal professionals trained by text-oriented lectures tend to view legal matters in the light of legal structures and legal concepts, and want to access legal information in this way.

Since the introduction of modern legal education, the text-oriented cramming method is primarily used in legal education, where an interpretative research method based on the written law is chiefly adopted. In order to resolve the problems, it has been strongly suggested that courses should introduce the case-study methods or problem-oriented methods which are widely accepted in other countries.

The case-method approach tends to proceed from the consideration of a specific problem in the case to the evolution of some general interpretation. A case is analysed into facts, legal issues, and reason of judgment by means of the instructor's questions and the responses of the students. For the success of the case method, the students have to be fully prepared before class for all the probable issues in given cases, and professors are in a position not of lecturing for cramming but of presiding over the discussions among students.

But, there are obstacles to the acceptance of these methods in the Korean educational situation, such as the size of class (the number of students in one class), availability of qualified teachers who could apply these methods and students' positive attitudes towards participating in these methods. The most important thing is to be fully equipped with the required educational materials which are needed for education by this method.

The Interpretative, theoretical method of education is closely related to the national examination system for legal practitioners. There are serious criticisms that the national examination does not test the capability of applicants' reasoning and analysis, and ambitious attitude, but measures their ability to remember legal knowledge from the textbooks.

Students who studied by a text-oriented, memory-centered method, and professionals who were educated in this way are likely to have difficulties in legal research. It will probably affect their attitudes toward information seeking.

The system of training at the Judicature Research and Training Institute for beginning legal practitioners has also been criticised in that it could not carry out its role efficiently.

Law is not a science of pure theory, but an applied one. The law schools in Korea, nevertheless, are traditionally inclined toward theoretical courses. Recently, among Korean law schools, there is a tendency to adopt problem-oriented courses which are based on practical exercises.

5.3.5. Training in legal research

In Encyclopaedia Britannica, "The aim of legal education is not that the student should remember the law, but that the student

should understand basic concepts and become sufficiently familiar with a law library to carry out the necessary research on any legal problem that may come his way".

In the USA, a report by a special committee chaired by R.J. Foulis, entitled Law Schools and Professional Education (sometimes called the Foulis Report) noted that law graduates rated legal research and writing as one of the most important skills that they had learned in law school (Bauman, 1982). By ABA standards, a law school in the U.S. must have a curriculum which includes rigorous writing experience and instruction in professional skills (Bauman, 1982).

Legal research is different from research in any other field. Thus, developing proficient research skills in the law field is an important element in a legal education. There is a necessity to extend the scope of information sources and to relate with other disciplines, because no longer can a lawyers' research be carried out solely within his own office library or even within the bounds of a local law library. Lawyers must increasingly have recourse to the related literatures of other discipline, particularly the social sciences (Cohen, 1969).

In Korea, the lack of formal training course for legal research and how to use library and information sources exerts a bad influence on the research habits and behaviour of legal professionals.

Nowadays, there are many changes in legal education directed towards practical exercises and problem-oriented methods, and the establishment of new courses needed by society. In terms of research, there are tendencies among legal professionals to be interested in case studies, review of case law, and studies of the legislation of other countries. These changing situations in legal education and research are likely to require more practical and

detailed legal information than before.

It is widely realised that the knowledge and information are treated as the core economic variables in the information society. Therefore, the acquisition of relevant information is considered as a fundamental element for success, especially in professional fields. In the legal setting, however, the application of information technology and its developments are likely to contribute to the de-professionalisation of law, and will exacerbate existing division between 'information rich' and 'information poor' (Clark, 1992).

The significance of information is greatly emphasised and legal information-related education is necessary in law schools for future legal professionals. Under the present duration of legal education and teaching method, it is very unrealistic to expect to have a course for legal information and research. This decisive weak point, in the long run, becomes a primary factor in obstructing efficient research either of law students or of legal practitioners and scholars. Despite the suggestion of the establishment of a 'legal methodology and terminology' course by Seoul National University in 1974, a course relating to legal research has not opened in any law school.

5.4. Functions and Roles of legal professionals in Korea

As mentioned above, the legal profession is firmly divided into two groups, each of them having a unique role and activity in society. Incidentally, there is a tendency for the professionals belonging to one group to take part in another group's work. For example, the judges or attorneys are also connected with academic settings, often combining theory, practice, and research. As it were, they join in the education of law schools, or participate in the specialised law field environment and present papers on their research results.

Therefore, it can be said that professionals working as scholars or as practitioners have quite a close relationship with each other. Actually, development of the legal system, and enrichment and diversification of the contents of laws can be established by the combination of legal doctrines created by academic scholars and case law made by judges.

They are mutually interdependent upon each other, so that case law without the support of legal doctrines may come to lack generality and rationality, even if it is appropriate in some specific cases. Conversely, legal doctrines without the support of case law may lead to the opposite effect. So, it can be said that the scholarly world consolidates case law by giving theoretical results to it, and the practicing world introduces liveliness and reasonableness to legal doctrines.

5.4.1. Legal scholars (Law Professors)

Law professors are engaged in scholarly research and education, through which they contribute to the development of legal culture and cultivate able legal professionals for the future. According to a legal maxim, those who wish to be legal scholars have to do research continuously and to learn from everyone.

They need more theoretical, deep and intensive information than the practitioners. The results of their research activities directly constitute legal doctrine and influences case law and legislation. Legal scholars stress the precise interpretation of each provision within the context of a systematic jurisprudential framework. Explanations of textual meaning are often abstract, philosophical, logical and sometimes ideological.

The views of legal scholars are considered by the courts and sometimes become the law by virtue of being incorporated into legal decisions. The end-product of research may result in the

development of the legal system itself by using it in the practice of law. The results of their research are published in book form including in-depth studies of one problem area, and in articles or reports including background and current status of law in a specific subject area.

5.4.2. Practicing Lawyers

Even though judges, attorneys, and prosecutors participate in a legal dispute at the same time, their positions and functions in the judicial process are quite different from each other.

5.4.2.1. Judges

Section 101 of the Constitution states that " The Judicature is authorised to exercise its judicial power which vests in the Court composed of judges."

The Judicature is the agency which applies the law to a certain legal dispute and makes a judgment on it, and it is called a last resort to protect the law and justice. From the viewpoint that conducting a trial is a major function of judges, they have to perform their duties according to basic principles, such as reasonableness, fairness, quickness, and impartiality based on sufficient information relating to the trial.

They are in part arbitrators, whereas attorneys are advocates of a certain viewpoint, and thus they are isolated from others. As the independence of the Judicature is a principle strictly guaranteed by law, so judges should interpret and apply the law reasonably and fairly to the legal dispute and conflict of interest.

The judges who constitute the Judicature have several functions;

- a). Protection of civil rights and interests
- b). Maintenance of legal order

- c). Supplementing a lack of law and resolving the inconsistency between law
- d). Settlement of social conflict

The basic function of the judge is making a decision. He functions something like a referee who makes a reasonable judgment on the dispute pending in court, which is caused by the conflict of interest between two parties.

The trial should follow a procedure provided by law, and be under a judge's command in order for decisions to be made quickly and smoothly, and to assure a reasonable conclusion, corresponding to the rights and duties of the judge. The judge's right to conduct the trial is exercised from the institution of the lawsuit by the plaintiff or prosecutor to the end of the procedure. His work ranges throughout the whole process from routine work to actual examination in civil or criminal procedure.

Consequently, the judge make an authoritative judgment, a judicial decision, based on the essential facts clarified in the procedure. Judicial decisions can be considered to lead to the creation of new law which is made through the judge's deliberation over the many records produced during the procedure and are the result of the interpretation of law and by referring to related statutory law and case law. Therefore, the judge takes a leading role in making case law, in the formulation of new law, as well as in protecting the rights and interests of the people through the reasonable application of the law in each specific case.

5.4.2.2. Prosecutors

In parallel with the judicial structure, there is the system of public prosecutors' offices. The highest prosecuting agency is the Public Prosecution Administration headed by the Public Prosecutor-General. It supervises and controls all subordinate Offices, High

Public Prosecutors Offices, and District Public Prosecutors Offices and their Branch Offices. They are located in the cities where their judicial counterparts sit. All these offices, including the Public Prosecutions Administration, are under the direction of the Minister of Justice.

The prosecutors are empowered to conduct investigations into the violation of law and to institute legal actions against criminal suspects, directing and supervising the judicial police under their control. In the position of protectors of the public interest, social and national, and private interest, they participate in the trial as counterparts of the accused or representatives of public interest. They submit a written arraignment and address the court, so as to insure due application of the law.

The most important thing to be done by a prosecutor is the prosecution which is carried out by sending a written arraignment to the relevant court explaining the specific name of the crime, facts relating to that crime, and law applying to the facts. Besides the institution of a prosecution, the prosecutor supports it during the judicial procedure, by making the statement of summary described in the written arraignment, examination of the accused and request on the testimony, statement of his view on the facts and law to be applied, and finally presentation of his address and recommendation of a penalty.

In addition to the functions above, the prosecutor appeals to a higher court and the Public Prosecutor-General proposes an extraordinary appeal to the Supreme Court, in order to correct the wrong application of law and to keep consistency in the operation of the law.

Public prosecutors have to possess a high standard of legal knowledge and experience, and the same qualification applies to

judges for their appointment. As a legal professional to be involved in the operation of the legal system, prosecutor needs legal information on the interpretation and application of law required to set forth his professional opinion in the judicial process, namely, in deciding whether or not to prosecute the criminal suspect, in performing the action as the party, and in studying the appropriateness of the law applied.

Detailed provisions about the organisation of prosecutors' offices and the functions pertaining to the investigations and prosecutions handled by public prosecutors are included in The Public Prosecutors' Office Act.

5.4.2.3. Attorneys

The attorney is highly regarded in democratic society as a public-minded legal professional, protector of civil right, and guardian of social justice. In order to play his role efficiently, he takes part in trials for effective legal action. This is his main function. He also participates in the negotiation of business transactions or prepares legal instruments giving legal advice and counsel outside the courts.

An attorney who has been selected by a party as his legal representative or advocate must faithfully, honestly and consistently represent his client and do his utmost to protect his client's rights and interests. As part of his duty, he is obligated to investigate pertinent information sources exhaustively and cooperate with the court to promote justice.

The attorney participate in the judicial process as the representative of a party in civil and administrative cases, and as the defence advocate in criminal cases. A lawsuit consists of such technical and complicated processes that it is very difficult for the lay public to undertake their own action efficiently and

protect their legal rights and interests completely.

The equality of the parties in the trial is adopted as a basic principle under the Korean judicial system. By this system, each party in every judicial procedure is legally entitled to undertake the action, but there is too great a difference of legal knowledge and litigation skill between the layman and the professional. The attorneys designated have duties to protect the rights of the accused or suspect, and to make up their deficiencies of legal knowledge and skills in criminal procedure. Through the interrogation of the accused, the attorney grasps the facts presented and understands the circumstances, and then requests the taking of evidence and gains a confident opinion.

Based on the materials and conviction, attorneys should then plead their opinions on that case before the court. As their legal opinion which purports to protect the right of the accused should be strong enough to persuade the judge and to be reflected in the judgment, so it should be based on a quality of legal information which can be applied advantageously to the accused.

In civil procedure, the attorneys designated should aim to protect and assert the legal rights and interests of the constituent, and thus present themselves at court in order to make appropriate attacks and timely defences and to have beneficial effects on the trial.

Actually, under the Korean judicial system constituents could perform the trial for themselves. The reason for designating an expensive attorney may result from the expectation of advantageous results which can be brought by professional knowledge and litigation skill. Therefore, attorneys should locate sufficient information relating to the legal matters and utilise it properly at court, and conduct the trial successfully.

The legal practitioner who would like to work as an attorney must register his name with the Korean Federation of Attorneys' Association. The application for this registration must be submitted to the KFAA through the Local Attorneys' Association of which they want to become a member, and the KFAA should register their name on the Attorneys' Register. Every attorney must belong to one of the Local Attorneys' Associations organised in each jurisdiction of district courts, and at the same time to the Korean Federation of Attorneys' Association which is composed of all local association in the nation. Once attorneys are admitted to the association, they can open an office privately or join a law firm, and operate as an attorney. They can plead before any court and be engaged in the general practice of law.

An attorney having a professional qualification and having enrolled on the Attorneys' Register, can participate in a trial as a legal representative of the plaintiff or defendant in civil procedure, and as an advocate of the accused in criminal procedure, and undertake the legal action on an equal basis.

Duties and responsibilities of attorneys to their clients, the profession of attorneys, and organisation of the association are provided for in the Lawyers Act. In addition, the Korean Federation of Attorneys' Associations adopted the Canons of Lawyers' Ethics, and provided in the preamble that the attorneys should expedite rightful operation of judicial procedures by endeavouring to conduct a ceaseless study of the law and pursue a justice by execution thereof.

In order to secure the relevant information and to use it advantageously during the trial, they must have the professional knowledge and skills to search all relevant sources. In view of the nature and importance of the roles of attorneys, the qualifications for them are the same as those for judges and public prosecutors.

CHAPTER 6 INFORMATION NEEDS AND RESEARCH BEHAVIOUR OF LEGAL PROFESSIONALS IN GENERAL

6.1. General views on information needs and research behaviour of legal professionals

Legal research is rarely easy or straightforward, because the law emanates from many sources and develops in complex ways, and it is dynamic and unclear in many areas. Therefore, thorough legal research requires great technical proficiency and demands great creativity and careful thought (Cohen, 1969). A proliferation of laws, rules and regulations, and an increasing number of disputes have resulted in the augmentation of the importance of legal research and information.

Up until recently, the legal profession had assumed that all lawyers are capable of handling almost any legal matter. But today, that presumption is being eroded by the increasing complexity of the law (Kunz, 1986). The more complex the legal problems, the more information resources are difficult to manage within a busy and active legal practice. Accordingly, the necessity for an expert who can deliver the highest quality legal services as efficiently as possible has arisen, and in Canada, 'research lawyers' with post-graduate or research backgrounds are employed in large law firms. They are involved in billable research for clients and undertake some online searching (Chester and Binch, 1986).

There is no substantial difference in the primary function of legal research between Civil Law and Common Law, but a difference exists in priorities and in the manner of use of legal materials. For example, it is generally said that lawyers under the Civil Law system search in the order of legislation, doctrine, and judicial decisions. On the other hand, lawyers under the Common Law system search the statutory material first of all, and then they search

for judicial decisions whose interpretation of the statutes are a binding authority as to their true meaning (Cohen, 1976).

Peculiarity of information needs and research behaviour is influenced by subject. Therefore, the characteristics of law itself and of legal information sources affect legal professionals' attitudes toward information.

Law is a matter of words. Language or words used either in statutory or case law is very important, but it has inherent limitations and drawbacks. In statutory law, such problems as prolixity and specificity, and ambiguity exist, so that it is necessary to interpret, clarify and explain statutory language in the course of resolving legal controversies. Also, case law brings about some difficulties, which result from the variety of ways in which the judge's judicial opinion might be expressed. Judges enjoy great freedom of expression in writing their opinions, and this free literary style permits the lawyer, as well as the judge, to express the meaning of a case in a variety of ways, all equally correct.

Normally, users' attitudes toward information are closely related to their social functions. Between professionals and non-professionals, there is a distinctive difference in information needs and behaviour.

There are several studies which compare the behaviour of scientists and lawyers. According to the research done by Goedan (1986), lawyers have a special relationship with words. Words are very important tools in their business life, and form the fabric of the legal profession. For lawyers, a large part of their corpus of literature is authoritative in the sense that courts and agencies are bound to operate according to the law.

A research scientist usually works on only one (or very few) concrete problems at any one time. After he has obtained an information base for this particular problem by intensive and extensive retrieval, he occupies himself for a long period of time with the problem and desires only to be kept up-to-date with new information (Svoboda, 1981b).

There have been various studies on legal information and research. During the 1970s, with the development of computerised legal research systems, there were significant development in professionals' legal research. With the increase of interest in legal research, legal malpractice suits, which are claims against lawyers for professional negligence in lawyering have increased. According to the Model Rules of Professional Conduct for American Lawyers (Rule 1.1), as a Competent Representative, they are required to possess legal knowledge, skill, thoroughness and preparation, and the failure to research the law thoroughly and accurately can result in liability for malpractice.

Malpractice is an application of negligence law by which liability is imposed for professional misconduct. Malpractice liability is usually imposed, not when professionals fail to achieve certain results, but when they fail to exercise 'due diligence' and 'reasonable care' in their practices. The acts constituting malpractice differ from profession to profession, but the term is generally used as a label for the conduct of practitioners who act without exercising the learning, skill, and care ordinarily possessed and practiced by others in their fields (Willick, 1986).

Over 625 legal malpractice cases were decided by appellate courts during the 1970s in the USA, among them one case (Smith v. Lewis) addressed the lawyer's general duty to perform legal research (O'Connell, 1984). Existing decisions indicate that attorney malpractice liability is commonly based on common law concepts of negligence.

The court, approved an award of \$100,000 against a lawyer who had failed to apply principles of law commonly known to well-informed attorneys or to discover other principles readily accessible through standard research techniques (Kunz, 1986).

Standards for negligence or malpractice are based on the conduct of a 'reasonable lawyer'. Although various courts have defined the 'reasonable' lawyer standard somewhat differently, it can be translated into the following basic, positive standard of care ; The attorney should exercise the skill and knowledge ordinarily possessed by attorneys under similar circumstances. Courts will thus measure an attorney's actual conduct against this reasonable attorney standard to determine what level of research the lawyer must have attained in solving a legal problem.

A court in the USA takes three approaches to determine the knowledge, and research techniques as follows (O'Connel, 1984).

a). The knowledge

The knowledge is that the reasonable attorney is required to possess. It is categorised into 3 groups;

- i). The knowledge of well-established and clearly defined principles of law. All attorneys are required to know this, and thus their failure to seek out and find these basic principles has generally resulted in a liability being imposed by the courts.
- ii). The knowledge of which no attorney is required to predict the law or to learn law. This is the case where established law on the point in question does not exist at all.
- iii). The knowledge of the doubtful or unsettled law.

The court has imposed a duty upon the lawyer to diligently seek out the first category of the knowledge, the well-established and basic principles, relevant to the legal problem at hand (1890,

Supreme Court of Indiana), and this has been imposed upon the attorney up to the present day.

In contrast, courts have refused to impose malpractice liability upon an attorney to the second category of knowledge where no established law on the point in question exists. In the case of doubtful or unsettled law, the third category of knowledge, where no definitive law exists, attorneys have usually been protected from malpractice liability by the "error of judgment rule".

b). Research techniques

The reasonable attorney must employ these. Legal research is essentially a search for authorities applicable to particular legal situations. The authorities relied upon must sufficiently inform the attorney's judgment.

Courts have already referred to computer-assisted legal research systems (essentially LEXIS or WESTLAW) as 'an essential tool of a modern, efficient law office', the use of which is 'certainly reasonable, if not essential, in contemporary legal practice' in *Wehr v. Burroughs* (Willick, 1986). Computer systems are thereby transformed from experimental into accepted professional tools.

In Britain, recent cases have established that an advocate, whether barrister or solicitor, is immune from action for negligence by his client in respect of his conduct and management of a case in court. This immunity extends to the preliminary work connected with the hearing such as the drawing of pleading and to pre-trial work where the act in question is intimately connected with the conduct of the case in court. The main reasons for this immunity are that the administration of justice requires barristers and solicitors to be able to carry out their duty to the court fearlessly and independently and that actions for negligence against barristers and solicitors in respect of

advocacy work would make the re-trying of the original actions inevitable and so multiply litigation. The Government accepts the cogency of these arguments and considers that this immunity from actions in negligence should in the future extend to all recognised advocates. (Lord Chancellor's Department, 1989a).

6.1.1. Information needs

Professionals who are engaged in the law field as practitioners or scholars, not only contribute to the realisation of justice through the settlement of legal disputes, but also to the improvement of the legal system through research. Principally, their legal practice and research are based on legal data, although the degree of requirement for information in other fields is increasing according to the complexity of society.

Law is a matter of words and writing. Therefore, all lawyers necessarily take part in research, and consequently they are called researchers regardless of their particular professional functions or specialisation (Crabb and Fedynskyj, 1978).

Feliciano (1984) listed the objectives of the legal professional is acquiring legal information.

- a). To provide specific information needed for work in progress
- b). To provide introductory information needed for work in progress
- c). To improve abilities
- d). To keep informed of development in work
- e). To provide introductory and background information for unfamiliar needs

Another study (Houghton, 1985) listed 12 kinds of legal information needs.

- a). obtaining an overview of a subject so that a legal problem might be more clearly identified.

- b). specific statutes or regulations
- c). the case law surrounding a particular areas
- d). obtaining a pointer to primary authority
- e). strengthening a minority position where no precedent exists
- f). preparing a brief
- g). identifying the subsequent citations of a decision
- h). monitoring a judge's decisions and rulings
- i). identifying the appearances of a particular counsel
- j). monitoring compensation policies and practices
- k). obtaining a current awareness service on the significance of recent law

6.1.2. Research Process and Search Strategy

The objective of a search is to locate desired information. In a strict sense, an effective search should be distinguished from an efficient search. An effective search is any search producing the desired information, and an efficient search is any search producing the desired information with a minimum amount of time and effort. So, the objective of planning a search strategy is to develop an efficient search.

It can generally be said that the reason for the failure to locate requested information is system related and searcher related. For an efficient search, the user should be able to analyse each information need and to develop a search strategy appropriate to the need and the system, and to operate the system in an efficient manner (Hamilton, 1985).

The aim of all legal research is to find legal authority in an efficient and thorough fashion. To a degree, a person's decisions regarding research techniques are a matter of personal taste and judgment. More important is the development of thorough and efficient habits and a familiarity with the variety of research tools available (Price and Bitner, 1969).

A successful search is achieved when congruity is achieved between the characteristics of the query (request for information) and the information system (any organised presentation of information). So, it can be said that the most critical part of research is the formulation of a query, which is the user dependent translation of a vague problem into the formalism of a search language. In this sense, the searcher must bridge a gap between the query and the system. (Benson and Maloney, 1975).

Both the query and the system consist of three components, that is, type, language, and parameters. Among these, language is a very crucial factor in the search (Benson and Melony, 1975). The language used in the query is the means by which the user communicates his problem and interprets the request. In contrast, the language used in the system is the means by which the user approaches the system by its access points.

There are different views on the most efficient search mode for legal information, that is, a search the by end-user or by an intermediary. Due to the complexity of a search which may derive from several factors inherent in the law as follows, the end-user system is strongly stressed in the law field.

The major aim of legal research is to solve legal problems. The research process in the law field is more complicated because of its characteristics (Cohen, 1976).

- i). By the presence of several legal issues, rather than a single issue
- ii). By the fact that no two cases are ever exactly the same in their material facts
- iii). By the possibility that the passage of time has generated new social circumstances and interests

There are many studies of the research process which consider the peculiarities of law as a subject. In the research process, it is

most important to gain relevant information on legal problems. Due to problems in communication with intermediaries about legal problems, some professionals tend to do the search by themselves. On the other hand, due to the difficulties in accessing the information system efficiently, other professionals tend to gain information through intermediaries.

Several studies recommend search processes for legal information which are applicable either to an end-user or a mid-user search. Cohen (1976) suggested 4 steps in the process, and Kunz (1986) presented a similar but more detailed process as follows.

- a). The starting point : Factual Analysis focused on the legally relevant facts.
 - . Item, Location, Subject matter
 - . Persons or Parties (status or relationship)
 - . Legal Theories (liability or defence to liability)
 - . Relief sought (Result)
- b). Identifying and framing the Issues; This process is the core of the analytic process inherent in legal research.
 - . Identify legally relevant facts.
 - . Apply the correct legal terminology to the facts.
 - . Choose the research sources that will enhance your understanding of relevant legal concepts, enable you to refine your terminology, and improve your perception of the relevant facts.
- c). Using Commentary for background purposes
- d). Searching for Authority

Legal professionals can obtain the information they require by accessing the sources by following stages (Pausley, 1990).

- a). Define the problem
 - i). Consult text books about the issue for an overview of concepts, relevant specific vocabulary, and citations to leading cases.

- ii). Consult encyclopedias and annotations for more recent definitions and citations to relevant cases.
 - iii). Consult books of words and phrases for more related vocabulary.
- b). Search for applicable Statute
 - i). Define the legally relevant facts and look them up in indexes to law and Administrative Regulations in the appropriate jurisdiction.
 - ii). Review Law Reports in the jurisdiction for "statutes construed" to find the current judicial holdings concerning the Statute.
 - c). Search for judicial opinion
 - i). Determine a digest of the subject, and find apparently relevant cases based on the abstract.
 - ii). Review appropriate annotations, and note relevant cases based on editorial analysis.
 - iii). Read and evaluate apparently appropriate cases in the light of the current problem, and select those which lend support through their analysis and outcome.
 - iv). 'Shepardize' relevant cases to ascertain current judicial treatment of precedent i.e., look in a citation index.

Price and Bitner (1969) presented a contrasting the order of search and a checklist of factors to bear in mind. In addition, they suggested seven approaches to legal research which illustrate a specified approach mode based on the arrangement of sources and types of information required.

6.2. Characteristics of legal scholars and practitioners

With legal professionals, the need to ask for information and the uses for it vary between scholars and practitioners, because they have different social duties, and thus fulfill different tasks in their work.

Professional functions are divided to 4 categories, i.e., advocacy, counselling, planning, and legal academics (Crabb and Fedynskyj, 1978). Those functions are overlapping and differ in priorities and emphasis, rather than research activities being distinguished. In practice, professional functions are intermingled with each other, and thus their information needs should be decided by the situation in which they are actually working.

Slade and Gray (1984) defined the status of legal knowledge and legal information, and compared the characteristics of information needs between legal scholars and practitioners. According to them, academics investigate the way in which such intellectual devices are formed, and practitioners use such devices for immediate practical ends. They insisted that all kinds of intellectual expressions of the law are very important both to scholars and practitioners, but differ in terms of emphasis, perception, form of communication.

6.2.1. Legal scholars

Scholars are not focused toward the affairs of any client or individual, but are directed toward the edification of students, the legal profession, or even society at large by exposition, analysis, and critique of the law. Scholars usually execute in depth studies into a specific subject, and thus they need comprehensive information pertinent to the subject and require an exhaustive search of related sources. Legal scholars, normally, focus their attention on one problem for a long period, and they want not only particular but also comprehensive information on the problem.

Compared with the practitioners, they expect to study the small area of knowledge reported by others and to synthesise this information for themselves. They are less likely to be interested

in a specific datum than the practitioners, and also less likely to be as time-bound in their needs for the information. So, they can take the time for thorough investigation and need a large array of literature and more detailed keys to it. They tend to browse for general ideas, unifying concepts, and general insights not always connected with a particular problem (Brodman, 1976).

They conduct legal research with a view mainly to advancing the theory and practice of their discipline. They may also go beyond the law to study a related discipline and integrate its findings into the background of the law. Therefore, they prefer a wider and more catholic collection.

In general, it may be said that scholarly research not only provides direct assistance to those engaged in the practice of law but also contributes to the understanding of broad social and political conditions. In total, this research provides the body of knowledge needed for the interpretation of particular laws in particular circumstances. In a sense, professors of law serve not only as teachers of law but also as critics and guides for their discipline (Smith, 1976).

A legal scholar's objectives in using legal information can be described as follows (Slade and Gray, 1984).

- a). More concerned to analyse what he perceives to be the distinctive qualities of legal information.
- b). The significance for clients and society of the interaction between lawyer and legal knowledge
- c). Reasoning as to why any set of ideas might be adopted in any particular social context.

Their wish is not merely to learn legal rules or doctrines, but also to persuade students and the profession that law is both a demanding intellectual discipline and a vital social phenomenon.

A study has been made on the characteristics of legal scholars (Goedan, 1986). He examined their behaviour toward information and documentation, and showed the differences between scholars and practicing lawyers in the use of search aids, field of information search, and required time. According to this study, scholars spent more time on the information search than practicing lawyers. Scholars preferred to rely on their own documentation as opposed to practitioners who relied heavily on a pre-fabricated system. Most searching by scholars was on literature. On the other hand, a similar amount of searching through statutory law, case law, and literature was done by practicing lawyers. A study of 115 professionals from Europe on their attitudes toward CLIS showed that academics and administrative officials were skeptical (only 55% gave a good rating to automated systems), and groups of practicing professionals were very supportive of it (70 % of them gave a good rating) (Goedan, 1986).

6.2.2. Legal practitioners

Practitioners need to solve the legal problems faced in their work, and thus they need relevant information for this purpose and need to obtain the most accurate information as quickly as possible. As it were, research done by practitioners is orientated towards the end product and is projected directly into their work.

Practicing lawyers' legal research relates to two of their basic professional functions. That is, they seek to determine what the law is on a particular problem, and how a court will act if his problem is ever litigated. This is about legal probabilities and it can be used to advise his client on some proposed course of action. Also, they seek authorities and arguments to support an already determined position.

Practitioners have small and large collections in their own offices for their own use. They are fundamentally interested in

solving a particular problem with which they are faced in a particular real-life setting, under particular conditions, and usually they are faced with the necessity of solving it by a tight deadline. Therefore, the practitioners need more aid in finding the answers to their problems (Brodman, E., 1976).

Lloyd (1986) explained the activities which consume the greatest part of a lawyers' time.

- a). Explaining legal principles with which they are already familiar
- b). Considering how the facts fit these principles
- c). Drafting advice or pleadings or submissions

Svoboda (1981) described the characteristics of a practicing lawyer's work as numerous problems parallel to one another. She found that the effort expended per problem is much lower but is spread out over a longer period of time. This type of work regularly requires concise, punctual, problem-oriented information.

The characteristics of the working methods and information needs of practicing lawyers were explained by Goedan (1986). He stated that lawyers cover a large number of cases at the same time, that they need concise information on particular details, and that they are looking for the most relevant case or the relevant statutory provision.

When practicing lawyers are confronted with a new problem, they acquire the required information by referring to their files and notes, and seeking the advice of other lawyers, or assigning the research task to others (Cohen, 1969).

Lloyd (1986) divided lawyers' information needs into two groups, specific information and general information. Specific information is information relevant to the specific matter on which they are

working, and general information is information which is not relevant to the specific matter in hand, but which is acquired out of interest or in order to keep generally up-to-date. Specific information needs were examined from several points of view, such as kind of information, currency, field, easiness to obtain information, and sources used.

Practicing lawyers' legal research process is provided by two models of creative legal research, and from these models four stages in a lawyers' thought processes can be deduced (Ebersole, 1980).

Slayton, also, suggested four stages in a practicing lawyers' thought processes and the search process (Slayton, 1973).

CHAPTER 7 SURVEY OF INFORMATION NEEDS AND RESEARCH BEHAVIOUR OF LEGAL PROFESSIONALS IN KOREA

7.1. Background of information needs and research behaviour of Korean legal professionals

The most efficient system should be developed according to the user's needs. In order to design a Korean legal information system, it is necessary to make the system in compliance with the information needs and behaviour of Korean legal professionals.

Knowledge of the information needs of users is a prerequisite for the construction of the most efficient information system. The information system should not only be equipped with sufficient contents in order to comply with the users' needs properly, but also it should be organised to reflect the users' research habit and behaviour which are influenced by their legal education and training.

In a law-governed society, every person either as an individual or a member of a social body, needs legal information in order to function as a legal professional or paraprofessional, or to live as a citizen, but certainly the needs of legal professionals are stronger, more specific and deeper than those of others. They might need specific and detailed information relating to their legal matters, and these legal matters, either practical or scholarly, are closely related to their unique social roles and tasks, as well as to the legal system itself.

As described above, their information needs and research behaviour are closely linked with the legal system and legal professional system. It is strongly influenced by the information environment surrounding them and by their mode of education and training.

Legal professionals in Korea have been trained by textbook-oriented lectures using interpretations of written laws, so it may be difficult to believe that they are well-trained in information skills. Usually, they try initially to find a pertinent legal structure and concepts to which the legal matters they face are related. Then, they try to seek relevant information relating to legal matters which exist in the form of statutory law, case law or legal doctrine. Most legal doctrines are included in the textbooks or commentaries.

Original sources of statutory and case information are primary legal information sources, such as collections of statutory laws and case law. In order to identify and verify the authoritative information, these sources should be referred to first of all, and for this purpose they have to be organised to be easily accessible and quickly searchable in relation to their users' information seeking behaviour.

7.2. Methodology

This survey has been carried out for two purposes. One is to identify the legal professionals' attitudes toward legal information in general, their information needs and behavioural patterns, and to compare the characteristic relating to information between professors and practitioners. The other one is to utilise the survey results as an evaluative tool to assess the capabilities of the existing CLIS in Korea.

The questionnaire for the examination of users' needs and behaviour in Korea, was constructed with reference to the existing literature on user studies, especially in the law field. Special items peculiar to the characteristics of the Korean legal system were added to basic questions. Since the two existing systems were developed based on primary legal sources, questions were limited to these.

For the preparation of an appropriate questionnaire, advice was taken from two law professors who have experience in using CLIS in other countries. The questionnaire was prepared in the Korean language, so that the aims of the questions could be presented more accurately and understood by the respondents more clearly.

To compare the attitudes of the two groups, the same number of respondents were chosen from practitioners and professors. Although legal sources, both printed and CLIS, can be used widely by legal and para-legal professionals and even by the public, their major users are legal professionals. So, respondents were divided into two groups, a practitioner group consisting of judges, prosecutors, and attorneys, and a professor group.

A selected sample was taken based on the following guidelines established by the writer, and recommended by professionals. 44 respondents from each group were chosen.

- . Legal professionals who are involved in the development of and interested in legal information systems.
- . Legal professionals who take an active role in legal research.

Delivery of the questionnaires and their collection was done through the representative who was chosen among samples belonging to the institution. It was possible to get replies from all respondents easily, as the questionnaires were delivered to and collected from the respondents by their colleagues.

Among the data collected, valid data was analysed statistically. No response to an item or an unwillingness to answer a particular question (Payne, 1990) was indicated as 'frequency missing' in every table. Analysis was done with the help of an expert in statistics and processed by a main frame computer using an SAS package. Analysis was conducted by Chi-square in order to analyse the relation between practitioners and professors. In addition, F-test (2-way ANOVA, Analysis of Variance) and Sheffe's Test for

Variable were applied for analysis and verification of the results.

7.3. Structure of the questionnaire

The questionnaire is printed as an APPENDIX.

7.3.1. Details of the respondents

- 1). Working environment (Q. 1)
(Name of the institution and position)
- 2). Educational background, professional career, and specialised field (Q. 2, 4, 5)
- 3). Qualification of legal practitioner (Q. 3)

7.3.2. General attitudes towards legal information and research

- 1). Major source of legal information (Q. 6)
- 2). Use of library and library collection (Q. 7-9)
 - a). Degree of satisfaction with the library, and obstacles encountered in use of the library
 - b). Major difficulties in the use of library collection
- 3). The most convenient access point to legal information (Q.10)
- 4). Assistance from others (Q. 11-13)
 - a). Identity of assistant and degree of assistance
- 5). Required time for location of information (Q. 14)
- 6). Training for information search (Q. 15-16)
 - a). Whether trained or not
 - b). Kind of training

7.3.3. Kinds of legal information needed

Order of importance among statutory law, case law and legal doctrine (Q. 17)

7.3.4. Questions on the statutory law information and its sources

- 1). Reasons for need of statutory law sources (Q. 18)
- 2). Kind of information needed in statutory law sources (Q.19)
- 3). A access procedure to the full-text of statutory law (Q.20)
- 4). Title of the most used source and degree of satisfaction with it (Q. 21-22)

7.3.5. Questions on the case law information and its sources

- 1). Reasons for need of case law sources (Q. 23)
- 2). Kind of information needed in the case law sources (Q. 24)
- 3). Kind of information expected to be found in the case law (Q. 25)
- 4). The access procedure to get the full-text of case law (Q. 26)
- 5). Title of the most used source and degree of satisfaction with it (Q. 27-28)
- 6). Title used to get current case law information and reasons for need of it (Q.29-30)
- 7). Title used to get information about lower court case law and reasons for need of it (Q. 31-32)
- 8). Attitudes toward the Judicial Gazette and the Collections of the Supreme Court Case Law (Q. 33-34)

7.3.6. Questions on the doctrines

- 1). Kind of source used to get information about legal doctrines (Q. 35)
- 2). Reasons for need of the sources including legal doctrines (Q.36)

7.3.7. Best way for effective legal research (Q. 37)

7.3.8. Views on the computerisation

- 1). Reasons for approval or disapproval of a plan for computerisation (Q. 38-39)
- 2). Experiences in using computers in daily life or in the search for legal information (Q. 40-41)
- 3). The kind of information to be covered by the system (Q.42)
 - a). kind of statutory laws (Q.43)
 - b). kind of and scope of Supreme Court case law (Q. 44-46)
- 4). Proper agency to take charge of systemisation (Q. 47)
- 5). Desirable system mode, cost system, expected users, and training (Q. 48-51)

7.4. Analysis of Research Results

7.4.1. Details of the Respondents

- 1). Categories of respondents

Legal professionals are generally classified into two groups, legal practitioners and scholars. The practitioners group is comprised of judges, prosecutors, and attorneys.

Samples of this survey amount to 88 persons consisting of the same number of scholars and practitioners. Respondents belonging to the practitioner group are comprised of 17 judges, 13 prosecutors, and 14 attorneys. The selection was made to maintain a balance between each category. The scholar group is composed of law professors who are teaching and researching in law schools.

Questionnaires were sent to and collected from all of the participants.

2). Educational background

Generally, education and training in the specialised fields are considered a prerequisite for the profession.

In Korea, there is no educational requirement to be a legal professional which is quite different from the medical professional. According to The National Examination for Legal Practitioners, anyone can enter for an examination regardless of their educational background. Although the system is opened to all people, most practitioners have been educated in law schools.

As shown <table 7-1>, 86 persons among all respondents (97.7%) possess higher degrees than the LL.B., among them 33 persons have a Ph.D in law and 29 the LL.M.. Only 2 respondents who are working as practitioners were not educated in law school. The law professors' major functions are to do research and to teach in law schools, thus their educational level is comparatively higher than that of practitioners.

< TABLE 7-1 > - Educational background

	practitioner	professor	total
Ph.D	4	29	33 (37.5%)
LL.M	15	14	29 (33.0%)
LL.B	23	1	24 (27.3%)
None	2	0	2 (2.3%)

3). Qualification for legal practitioner

A qualification for law professors is not firmly established in Korea, even though most of them have higher degrees in the law field. On the contrary, the legal practitioners need to be qualified as approved by the government, to be engaged in legal practice.

A qualification for legal practitioners cannot be easily obtained. Therefore, it is usual for the holders of this qualification to engage in legal practice, because legal practitioners are highly regarded and are guaranteed their position in society. Only 2 respondents qualified to practice, are working as law professors in this survey.

4). Professional careers

More than half of the respondents hold leading positions in the professional field, and have been engaged in their field for more than 10 years as indicated in < table 7-2 >.

< TABLE 7-2 > - Professional careers

	practitioner	professor	total
less than 5 yr	8	7	15 (17.0%)
5 - 10 yr	16	11	27 (30.7%)
10 - 15 yr	10	9	19 (21.6%)
more than 15 yr	10	17	27 (30.7%)

5). Specialised field

Even though the professors probably teach and undertake research in a specialised subfield in law, negative responses from 10 professors to this question may have been caused by insufficient understanding of the question. On the other hand, most practitioners except for a few attorneys should carry out the duties charged to their position, and should deal with legal matters without regard to the subfield of law. Positive responses from 18 practitioners can be interpreted to mean that they have a special interest in a specific subfield of law and do undertake research within it.

7.4.2. General Attitudes towards Legal Information and Research

1). Major source of legal information

In general, the sources used to obtain required information are closely related to the aims of information use, information seeking behaviour, types of information, and the information environment.

< TABLE 7-3 > - Major source of legal information

	practitioner	professor	total
private collection	3	14	17 (28.8%)
office	7	0	7(11.9%)
library in the inst.	22	11	33(55.9%)
other library	0	2	2 (3.4%)

* Frequency missing : 29

In the survey, libraries in the institution where the legal professionals are working, are indicated as major information sources by more than half of the respondents (especially preferred by practitioners). Even so, libraries in Korea are not recognised as a major source for legal research by legal professionals.

On the other hand, private collections are indicated as the most widely used sources by professors. It has been a general tendency in Korea that the readers want to have their own collections and use their own books. This might be based on several factors, eg. traditional research habits, sufficient knowledge of contents and use of their private collection.

The varied response to this question might be derived from the differences in the objectives of information use between practitioners and professors. Most of the duties of practitioners

who are doing legal work in connection with their practice, are carried out in their office during office hours, and are concerned primarily with the review of the records relating to litigation in hand. Furthermore, they do not usually specialise in a narrow subfield, and thus they deal with a variety of legal matters as they arise. On the contrary, professors do theoretical research on a specific topic, and need to search comprehensively for in-depth research on it. Therefore, they normally wish to have the materials relating to the specified field nearby and to have easy access to them should the need arise.

As described above, the major sources of information used by practitioners and professors are quite different. So, the difference verified by a statistical analysis is extremely significant ($\chi^2(3)=19.501, P < .0001$).

2). Use of library and library collection

As indicated above, few professionals considered the library to function as the most important facility for legal research.

a). Degree of satisfaction with the libraries

None of the respondents replied that they could obtain "complete" information from the library, but 3 practitioners replied that they can get an "almost complete" level. Almost all respondents replied that they could get information on an "adequate" or "insufficient" level.

Negative attitudes toward the library were expressed more seriously by professors, and this may cause them to prefer to have their private collection and to depend on them strongly in research.

It is verified by statistical analysis that the difference between the two groups is very significant ($\chi^2 (2)=19.275$, $P <.0001$).

< TABLE 7-4 > - Degree of satisfaction with the libraries
practitioner professor total

	practitioner	professor	total
complete	0	0	0
almost complete	3	0	3 (3.4%)
adequate	37	22	59 (67.1%)
insufficient	4	22	26 (29.5%)

b). Major obstacles in using library

Almost all the respondents in the two groups, 37 practitioners and 35 professors (93.5%), pointed out that an "insufficient collection" is the most important factor in obstructing the use of the library and causing the low usage of the library. Other factors, such as "distance of the library from office", "regulations of and time limits in the use of the library", were not considered as obstacles by either group.

Both of the two groups showed similar responses, and it is verified by statistical analysis that the relationship between the two groups to this question was on a non-significant level ($\chi^2 (4)=3.043$, $P>.05$).

c). Major difficulties in using library collection

Acquisition of current information is stressed in every discipline. Due to the continuously changing nature of legal information, the provision of current legal information is not only necessary to solve legal matters, but also the provision of outdated information may have dangerous consequences. Therefore,

the requirement for current legal information by legal professionals is accepted as a matter of course.

The problem of "acquisition of current information" was pointed out as the most critical barrier to the use of the library collection by more than half of all respondents, especially, a large number of professors who reacted to this very strongly. "Unsystematic organisation of library material" was pointed out as a major difficulty faced by the practitioners.

Different responses as such may be closely related to the major information sources of each group (Q.6). That is, professors depended on their own collections, because they could not be provided with enough current information by the library. On the other hand, practitioners generally depended on the library, so they might face some problems in accessing and locating needed information in the library collection.

Different responses, also, may be caused by the nature of the research purpose and topic, scope of research, and information needs and behaviour of each category. Pointing out "the lack of basic legal materials, such as Collection of statutory laws and case law" is very suggestive of the real situation of law libraries.

< TABLE 7-5 > - Major difficulties in using library collection
pract. prof. total

	pract.	prof.	total
lack of basic legal materials	5	7	12(17.1%)
acquisition of current information	13	25	38(54.3%)
missing volumes	1	1	2(2.9%)
unsystematic organisation of mater.	15	3	18(25.7%)

* Frequency missing : 18

The relationship between the two groups is statistically significant ($\chi^2(3)=12.076$, $P<.01$).

3). The most convenient access point to the legal information

Most libraries including law libraries in Korea, have two kinds of catalogue, one is based on KDC (Korean Decimal Classification), the other is based on DDC (Dewey Decimal Classification). Generally, a subject heading approach to the library collection is preferred by the majority of users. Under the present library system, users can only use the classified catalogue for a subject approach to the collection. This is because there is no list of subject headings appropriate to the Korean legal system and thus no law library has a subject catalogue based on the subject headings. Computerisation of legal information and online retrieval software can solve these problems, and provide users with current and relevant legal information in their work place.

As a quarter of all respondents found that organisation of library material was inconvenient for locating the needed information in the present system, it is important to examine the desirable access point. In this survey, "Access by specific terms" was ranked most frequently (54.8%) by both groups, and "access by legal structure" was also indicated by a lot of respondents (42.9%) as a proper access point. This means that either specific terms or legal structures are familiar and used as access points by legal professionals.

It is verified that the relationship between the two groups is on a non-significant level ($\chi^2(2)=1.953$, $P>.05$).

4). Assistance from others

Generally, it may be possible to anticipate that the professionals

are usually aided in their work by others who act as eyes and legs in finding proper information and delivering it.

Even though the professors usually spend much time on their research, less than half of them (21 persons among 44) use assistants for their research. This may be derived from the fact that they do in-depth research on a specific topic, and need comprehensive and accurate information on it. Thus they tend to acquire the required information for themselves. On the other hand, practitioners officially have assistants, in their work, and call upon them frequently. 31 practitioners responded that they are assisted by others.

The relationship between the two groups is verified significantly different by the statistical analysis ($\chi^2(1)=4.701, P<.05$).

a). Identity of assistants

50 persons among 52 respondents who are assisted by others replied to this question. "Assistance from colleagues" by practitioners, and "assistants in the office" by professors were mostly ticked. Only 4 practitioners answered that they were assisted by the librarian.

b). Degree of assistance

The degree of assistance ranges from the comprehensive and overall examination of the research topic to a search for a specific item in the library holdings and routine assistance, such as circulation and photocopying of materials.

More than half of the respondents (25 persons, 51.0%) received aid in "search of the specific item" and 12 persons (24.5%) in the routine works. It means that most of the legal professionals examined relevant information for themselves, and then asked for the assistance to others to find the location of that information,

or to borrow or photocopy it.

5). Required time for the location of information

Legal professionals in Korea tend to spend much time on information searches in the process of their legal research. In Korea, there is no formal training course in legal information searching or for use of the library. So, it is natural that information searching is time consuming. No training in information searching and library use may result in the fact that users do not use the library efficiently and try to possess and to develop their private collections.

We can easily assume that there are many differences between practitioners and professors in terms of the subject, scope, method, and purpose of their research. Practitioners do research on the legal matters faced in their practice in order to get a reasonable resolution, and professors do research on a specific topic to find and consolidate its theoretical foundation.

The differences in various factors between them bring about a wide difference in the time required for the acquisition of information by each group. 22 professors among 42 respondents spent "more than 3 days", and 16 practitioners among 42 respondents spent merely "less than 6 hours".

< TABLE 7-6 > - Required time for the location of information

	practitioner	professor	total
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less than 6 hours	16	2	18 (21.4%)
6 hours to 1 day	11	5	16 (19.0%)
1 to 3 days	10	13	23 (27.4%)
more than 3 days	5	22	27 (32.4%)

* Frequency missing : 4

The survey indicates that there is a very significant level of difference between the two groups in respect of the required time for information search ($\chi^2(3)=24.234, P<.0001$).

6). Training for information search

In the legal education system in Korea, formal courses for legal research method, information search and library use are not included in the curriculum of law schools or of the Training Institute for Legal Practitioners.

The negative attitudes of most of the respondents (74 persons, 85.1%) to this question is the reflection of the present situation of legal education and training. Among the persons who gave positive responses, 9 persons indicate that they were trained by formal courses in law schools. Considering the Korean legal education system, it can probably be interpreted that they were trained in law schools in other countries.

Lack of formal courses in legal research and use of libraries may result in time-consuming searching, a simple level of assistance from others, insufficient use of the library, and trends to possess and to develop their own collections.

7.4.3. Kinds of Needed Information

Respondents were asked to rank the preferred information in order of importance, which can be used for the analysis of the comparative value of each type of information, especially by reference to the first rank. For practitioners, the importance of statutory law, case law, and legal doctrine is fairly evenly spread, compared to the professors for whom the ranking is more definite.

Analysing the preferred information by the first rank, the practitioners regarded legal information in the order of statutory law, legal doctrine, and case law. For professors, on the other hand, this was in the order of statutory law, case law, and legal doctrine. Responses from the two groups go against the general expectation that the practitioner is likely to regard the case law as of great importance, and the professor, the legal doctrine as the most important.

This result can be analysed statistically to show that the level of significance between preferred information indicated by practitioners is lower than for professors. The former is ($\chi^2(4)=14.093, P<.01$), and the latter is ($\chi^2(4)=73.116, P<.0001$).

(TABLE 7-7a) : practitioners - Kind of needed information

	1	2	3	total
statutory law	22	12	9	43
case law	6	17	20	43
legal doctrine	15	14	14	43

* Frequency missing : 3

(TABLE 7-7b) : professors - Kind of needed information

	1	2	3	total
statutory law	28	3	12	43
case law	12	29	2	43
legal doctrine	3	11	29	43

* Frequency missing : 3

7.4.4. Questions on the Statutory Law Information and Its Sources

In statutory law, reasons for requiring the information, kinds of information needed, access process to full-text, and attitudes toward sources were discussed.

1). Reasons for need of statutory law sources

Both of the two groups commonly pointed out that statutory law is the most important information. Reasons for asking for statutory information were differently given. Practitioners showed very clearly the order of importance of reasons, but professors didn't. So responses of professors were analysed based on the first rank of importance.

Practitioners responded that they have used statutory sources in the order of "ascertainment of existence of law relating to special subject", "identification of related laws to special subject", and "examination of legal text". On the other hand, professors answered in the order of "ascertainment of existence of law relating to special subject", "examination of legal text", and "identification of related laws to special subject".

(TABLE 7-8a) : practitioners - Reasons for need of statutory sources

	1	2	3	total
ascertain the existence of law relating to special subject	20	9	14	43
identify the related laws to special subject	12	18	13	43
examine the legal text	11	16	16	43

* Frequency missing : 3

(TABLE 7-8b) : professors - Reasons for need of statutory sources

	1	2	3	total
ascertain the existence of law relating to special subject	17	5	17	39
identify the related laws to special subject	9	22	8	39
examine the legal text	13	12	14	39

* Frequency missing : 15

There is a significant level of difference between the reasons for asking for statutory information by professors ($\chi^2(4)=16.923$, $P<.01$). On the other hand, tendency by practitioners is on a non-significant level ($\chi^2(4)=6.837$, $P>.05$).

2). Kinds of information needed in the statutory law sources

The contents included in the statutory sources are different from each other, ranging from the coverage of the full-text to comprehensive information relating to the statutory law. Similar attitudes towards them arose in both groups. That is, they commonly preferred the information in the order of "full-text", "related laws", "history of statutory law".

(TABLE 7-9a) : practitioner - Kind of information needed in statutory sources

	1	2	3	total
full-text	30	7	5	42
history	5	10	27	42
related laws	7	25	10	42

* Frequency missing : 6

(TABLE 7-9b) : professor - Kind of information needed in statutory sources

	1	2	3	total
full-text	22	15	7	44
history	4	8	32	44
related laws	18	21	5	44

The relationship between the kinds of information, analysed statistically, is highly significant both in practitioners and professors.

(The practitioners - $\chi^2(4)=59.857$, $P<.0001$,

The professors - $\chi^2(4)=48.818$, $P<.0001$)

3). The access procedure to the full-text of statutory law

In the written law system, a Code of Law is considered as a basic tool and is the first source checked by professionals in their work, and thus it is located close by them for easy use at any time. Legal professionals normally have their own Code of Law, which is commercially published in one volume. It is located within their reach and used frequently for statutory legal information. So they are very familiar with it. But, its scope is so limited and only selected categories of statutory instruments are covered in it, that the need for comprehensive statutory information cannot be satisfied by it.

Therefore, the Collection of Korean Laws in Force in loose-leaf form is usually required as a comprehensive source for statutory information.

It is organised by legal structure, so knowledge of legal structure is required to facilitate its use. Behaviour in accessing the full-text, was different between the two groups.

"Direct access to Collection of Laws of the ROK" was strongly cited by the practitioners. Namely, they access directly the Collection of Laws of the ROK when they found the appropriate statutory information relating to a legal matter. On the other hand, the professors ranked "journal articles to Collection of Laws of the ROK" first, and "direct access to Collection of Laws of the ROK" second.

Secondary sources, such as journal articles and commentaries, are used both by practitioners and scholars as tools for finding statutory information. Professors in particular frequently browse and read journal articles and use them for such purposes. Journal articles are the result of in-depth research. They give theoretical information on a specific legal topic with leading cases and related statutory information.

Also, commentaries are used by many professionals. These are arranged numerically by sections of a specific act and contain much useful information, such as an interpretation of the law, leading cases and related statutory information.

The different attitudes in information seeking behaviour between the two groups may be the reflection of their research habits and depth of research.

(TABLE 7-10) - Access process to obtain full-text of statutory law

	pract.	prof.	total
textbook to Collection	3	5	8(9.64%)
commentary to Collection	9	3	12(14.46%)
journal art. to Collection	3	17	20(24.10%)
notes in the code to Collection	4	2	6(7.23%)
direct access to Collection	24	13	37(44.58%)

* Frequency missing : 5

The relationship between the two groups in terms of their methods of accessing the full-text of statutory law is quite different, and it is verified to be significant by the statistical analysis ($\chi^2(4)=17.151, P<.01$).

4). Title of the most used source and degree of satisfaction with it

a). Order of the preferred statutory sources

Attitudes toward the preferred statutory sources varied between practitioners and professors. This may be related to the nature of their duties. Professors tend to need an exhaustive examination of information relating to their specific topic for in-depth scholarly research. On the contrary, practitioners need definite information which can be applied to the legal matter and will resolve it successfully.

The professors in this survey clearly showed the order of importance of their preferred sources, in contrast to the varied nature of the practitioners' attitudes. Preferred sources for statutory information of professors were in the order of "unabridged code of law", "Collection of Laws of the ROK", "Official Gazette", "abridged code of law". Order of importance for practitioners determined by the first rank was in the order of "unbridged code of law", "abridged code of law", "Collection of Laws of the ROK".

The preference of "unabridged code of law" by practitioners and professors may be caused by an adequate coverage of law compared with "abridged code of law", its handiness to use, and their familiarity with it.

The relations between the statutory sources preferred is statistically significant for both groups.

(practitioners : $\chi^2(9)=85.293, P<.0001$
 professors : $\chi^2(9)=218.154, P<.0001$)

(TABLE 7-11a) : practitioner - The order of preferred statutory sources

	1	2	3	4	total
abridged code	12	7	5	14	38
unabridged code	19	16	3	0	38
Collection of Korean Laws	6	10	21	1	38
Official Gazette	1	5	9	23	38

* Frequency missing : 24

(TABLE 7-11b) : professor - The order of preferred statutory sources

	1	2	3	4	total
abridged code	3	2	8	26	39
unabridged code	34	5	0	0	39
Collection of Korean Laws	2	30	6	1	39
Official Gazette	0	2	25	12	39

* Frequency missing : 20

b). Degree of satisfaction with the most used statutory source

This question was posed in an attempt to analyse the attitudes of practitioners and professors toward the most used statutory source, in terms of its scope and contents, and the method of searching.

Therefore, three facets of analysis, i.e., the relationship between practitioners and professors (A), the relationship between three items (scope, contents, and methods) (B), and the relationship of interaction between two groups and three items

(A * B), were conducted. In order to analyse them statistically, 2-way ANOVA (Analysis of Variance), also called F-test, was conducted.

First, the relation of the two groups to the most used statutory sources was significantly different ($F(1, 258)=6.76, P<.01$). Second, the relation between three items (scope and contents of the most used statutory source, and method of search) is also significantly different ($F(2, 258)=6.52, P<.01$). Third, the relation of interaction between the two groups and the three items is not significant ($F(2, 258)=0.52, P>.05$).

The following tables concern the degree of satisfaction with the most used statutory sources.

< TABLE 7-12a > : scope of material

	practitioners	professors	total
complete	4	1	5
almost complete	20	15	35
adequate	19	28	47
insufficient	1	0	1

< TABLE 7-12b > : contents of material

	practitioners	professors	total
complete	1	1	2
almost complete	23	12	35
adequate	20	30	50
insufficient	0	1	1

< TABLE 7-12c > : method of search

	practitioners	professors	total
complete	0	1	1
almost complete	13	13	26
adequate	28	21	49
insufficient	3	9	12

In order to verify the degree of difference further, Scheffe's Test for Variable was conducted. < TABLE 7-13 > : a) showed the relation between professor and practitioner groups, and <TABLE - 13> : b) showed the relation between the three items. More detailed results were as follows.

First, the professors' group seemed less satisfied with the most used statutory source than the practitioners' group, and the relation between the two groups is significantly different ($P < .05$). Second, the degree of satisfaction with "method of search" of the most used statutory source tended to be less than either "scope of it" or "contents of it". The relation between "scope of it" and "contents of it" had no significant difference. Thus, it is clear that "method of search" is the major unsatisfactory factor among the three items, and the relation between the three items is significantly different ($P < .05$).

< TABLE 7-13 > : a - Results of Scheffe's test to <TABLE 7-12>

Scheffe grouping	Mean	A
A	2.72727	professor
B	2.53030	practitioner

< TABLE 7-13 > : b - Results of Scheffe's test to <TABLE 7-12>

Scheffe grouping	Mean	B
A	2.81818	method of search
B B	2.56818	contents of it
B	2.50000	scope of it

7.4.5. Questions on the Case Law Information and Its Sources

In case law, the reasons for asking for it, kinds of information needed, contents of it required, access process for full-text of it, attitudes toward sources, and attitudes toward lower case law were discussed.

1). Reasons for need of case law sources

As to the reasons for asking for case law information, the professors clearly showed an order of importance, unlike the dispersed distribution of the practitioners. But, the results from the practitioners as observed by the first rank were the same as from the professors.

"Identify whether the case laws relating to the special subject exist" was pointed out as the most important reason for using case law sources by two groups. Only a few respondents indicated that they use those sources for "Identification of the title, and the number and date of a certain case".

< TABLE 7-14a > : practitioners - Reasons for need of case law sources

	1	2	3	total
Identify whether the case laws relating to the special subject exist	21	16	6	43
Identification of the title, and the number and date of the specific case law	3	9	31	43
Examination of full-text	19	18	6	43

* Frequency missing : 3

< TABLE 7-14b > : professors - Reasons in need of case law sources

	1	2	3	total
Identify whether the case laws relating to the special subject exist	29	14	0	43
Identification of the title, and the number and date of the specific case law	0	1	42	43
Examination of full-text	14	28	1	43

* Frequency missing :3

It can be interpreted that the title of the case, and the number and date of the case are not regarded as important points or as useful information to find a specific case. Case law sources should consider the users' needs.

By the statistical analysis, it is verified that the relation between items is highly important in the two groups.

(professors : $\chi^2(4)=134.930$, $P<.0001$,
practitioners : $\chi^2(4)=45.767$, $P<.0001$).

2). Kind of information needed from case law sources

Practitioners and professors showed a very similar response to the kind of information included in case law sources, although the frequency distribution of each item was not identical, and the response of the professors was more concentric than that of the practitioners.

The kind of information preferred by both groups occurred in the order of "major point of case law", "full-text", "related case law", "history or change of case law", "statutory laws applied to

a certain case law". Preference for "the major point of case law" might be caused by the fact that it has been used as an efficient tool for finding the appropriate case laws in practicing and scholarly fields.

< TABLE 7-15a > : practitioners - Kind of information needed in case law sources

	1	2	3	4	5
major point of case law	27	6	4	3	2
full-text of case law	10	16	5	7	4
related case laws	1	8	14	11	8
history or change of case law	2	7	11	13	9
statutory laws applied to a certain case law	2	5	8	8	19

* Frequency missing : 10

< TABLE 7-15b > : professors - Kind of information needed in case law sources

	1	2	3	4	5
major point of case law	36	6	1	0	0
full-text of case law	5	23	9	5	1
related case laws	1	10	26	4	2
history or change of case law	0	2	3	25	13
statutory laws applied to a certain case law	1	2	4	9	27

* Frequency missing : 5

The relation between the responses on the kind of information is highly significant both in practitioners and professors.

(practitioners : $\chi^2(16)=102.857, P<.0001,$
 professors : $\chi^2(16)=300.000, P<.0001)$

3). Kind of information expected to be found in the case law

Normally, case law sources include an explanation of the facts which raise legal matters and legal disputes, application and interpretation of laws, and judicial decisions and the basis of them.

The purpose for using case law sources and the kind of information expected to be found in case law was clearly observed in the practitioners' attitudes, which was different from the dispersed distribution of the professors' attitudes. Furthermore, the order of importance of the kind of information was ranked quite differently from each other.

These results may be related to the differences in their social roles. Namely, practitioners tend to find similar cases which include similar facts to the legal matters faced, and to make a reasonable decision independently. On the other hand, professors tend to find information which can be used as a basis for their theoretical opinion, and for this purpose they may prefer to get a typical conclusion to legal problems.

< TABLE 7-16a > : practitioners - Kind of information expected to be found in case law

	1	2	3	4
identification of the fact included in the case law	20	9	6	5
conceptualisation of the fact into the legal concept	8	20	6	6
interpretation of legal terms and essential facts	10	8	15	7
typical conclusion of legal problems	2	3	13	22

* Frequency missing : 16

< TABLE 7-16b > : professors - Kind of information expected to be found in case law

	1	2	3	4
identification of the fact included in the case law	7	8	17	12
conceptualisation of the fact into the legal concept	9	11	15	9
interpretation of legal terms and essential facts	10	18	8	8
typical conclusion of legal problems	18	7	4	15

Frequency distribution is differently observed, practitioners' showing concentric distribution and professors' dispersed distribution, but the relation between items is significantly different in both groups.

(practitioners : $\chi^2 (9)=58.200, P<.0001$

professors : $\chi^2 (9)=25.818, P<.01$)

4). The accessing procedure to retrieve the full-text of case law

In general, the primary case law sources, such as the Collection of Supreme Court Case Law, are arranged by the date of decision and the number of cases. So, users who want to use these case books must know the date and number of the specific cases concerned with their legal interests. Without prior knowledge of them, it is very difficult for users to access the pertinent cases required.

Large number of professionals (38 persons, 46.91%), especially practitioners (27 persons among 41 persons responded), were apt to access the Collection of Case Law directly in order to get the

full-text of specific case law required. Without any preliminary knowledge of the title or the number of the case, they are directed to these case books and try to find appropriate information from them.

On the other hand, it is more general for professors to firstly access journal article which is likely to include relevant case law information, and then to access the Collection of case laws based on the information secured from the journal article.

The difference in the accessing procedure between practitioners and professors may be related to their information seeking behaviour and the purpose of their research. As it were, practitioners frequently utilise the Collections for their work, and thus they can become very familiar with the use of it. On the other hand, as professors need case law information in relation to theoretical research, they tend to find it through journal articles.

The relation between the two groups is verified by statistical analysis that showed it to be significantly different ($\chi^2(4)=24.737, P<.0001$).

< TABLE 7-17 > - Access process to retrieve full-text of case law
pract. prof. total

	pract.	prof.	total
textbook to Collections	3	7	10 (12.35%)
commentary to Collection	7	1	8 (9.88%)
journal article to Collection	4	18	22 (27.16%)
notes in code to Collection	0	3	3 (3.70%)
direct access to Collection	27	11	38 (46.91%)

* Frequency missing : 7

5). Title of the most used source and the degree of satisfaction with it

a). Kind of case law source preferred

The titles illustrated as the most used sources by practitioners and professors are quite different; the "Judicial Gazette" by practitioners and "Collection of Supreme Court Case Law" by professors. This difference might be related to their availability.

Compared with the Collection, the Judicial Gazette has advantages, such as currentness and comprehensiveness in respect of its coverage of case laws. But it also has disadvantage, such as limited distribution. Practitioners can easily access and use the Judicial Gazette without a problem, so they prefer this source. Although Collection of Supreme Court Case Law cannot be as comprehensive and current as the Judicial Gazette, it is readily accessible to the professors. Therefore, half of the professors indicated it as the most used source.

< TABLE 7-18 > - The order of preferred case law sources

	pract.	prof.	total
Collection of Supreme court case law	7	20	27 (34.62%)
Judicial Gazette case law in card form	20	9	29 (37.18%)
Comprehensive Guide to the case laws	0	0	0 (0.00%)
	11	11	22 (28.20%)

* Frequency missing : 8

The reason for non-response to the "Case law in card form" listed in the items might be caused by the cessation of publication in 1980.

The relation between the two groups is significantly different ($\chi^2(2)=10.387, P<.01$).

b). Degree of satisfaction with the most used case law source

This question is about the attitudes of both groups toward the most used case law source, in terms of its scope and contents, and the method of search. Therefore, three facets of analysis were done by the same method as Question 22.

First, the relation of the two groups to the most used case law source is significantly different ($F(1, 255)=9.59, P<.01$). Second, the relation between the three items is also significantly different ($F(2, 255)=4.31, P<.05$). Third, the relation of the interaction between the two groups and the three items is not significant ($F(2, 255)=1.03, P>.05$).

Facts concerning the degree of difference were clearly verified by Scheffe's Test for Variable, as follows.

First, the professors were likely to be less satisfied with the most used case law source than the practitioners, and the relation between the two groups was significantly different ($P<.05$).

The relation of the two groups to the case law sources seemed to have a similarity to the statutory source described in <TABLE-13>.

< TABLE 7-19 > : a - Results of Scheffe's test to the degree of satisfaction with the most used case law sources

Scheffe grouping	Mean	A
A	2.89147	professors
B	2.64394	practitioners

Second, the degree of satisfaction with "method of search" of the most used case law source tended to be less than either "scope of

it" or "contents of it", and the relation between scope and contents of it showed significant difference. Thus, it was clarified that "method of search" was the major unsatisfactory factor among the three items and the relation between the three items was significantly different ($P < .05$). This tendency was similar to the statutory source.

< TABLE 7-19 > : b - Results of Scheffe's test on the degree of satisfaction with the most used case law sources

Scheffe grouping	Mean	B
A	2.93103	method of search
B B	2.70115	contents of it
B	2.66667	scope of it

6). Title used to obtain current case law information and the reasons for needing it

a). Title used to get current case law information

Legal professionals, by and large, tended to use the "Judicial Gazette " in order to get current case law information. Due to its limited distribution, most of them were practitioners who could easily access this officially published source. Sources for current case law which were used by professors, were commercial publications, such as "Monthly Journal of Case Law" and "Legal Newspaper", which are easily available to them.

Daily newspapers listed among the items were not responded to at all. This might be due to the fact that daily newspapers only record new cases relating to current affairs, and thus are not used by professionals requiring extensive and diverse current case law.

The relation between the two groups regarding the preferred source

of current case law was verified by statistical analysis to be very significantly different ($\chi^2(3)=25.586, P<.0001$).

< TABLE 7-20 > - Title used to obtain current case law

	pract.	prof.	total
Judicial Gazette	31	12	43 (58.90%)
Legal Newspaper	4	16	20 (27.40%)
daily newspaper	0	0	0 (0.00%)
Monthly Journal of Case Law	0	8	8 (10.96%)
the others	2	0	2 (2.74%)

* Frequency missing : 15

b). The reasons for needing it

There were tendencies for most professionals to attempt to use some sort of serial in order to secure current information on case law. Reasons for using these sources may be related to the purpose and scope of research. This was clarified by the different responses from the practitioners and professors. Although "acquisition of current information relating to the subject" was ranked first both by practitioners and professors, "analysis of the specific case law" was placed second by the practitioners as was "understanding of current trends in case law" by the professors.

Frequency distribution of the practitioners' response showed a concentric tendency, in contrast to the professors' dispersed tendency. The relation between the reasons for asking for current case law was significantly different between practitioners and professors.

(practitioners : $\chi^2(4)=30.000, P<.0001,$
 professors : $\chi^2(4)=25.610, P<.0001$)

< TABLE 7-21a > : practitioners - Reasons for need of current case law

	1	2	3
understanding of current trends in case law	10	14	20
acquisition of current information relating to the subject	28	9	7
analysis of the specific case law	6	21	17

< TABLE 7-21b > : professors - Reasons for need of current case law

	1	2	3
understanding of current trends in case law	13	14	14
acquisition of current information relating to the subject	24	12	5
analysis of the specific case law	4	15	22

* Frequency missing : 3

7). Titles used to get information about lower court case law and reasons for need of it

a). Titles used to get case law information of lower court

The "Legal Newspaper" was indicated as the most used source for lower court case laws by legal professionals (48.81%). This might be due to the nature of it, that is, the provision of current information by frequent publication (twice a week) and its ready availability (commercial publication). In particular, more than half of all professors used it, in contrast to the practitioners' preference to the "Collection of Lower Court case law".

The relation between the two groups was not significantly

different ($\chi^2(3)=6.451, P>.05$).

< TABLE 7-22 > - Title used to get lower court case law

	pract.	prof.	total
Collection of Lower Court Case Law	20	11	31(36.90%)
Legal Newspaper	18	23	41(48.81%)
Monthly Journal of Case Law	3	8	11(13.10%)
daily newspaper	0	1	1(1.19%)

* Frequency missing : 4

b). Reasons for need of lower court case law

"Understanding the trends of lower court case law" was commonly stressed by practitioners and professors as a reason for needing the lower court case law, even though the same number of practitioners also pointed to the "identification of the fact included in the case law".

< TABLE 23 > - Reasons for need of lower court case law

	pract.	prof.	total
identification of the fact included in case law	14	9	23(28.40%)
understanding of trends of lower court case laws	14	17	31(38.27%)
examination of legal interpretation	7	9	16(19.75%)
review of the decision of specific case pending in higher court	5	6	11(13.58%)

* Frequency missing : 7

This emphasis by practitioners seems to be related to their work, in that when they encounter legal matters, they need to collect and consider factual information, such as judicial decisions, pleadings, and prosecutors' addresses, in their area.

8). Attitudes toward the Judicial Gazette and Collections of Supreme Court Case Laws

a). Attitudes toward the Judicial Gazette

There were three facets of analysis, and results were as follows.

First, the relation between the two groups was significantly different ($F(1, 237)=9.75, P<.01$).

Second, the relation between the three items (scope, contents, and method) was also significantly different ($F(2, 237)=3.73, P<.05$).

Third, the relation of the interaction between the two groups and the three items was not significant ($F(2, 237)=0.59, P>.05$).

By using Scheffe's Test on the results above, the following facts are clarified.

First, the professors tended to be less satisfied with the Judicial Gazette than the practitioners. The relation between the two groups was also verified as being significantly different ($P<.05$).

Second, the degree of satisfaction with the method of search tended to be less than either the scope or contents of it, and the relation between the scope and contents of it was similarly satisfied. Thus, it was clarified that the method of search was the most unsatisfactory factor among the three items.

As a whole, the relation between the three items was significantly different ($P<.05$).

b). Attitudes towards the Collection of Supreme Court Case Laws

Using the statistical analysis, the following tendencies were verified.

First, the relation between the two groups was very significantly different ($F(1, 249)=20.43, P<.0001$).

Second, the relation between the three items was significantly different ($F(2, 249)=3.74, P<.05$).

Third, the relation of the interaction between the two groups and three items was also significantly different ($F(2, 249)=3.04, P<.05$).

Using the Scheffe's Test, the following facts were revealed.

First, the practitioners tended to be more satisfied with the Collection of Supreme Court Case Laws than the professors, and the relation between the two groups was significantly different ($P<.05$).

Second, the degree of satisfaction with the method of search tended to be less than either the scope or contents of it, and the relation between the scope and contents of it was similarly satisfied.

Thus, it was clarified that the method of search was the most unsatisfactory factor among the three items. As a whole, the relation between the three items is significantly different ($P<.05$).

7.4.6. Questions on the Doctrines

- 1). Kind of source used to obtain information about legal doctrines

The sources of information used for legal doctrines are quite different between practitioners and professors, which might be closely related to their information seeking behaviour and their

types of information need.

Practitioners prefer to use a commentary which is a handy source to look up information easily and quickly. It is arranged by the number and section of each act, and includes case law and doctrines relating to that section in abbreviated form, and gives guidelines for the interpretation of certain sections. Conversely, professors prefer to use journal articles, which include adequate theoretical information with more comprehensive case law and doctrines, and gives exhaustive explanation of them.

The relation between the two groups is very significantly different ($\chi^2(2)=36.074$, $P<.0001$).

< TABLE 7-24 > - Kind of sources used to get information about legal doctrine

	practitioners	professors	total
textbook	7	18	25(29.07%)
commentary	30	3	33(38.37%)
journal article	6	22	28(32.56%)

* Frequency missing : 2

2). Reasons for using these sources

Legal doctrine purports to be an interpretation of the law given by scholars, and is applied to legal matters by practitioners in their work. As a result, the reasons for requesting legal doctrines are expected to be different between two groups.

With practitioners, the frequency distribution revealed a considerable concentric appearance, and the reasons for using them were ranked in the order of "examine the contents of legal doctrines", "review the application of legal doctrines to the

specific case and the result of it", and "identify whether the legal doctrines relating to the special subjects are existing". Conversely, the professors' responses showed dispersed distribution, and analysis by the first rank revealed an order different from practitioners. That is, "review the application of legal doctrines to the specific case and the result of it", "identify whether the legal doctrines relating to the special subject are existing", and "examine the contents of legal doctrines".

< TABLE 7-25a > : practitioners - Reasons for using textbooks, commentary, etc.

	1	2	3

identify whether the legal doctrines relating to the special subject are existing	13	9	20
examine the contents of legal doctrines	17	16	9
review the application of legal doctrine to the specific case and the result of it	12	17	13
* Frequency missing : 6			

< TABLE 7-25b > : professors - Reasons for using textbooks, commentary, etc.

	1	2	3

identify whether the legal doctrines relating to the special subject are existing	14	12	12
examine the contents of legal doctrines	5	17	16
review the application of legal doctrine to the specific case and the result of it	19	9	10
* Frequency missing : 18			

The relation between the reasons was significantly different with the professors, but not significantly different with the practitioners.

(practitioners : $\chi^2(4)=8.143, P>.05$
professors : $\chi^2(4)=12.000, P<.05$)

7.4.7. Best way for Effective Legal Research

The practitioners' responses pointed to "expansion of the library collection" as the best way for effective legal research. This might be co-related to the responses shown in (table 3) and (table 5). In tables 3 and 5, libraries in the institutions were indicated as a major source of information by most practitioners, and insufficient collections were pointed out as a major difficulty in using libraries. The professors showed the same response to this question, even though libraries in the institutions were not considered to be a major source of information.

What is specially noteworthy in this question was "the computerisation of legal information". Necessity for the computerisation was ranked as the second most important element by practitioners, and third by the professors. It could be presumed that favourable attitudes toward computerisation by practitioners might be caused by the need for quick information searches, or by prior knowledge of the information system being developed by the Supreme Court in Korea or about the operation of information systems in other countries, or by the progressive move toward information technology.

Order of importance was ranked by the practitioners into "expansion of library collection", "computerisation of legal information", "reorganisation of library materials", and "provision and use of research assistants". Conversely, the professors' attitude was observed in the order of "expansion of library collection", "reorganisation of library materials", "computerisation of legal information", and "provision and use of

research assistants".

The relation between items suggested as the best way for effective legal research is very significantly different in both groups.

(practitioners : $\chi^2(9)=64.651, P<.0001$
 professors : $\chi^2(9)=64.364, P<.0001$)

< TABLE 7-26a > : practitioners - Best way for effective legal research

	1	2	3	4
expansion of library collection	24	13	5	1
reorganisation of library materials	7	11	17	8
provision and use of research assistants	3	3	14	23
computerisation of legal information	9	16	7	11

* Frequency missing : 4

< TABLE 7-26b > : professors - Best way for effective legal research

	1	2	3	4
expansion of library collection	18	13	9	4
reorganisation of library materials	13	19	10	2
provision and use of research assistants	2	5	9	28
computerisation of legal information	11	7	16	10

7.4.8. Views on the Computerisation Project

- 1). Reasons for approval or disapproval of a plan of computerisation

Computerisation of legal information has such advantages as securing needed information quickly, easily, accurately, and exhaustively, maintaining timely current information and the

saving of space for conservation. Among these, quick and easy searching of needed information seemed, to a considerable degree, to be required both by practitioners and professors, and thus they pointed it out as a reason for approval of a plan of computerisation (82.35%). In order to meet users' needs, the system should be developed with an efficient search mode, by which users could access the system easily and obtain the needed information effectively.

The relation between the two groups' attitudes toward the reasons for computerisation was significantly different ($\chi^2(2)=7.204, P<.05$).

< TABLE 7-27 > - Reasons for approval or disapproval of a plan of computerisation

	pract.	prof.	total
quick and easy searching of needed information through a large quantity	40	30	70(82.35%)
comprehensive and exhaustive searching of needed information	2	5	7(8.24%)
solving the problems of space for the conservation of information	0	0	0(0.00%)
acquisition of current information	1	7	8(9.41%)

* Frequency missing : 3

Only one practitioner among all 88 respondents did not agree to the computerisation, because it may be difficult to search for the relevant information. It is not certain whether the negative attitude toward a computerised legal system is based on unsuccessful experience or simply an imaginary fear of it. In any case, development of an efficient search mode is very important for solving the problem.

2). Experiences in using computers in daily life or in the search for legal information

a). Experiences in using computers in daily life

More than half of all respondents (57.47%) answered that they have experience in the use of computers in daily life. In the professors' group, the number of those experienced was more than twice that of the inexperienced (29 persons : 14 persons), in the practitioners' group the numbers were almost equal (21 persons : 23 persons).

The relation between the two groups was not significantly different ($X^2(1)=3.458$, $P>.05$).

b). Experiences in using computers in the search for legal information

23 respondents consisting of 11 practitioners and 12 professors, answered that they have experience in searching for legal information using a computerised system. In order to examine the attitudes of the experienced respondents toward computerisation, their responses were analysed separately in the following questions.

3). The kind of information to be covered in the system

It is common, even in the countries using Written-law, that the quantity of case law has not only multiplied exponentially, but also its value as a legal information source has greatly increased. Especially, the Supreme Court case law has been stressed because of its leading role in legal practice and scholarly work.

< TABLE 7-28a > : practitioners - Kind of information to be covered by the system

	1	2	3	4	5
case laws of Supreme Court	14	11	10	4	0
case laws of Supreme Court and lower court	6	14	7	10	2
statutory laws in force	10	3	8	11	7
statutory laws in force, repealed and revised	7	8	8	11	5
legal doctrines	2	3	6	3	21

* Frequency missing : 29

< TABLE 7-28b > : professors - Kind of information to be covered by the system

	1	2	3	4	5
case laws of Supreme Court	26	6	6	1	1
case laws of Supreme Court and lower court	2	23	4	9	2
statutory laws in force	9	3	10	16	2
statutory laws in force, repealed and revised	3	8	8	10	11
legal doctrines	0	0	12	4	2

* Frequency missing : 20

Attitudes towards case law were strongly reflected in the scope of information covered in the computerised system. Both groups indicated this as the first rank, even though the degree of importance of it was expressed more strongly by professors than by practitioners.

The relation of the kinds of information is significantly different between the two groups.

(practitioners : $\chi^2(16)=73.349$, $P<.0001$
 professors : $\chi^2(16)=166.00$, $P<.0001$).

< TABLE 7-28c > : the experienced - Kind of information to be covered by the system

	1	2	3	4	5

case laws of Supreme Court	9	6	5	1	0
case laws of Supreme Court and lower court	5	5	4	6	1
statutory laws in force	3	4	3	8	3
statutory laws in force, repealed and revised	3	3	6	5	4
legal doctrines	1	3	3	1	13

* frequency missing : 10

The order of importance of the different kinds of information was similarly observed by the two groups, that is, "the case law of Supreme Court", "the statutory laws in force", "the statutory laws in force, abolition and revision", "the case law of the Supreme Court and lower court", and "the legal doctrines".

On the other hand, the responses from the 23 persons who have experience in using a computerised system for legal information searches were different from the results above. Namely, the inclusion of case law either of the Supreme Court or of the lower court was ranked higher than the statutory laws, and under statutory information, all the statute laws, such as laws in force, repealed and revised laws, were desired to be covered by the system.

a). Kind of statutory laws

Regarding the kind of statutory laws to be covered by the

computerised system, most practitioners and professors showed positive responses to the constitution, statutes, statutory instruments, regulations, and treaties. Conversely, local government rules, administrative regulations, and notifications, attracted comparatively negative reactions from a lot of the respondents.

The relation between items considered as desirable kinds of statutory laws is significantly different between the two groups.

(practitioners : $\chi^2(7)=67.298, P<.0001$
professors : $\chi^2(7)=64.190, P<.0001$)

The 23 experienced respondents showed similar results to those explained above.

b). Kind and scope of Supreme Court case law

Due to the importance of the Supreme Court case law under the Korean legal system, it can easily be assured that they should form an essential part of the computerised system.

There are several printed primary sources for the Supreme Court case law, which have different coverage and contents. Most respondents (64.70%) required that all Supreme Court case law should be included in the system, but many practitioners (16 among 42 practitioners) felt that case law reported in the Judicial Gazette was sufficient. That the professors' need for all Supreme Court case law was stronger than the practitioners' need, might be closely related to the difficulties of professors in accessing them.

Among the experienced respondents, 15 persons out of 23 had the same attitude as the trend in general.

The relation between the two groups was very significantly different ($\chi^2(2)=14.970$, $P<.001$).

< TABLE 7-29 > - Scope of the Supreme Court case law to be covered by the system

	pract.	prof.	total

case laws reported in the Collection of Supreme Court case laws	6	6	12(14.12%)
case laws reported in the Judicial Gazette	16	2	18(21.18%)
all Supreme Court laws	20	35	55(64.70%)

* Frequency missing : 3

Each of the three possible types of content of case law, that is, title and major point of case, full-text of case reported, full-text of judgment, showed quite high support.

The need for full-text was very high (59.30), even though it could be divided into two groups, one for the full-text of the judgment record (32.56%), the other for the whole text in the Judicial Gazette and the Collection of Supreme court case laws (26.74%). 18 experienced respondents preferred to have the full-text of case laws.

< TABLE 7-30 > - Type of Supreme Court case law to be covered in the system

	pract.	prof.	total

title and major point of case law	17	18	35(40.70%)
whole text in J G or Collection	16	7	23(26.74%)
full-text of judgment record	11	17	28(32.56%)

* Frequency missing : 1

The relation between the two groups showed no significant difference ($\chi^2(3)=5.825$, $P>.05$).

Concerning the time span of Supreme Court case law covered by the computerised system, more than half the respondents (47 persons, 54.02%) felt that case law since 1948, the year of the Formation of Government, was sufficient for their legal research. More comprehensive coverage of case law since 1910 (The occupation of Japan) was required by a lot of respondents (33 persons, 37.93%), and it is very significant that current research is closely related to the legal system before 1945. Among all the respondents, only 7 persons responded that case law of the last 10 years should be covered by the system.

The results from the experienced respondents are similar to the general trend.

4). Proper agency to take charge of system development

At present, two computerised legal information systems are established in Korea, one is for statutory law developed by the Government Computer Centre in cooperation with the Government Legislation Agency, and the other is for case law developed by the Supreme Court.

Regarding the question of who should undertake the systemisation of legal information, "Supreme Court" (35 persons, 41.67%) and "establishment of government-sponsored new institution" (31 persons, 36.90%) attracted a similar response. Preference for the Supreme Court might be caused by the fact that a large quantity of case law is produced by the Supreme Court, and the systemisation of case law is much more urgent compared to other information. Furthermore, an information system for case law is being developed by the Supreme Court at present.

On the other hand, the need for the establishment of a new government-sponsored institution might be the result of the importance with which systemisation is viewed, and of the Korean situation where a new institution initiated by the government could be in a better position to obtain financial support and to implement that system.

Conversely, the experienced respondents supported the establishment of a government-sponsored new institution rather than the Supreme Court.

< TABLE 7-31 > - Proper agency to take charge of the systemisation

	pract.	prof.	total
Supreme Court	21	14	35(41.67%)
commercial bodies	7	5	12(14.29%)
est. of government-sponsored new institution	13	18	31(36.90%)
est. of institution under univ.	3	3	6(7.14%)

5). Desirable system mode, cost system, expected users, and training for efficient use of it

Establishment of a fee-based system was desired by most respondents (80 persons, 94.12%), among them 41 persons supporting "users' fees" and 39 persons supporting "institutions' budgets".

Charging fees to the institution for the use of the system by judges, prosecutors, and by professors in national universities, would result in an expense to the government. In law schools, the problem remains of who to charge fees, law schools, law departments or the libraries. In the case of attorneys, fees could be passed on to the clients. All the experienced respondents except 1 person who responded to "free of charge", approved of the

fee-based system (10 for users' fee and 10 for institutions' budgets).

< TABLE 7-32 > - Desirable cost system

	practitioners	professors	total
users' fee	20	21	41(48.24%)
institutions' budgets	22	17	39(45.88%)
free of charge	1	4	5(5.88%)

`Right to know' and `Freedom of information' are basic civil rights in democratic society, and the legal information system performs its part by allowing easy access to databases and enabling the required information to be obtained efficiently.

Incidentally, the systems developed in Korea, are constructed and used by government bodies for the performance of their duties. Suggestions for a more desirable computerised system are quite different from the present situation. Namely, only a few people (16 persons, 18.18%) approved of limited use by special groups and individuals, and most of the respondents supported the system being open to the public (38 persons, 41.18%) or to subscribers (34 persons, 38.64%). The experienced respondents showed similar attitudes to each item.

The system modes, end-user system or mid-user system, are similarly approved of, 46 persons (52.87%) preferred the end-user system, and 41 persons (47.13%) the mid-user system. Preference of the mid-user system by a lot of respondents may be caused from fear of or hesitation about computer use. It could be quite closely related to the lack of instruction on legal research and information use. The results from the experienced respondents was also similar to the general trend.

For the efficient use of whatever computerised system is constructed, most respondents required training to be a part of legal education (59 persons, 70.24%), and 25 persons (29.76%) suggested training by special lectures. The experienced respondents showed similar results.

Regarding the questions outlined above, there is no significant difference between the attitudes of the two groups.

CHAPTER 8 COMPUTERISED LEGAL INFORMATION SYSTEM IN GENERAL

8.1. General description of CLIS

It is in the interest of users of legal information services that the information is as complete and fast as the user desires in a given situation. Therefore, automated research services should have the widest possible distribution.

Information technology can be used in law in three ways (Vandenberghe, 1989) ;

- i). For administrative purposes
- ii). For the purpose of providing better access to legal information.
- iii). For the purpose of assisting in the making of legal policy, by analysing and modifying legal information and decision structures.

In the law, rules are applied to facts. Rules and facts are data, which can be processed by machine. The object of the application of technology in law is the interaction between law and the gathering, storage, distribution, and reporting of data by making use of computer and telecommunication technology.

A computerised legal information system is a database system for legal data. A database system is a computerised record-keeping system, whose overall purpose is to maintain information and to make that information available on demand. So, it is regarded as a kind of electronic filing cabinet and as a repository for a collection of computerised data files (Date, 1986).

A database is defined as a collection of information held on a

computer in such a way that specific items of information can be identified and retrieved, usually using online terminals (Lloyd, 1986), or any collection of information in machine-readable form made searchable on a computer (Tenopir and Lundeen, 1988). It consists of four components, that is, data, hardware, software, and user, among them the data and user determine the characteristics of each database system.

8.1.1. Definition and elements of CLIS

An information retrieval system is a sort of information system. Even though the definitions of information systems vary according to the context in which they are viewed, they are commonly used as systems to store items of information that need to be processed, searched, retrieved, and disseminated to various user groups (Salton and McGill, 1983). So, it can be said that the information system functions as a bridge between editor (sender) and user (receiver).

Any system that is designed to facilitate literature searching activity may legitimately be called an information retrieval system (Lancaster, 1979). Information retrieval, synonymous with literature searching and document retrieval, is the process of searching for relevant documents using given terminology, in order to identify those documents which deal with a particular subject.

Information retrieval is divided into two types, fact retrieval and interest retrieval (Bing, 1984a). Fact retrieval is a search for facts: a specified type of information (names, numbers, volumes) or a certain document. In fact retrieval, the relevance assessment is absolute. There is only one correct response, and this is independent of the user making the search. Interest retrieval, on the other hand, is searching for references or identification of documents which discuss or explain a certain problem. It is more complex than fact retrieval, and the relevance

assessment is relative to the user. Legal information retrieval for solving legal problems is a typical example of interest retrieval.

An information retrieval system in law is called a legal database system, computerised legal information system (CLIS), or computer assisted legal research (CALR) system. A legal database is defined as a database containing primarily legal information (such as laws, regulations, court decisions or legal literature) or references to such information (Lloyd, 1986). In the literature on CLIS, the definition of a "system" usually pivots on a "provider of a service"; a centre, a publisher or some organisation. Thus, it is usual to describe LEXIS, WESTLAW, etc. as systems (Bing, 1984a).

The Council of Europe (1983) designated it as the "Computerised Legal Information Service" and defined it as a service providing information by automated means on legislation, court decisions, and legal literature. According to this definition, there are several elements constituting CLIS. One is a service authority providing information on legal documents, whether it is operated by the state or by private institutions. The other is information which is provided by automated means.

Besides these two elements, the data and users of CLIS differentiate it from other database system. Data included in CLIS usually is composed of three kinds, legislation, court decisions, and legal literature. Even though three kinds of information are listed, it is not required that all of them have to be covered by a computerised legal information service.

User, normally, means the party who interacts with the system via the on-line terminal, although sometimes the application programmer and database administrator are also included in the user category (Date, 1986). A person or institution can be a user

who directly seeks the service mentioned above. It is of no concern whether the user acts on his own behalf, or as an intermediary on behalf of a third party who will eventually use the information. In the latter case, the third party is not considered as a user, because the interrogations are performed by the intermediary.

8.1.2. Development and current trend of CLIS

Computer technology has been applied in the practice of law. One of these is automated legal research for providing better access to legal information in several areas. In the 1970s, the legal professions' primary concern with automation was with the CLIS system. CLIS was constructed by the application of computer capabilities, and by the matching of computer and existing manual legal information tools and the information needs of legal professionals.

Since the birth of the first CLIS, by Horthy in 1960 at the University of Pittsburgh, the system has continued development, and the amount of use has increased due to developments in the legal system or the legal information environment (Larson, 1980). Despite the development of computer technology, systems today are basically identical to Horthy's original design, with major differences in the goals of search and in the iterative process. That is, Horthy's batch system for fact retrieval can be compared with today's on-line system for interest retrieval (Bing, 1987b; Skelly, 1984).

There are two trends in legal information environment: both the increasing costs of law books, library space, and salaries, and the decreasing costs of CLIS affect the usage of CLIS directly.

Further, the tendencies inherent in the legal system are facilitating factors for the use of CLIS ; The training in law research systems offered by major law schools, and a significant

increase in major lawsuits with their avalanche of documents entailing extensive and detailed research.

The following proposals for CLIS suggested by Larson and Williams (1980) have been realised today ;

- a). The number of files will increase, the depth of the files will increase, retrospective material will be entered into the database, and material will be captured at the source.
- b). Improvement will be made in command languages, system features, terminals and communications. Advancement will be made in system design that will facilitate retrieval on concepts, not just words.
- c). The use of research specialist as intermediaries between the systems and the attorney requestors will increase.
- d). Systems will be made available through other networks.

CLIS is divided into two groups based on the developmental stage, first generation systems and second generation systems (Ebersole, 1980). First generation systems were made in 1980, emphasising the development of techniques in the hard and soft sciences that work to be applied to the law. Second generation system were made after that time, stressing a greater effect on legal research and the legal profession than do first generation systems.

Today, there are much development in the law field. To improve information retrieval techniques, new interfaces, search methods, thesauri, etc., as well as hypertext and CD-ROM have been developed. Hypertext system is the latest. This is a management tool for creating and for linking the contents of documents (Agosti, et al., 1989). Furthermore, for efficient information retrieval, the combination of this hypertext implementation with CD-ROM is desired (Sharman, 1988).

8.1.3. Kind of CLIS

Based on several standards, CLIS can be classified in various ways.

- a). Based on the main body who runs the CLIS (Goedan, 1986).
 - 1st stage ; Legal Academics (ex. Pittsburgh Project by Horty in the 1950s)
 - 2nd stage ; Sponsored by government and available only to officials (ex. JURIS, ITALGIURE, CELEX, 1960-early 1970s)
 - 3rd stage ; Initiative of associations of professionals (late 1960s-early 1970s)
 - 4th stage ; Commitment of large publishing houses

- b). Based on the developmental stages (Svoboda, 1981c).
 - i). Experimental systems concerned purely with research
 - ii). Experimental systems aiming at becoming operational (at present, at the research stage)
 - iii). Development systems (semi-operational)
 - iv). Fully operational systems

- c). Based on the body who has developed and operated the system.
 - i). CLIS supported by subsidy
 - ii). Commercial CLIS

In the U.S., the two giant commercial enterprises have become far more important than the government-run CLIS. In Europe, most of the systems are operated, or financed by government or government affiliates entirely or partly, or are run by associations of professionals. Commercial organisations played little or not took part in the development of CLIS in Europe.

- d). Based on the users
 - i). End-user system
 - ii). Mid-user system

Mid-users mean the intermediaries and information brokers to whom legal research has been delegated. They continue to be important channels for accessing legal databases, making them available to legal professionals. In general, intermediaries are familiar with the nature of the system, and provide and assist the user in translating his request into a form most suitable for the system to handle (Becker and Hayes, 1967). So, it is generally claimed that the search by intermediary is more efficient than by end-users.

However, in the law field, the search by end-user is considered as a more successful mode than by mid-user (Lloyd, 1986). This trend may be derived from the law-related reasons and system-related reasons mentioned in Ch. 6.1.2 and Ch. 8.3.5.

- e). Based on the search mode
 - i). Free-text / Full-text system
 - ii). Controlled vocabulary system
 - iii). Combining free-text searching with controlled vocabularies.

In the Harrod's Librarians' Glossary (Prytherch, 1987), full-text searching is defined as "online searching in which the whole of the source documents are on the record and can be retrieved in full if possible". Free text searching, on the other hand, is defined as "an indexing/information retrieval system that uses actual words of the text as its indexing words, and not recommended terms from a thesaurus". Since free-text and controlled vocabulary searching have both advantages or disadvantages, a combination of them is regarded as the best search mode, and is recommended as a pragmatic compromise or hybrid vocabulary.

Tenopir (1984) sums up that pragmatic compromise is a combination of the ability to do full-text/free-text retrieval with the addition of words from small or abbreviated controlled

vocabularies, and hybrid vocabulary is a combination of generic searching by a broad controlled vocabulary with specific searching by natural language.

Increasingly, full-text system developers are recognizing that the end-users should be primary users of full-text databases, and full-text databases are of particular interest to the end-users. Fortunately, economic factors such that storage capacity is becoming cheaper than intellectual indexing makes it easier to progress in the direction of full-text systems.

The Cranfield II results supported the efficacy of full-text indexing, in that the single terms were content words chosen from document texts (as opposed to terms assigned by subject analysts or indexers). One could conclude that the Cranfield II and SMART research results supported the effectiveness of full-text indexing for retrieval purposes. This conclusion was strengthened by the first evaluation of a full-text (batch) system for legal research, reported in 1968 (Ebersole, 1980).

Full-text databases are beginning to come closer to true electronic publications and to solve the problems of document delivery and accessibility (Tenopir, 1984)

The Canadian Law Information Council (CLIC, 1988/1989) also explained special kinds of CLIS with special purposes, i.e., practice CLIS and free CLIS. A practice database is a small sample of an existing database. Since a practice database has fewer documents and a low hourly rate, searches are quick and inexpensive to perform. It is helpful to develop search skills. A free database is specially constructed for students.

8.1.4. Nature and function of CLIS

8.1.4.1. Nature of CLIS

Both printed materials and legal databases are the same thing in terms of research tools, and thus they have to co-exist each other and to be used for efficient research. Legal databases are accessed to support the traditional manual search, and do not replace the printed sources because of the reasons which are mentioned in 8.1.5.1 . For successful use, legal skill and experience are required for both cases.

A legal database is a potential tool used by legal professionals for tackling the information crisis in law and for disseminating legal information to anyone who requires it. It cannot replace the lawyers' legal skill, experience, and the critical function of the lawyer, but makes the lawyers' work easier (Lloyd, 1986). Due to quick and comprehensive searches, computer research can offer fast results, when the existence of law is doubtful or unsettled, or the law is not easily discovered by manual searching (O'Connell, 1984).

8.1.4.2. Functions of CLIS

CLIS functions in society to make law transparent and to eliminate the privileged position of those who have the chance and possess the tools for becoming acquainted with it (International Bureau of Informatics, 1979).

CLIS can be adjusted to the ordinary legal research process. This is because the basis of CLIS at present is the application of the modern computer's ability to sort words efficiently. This technological capacity to arrange collections of phrases or single words in neat array (alphabetic sequences), determines the nature of computerised finding aids.

Peculiarities of legal documentation, especially the considerable volume of text, require long terminal connection time, and thus require to specify the topic exactly and to avoid approximation in query formulation. It has become feasible to apply this capacity, because of advances in time-sharing, communication technology, and terminal device technology, all of which resulted in dramatically decreasing costs (Ebersole, 1980).

There are enormous benefits in the use of CLIS (Iosipescu and Yogis, 1981), which lead to three functions, ie., search function, relevance function, and source function (Bing, 1987b). In order to perform the three functions efficiently, it is quite common for a law database to include three types of documents; the authentic text supporting source function, an abstract for the relevance function, and indexes for the search function.

The necessity for the inclusion of various kinds of documents was verified by experiments at the Norwegian Research Center for Computers and Law, which showed that abstracts alone have the lowest performance and the combination of abstracts and authentic text has the highest performance (Bing, 1987b).

CLIS can be applied to all kinds of legal information, among them case law, statutory law, and legal literature are usually stored and have advantages in being stored in the system.

CLIS makes it possible to organise information included in case law, and it has such powers as follows (Slade and Gray, 1984) ;

- a). Any configuration of facts
- b). Any mix of legal concepts, status and factual events or forms of behaviour.
- c). Cases where a particular mix of precedents were referred to in an opinion or were cited in an argument
- d). A judicial biography

In statutory law, on the other hand, the handling of information is more difficult than in case law because of distinctive linguistic form and an absence of indexing systems. However, CLIS is very useful for the searching of statutory material. It makes it possible to capture the perpetual addition, amendment and deletion of statutes, and to focus attention on chronology and the sequence of ideas (Slade and Gray, 1984).

A chronological account with analysis would have been useful, because many changes have taken place from early days. The development of hypertext systems makes moving around the text and jumping from one text to another text possible. Therefore, requirements for the history of a specific act and for a relating act could be achieved fairly easily.

8.1.5. Effect of CLIS

The effects of computerisation are to provide new kinds of access to law, to enhance traditional access, to provide critical support to the research, and to improve the quality of the professions' research habits (Iosipescu and Yogis, 1981).

Since the development of CLIS, legal information can be easily accessed and searched, even if the problem of cost remains. The cost in this sense means the maintenance cost and variable cost which were described in Ch. 8.1.5.5.

As a consequence of the popularisation of the use of CLIS, two trends have appeared (Lloyd, 1986) ; one is the decreasing gap between specialist lawyers and general practitioners which is caused by accessibility of CLIS, and the other is the increasing gap between the wealthy practices and the less wealthy practices which is caused by the cost.

8.1.5.1. Comparison between manual and CLIS searches

As finding tools for legal information, CLIS and legal books have common features. Differences between CLIS and legal books include the availability of index terms and costs (Kunz, 1986).

Information sources in printed and computerised form are not in a competitive relationship but in a complementary relationship to each other. Therefore, CLIS is considered as not a replacement for legal books, but an addition to them, due to those reasons (Goedan, 1986) ;

a). The quantity of data available from computer cannot compete with that available in print. Loose-leaf services that are highly specialised and very well organised will survive, because the use of them at the lawyer's desk can be more convenient and quicker than use of a CLIS.

b). To a large extent, databases are used as finders of the printed material in order to point out citations to sources which are then read in their printed version.

Actually, there are many cases when a manual search is more efficient than a computerised search (Kunz, 1986; Larson and Williams, 1980).

Goedan (1986) analysed the efficiency of manual and CLIS searching based on three stages of legal research. That is, in a browsing stage, it is more efficient to use manual tools before using CLIS. In an elaborating stage, precise questions are put to the CLIS in order to get a detailed answer. In an updating stage, CLIS is available to fill the gap between the printed material found in the library and the information already available.

According to the survey on the comparison of automated and manual legal research (Iosipescu and Yogis, 1981), the following results emerged;

- i). Time ; significant time-savings were achieved by using automation.
- ii). Relevance ; the manual research method can find fewer relevant cases than the automated method.
- iii). Usefulness ; the manual method can find more useful cases than the automated method.
- iv). Time consuming to peruse the irrelevant information ; the computer pulls up volumes of irrelevant materials that require vast amounts of time to peruse.

8.1.5.2. Factors affecting the use of CLIS

A lawyer's livelihood depends to a large extent on the ability to solve legal problems in a timely and cost-effective manner. In this sense, the computer should be applied widely to the professional's work, and CLIS should be adopted as a finding tool for relevant information to the legal problems faced.

A database does not exist as a curiosity but as a tool to make the lawyer's work easier (Lloyd, 1986). The lawyer who contemplates using a legal database does so in order to render legal advice of higher quality or to render legal advice more quickly or more profitably, if prerequisite conditions were satisfied by the user (Kunz, 1986; Ebersole, 1980).

Even though the use of CLIS gives many advantages to the legal professionals, many of them tend to be negative towards it. Their reaction to and acceptance of CLIS are influenced by their information seeking behaviour, their image of computers and unsuccessful experiences (Ellis, 1975; O'Connell, 1984).

There is a study on the changing pattern of users' behaviour in relation to CLIS (Ellis, 1975). During the first uncertainty phase the user overcomes hesitancy and anxiety, during the second insight phase the user begins to see underlying principles and

decides how best to use it for his special needs. During the last incorporation phase its use becomes a part of the user's information seeking behaviour.

Factors affecting the use of CLIS are summarised as three elements (Ebersole, 1980; Lloyd, 1986).

- a). Time saving of legal research
- b). Reduced cost of legal research
- c). Increased quality of legal research

In addition, other factors relating to the operation of the system itself, such as up-time availability, response time, and terminal and network reliability affect the use of a CLIS system (Ebersole, 1980).

8.1.5.3. Advantages of CLIS

CLIS makes legal information available for searching comprehensively and promptly, and information, especially current information, which is not included in printed form may be available on a computerised database. In addition, it eliminates the need to use topical and other indexes in primary or secondary sources, and it makes research more productive.

Characteristics derived from the computer's main function, provide many benefits in indexing and in searching (Kunz, 1986; Pausley, 1990). Any words in the documents can be indexed in the system comprehensively and thus there is no loss of information due to indexer bias or error. All of them can be used as search terms.

Everything in the system which matches the query is retrieved. Retrieval is based on the terms used by the searcher, who can use words simply or combine terms flexibly to create unique index terms to meet his research needs. The computer technique can search a database speedily and can highlight new and changing

terms immediately. The information in the computer is always available, except when the computer is down or available terminals are already in use.

In practice, the following cases show where the searches by CLIS are so valuable (Slade and Gray, 1984).

- a). Retrieving all cases which have interpreted any particular statute or a section or subsection of that statute.
- b). Retrieving all statutes or statutory instruments which contain some relevant concept or fact.
- c). Retrieving statutory instruments made under the authority of some enabling statute.
- d). Retrieving the statute or statutory instrument as currently in force.

8.1.5.4. Disadvantages of CLIS

The computer is a machine. The performance of it is influenced by the ability of the system designer and of users as well as by characteristics inherent in the computer. There are disadvantages to CLIS derived from the reasons above.

Kunz (1986) illustrated disadvantages of CLIS as follows ;

- a). The literalness of the computer
The computer has no imagination and flexibility, so it cannot have cognisance of misspelling or of the meaning of concepts.
- b). Imprecision of language
The computer cannot recognise synonyms of search terms.
- c). The computer does not give the same search guidance that traditional sources do. So, cross-references from a general term to more specific terms are not provided by CLIS.

According to the technological development of the hypertext system, a group of interrelated texts can be read and explored in

a non-linear way (Jones, 1990). Therefore, the third problem mentioned above could be easily solved. Also, the first and second problems could be eased by developments in the "intelligence" of computers.

Pausley (1990) explained the disadvantages of CLIS in more detail centering on the search results ;

- a). Good results require searcher expertise both in framing the query, and in the techniques of executing the computer search itself.
- b). Many irrelevant documents are retrieved, either because the search terms have changed in meaning over time or because the same word can have multiple meanings.
- c). Sometimes inappropriate results are returned when the order of terms is not specified.
- d). The retrieval may be excessive unless the proximity relaters are selected with care.
- e). The author of the text may not use the terms selected for the search. Therefore, there are differences between the expressions of judges and the language chosen by users to describe their query.

8.1.5.5. Problems in using CLIS and solutions

The disadvantages of CLIS create problems in using it, such as cost, education, user resistance and selection of material for the database. They act as barriers to the use of CLIS (Larson, and Williams, 1980). Among them, three problems, except for the cost, can be easily solved if the opportunity to learn how to use CLIS is given. However, the problem of cost is the most critical one.

The problem of cost arises with the users' participation in CLIS and in the process of its operation. Costs are broadly divided into two kinds, one is maintenance costs, the other one is variable costs. Maintenance costs are associated with maintaining

the system, and include subscription fees, salaries of staff responsible for filing or categorising material, costs for furnishing the library and renting space for it, costs of terminal, microform readers or other acquired equipment. Variable costs are associated with any single case of the user and are related to the work on each case, and vary from one case to another (Bing, 1984a).

In general, costs are charged by the government, professional organisation, or by users themselves or the user's institution. In any case, a positive attitude by top management is crucial to successful implementation.

Three plans are suggested as partial solutions to the cost problems (Larson and Williams, 1980).

- a). Reducing the subscription fees and use charges
- b). Resource sharing
- c). Use of a well-trained, experienced research specialist as an intermediary

Today, the CLIS specialist is used either to conduct research for those who are unable or unwilling to do so or to provide assistance for those who wish to become more efficient. For these activities, such qualification as the acquisition of considerable experience in searching, intelligence, conversance with the law and the ability to work with people are required.

8.2. Basic elements of CLIS

The more the amount and kind of legal sources increase, the more the searches for appropriate information become complicated, and thus the more elaborate finding tools are required. Also, the fast-changing nature of our legal sources requires supplementation without which law books are obsolete within a short time. Therefore, the finding tools and supplementation are basic

elements for legal research, and without them legal research is unreliable.

The task of a database designer is not to select information but to make it accessible to the user through various modes. In order to guarantee a high quality retrieval, the nature and effectiveness of the retrieval system are important, and thus the system should be designed in consideration of the users' behavioral characteristics and intellectual qualities (Slade and Gray, 1984).

8.2.1. Principles of CLIS

The main objective of CLIS is to be accessed efficiently by users and for the users to be satisfied with the search result. For this, CLIS should cover comprehensive and complete data based on authoritative sources, be available to and be accessed easily by users, be adaptable to the needs of users, and be compatible with other legal information systems.

The Council of Europe (1983) described general principles concerning the protection of users of computerised legal information services.

8.2.2. Conditions for an efficient system

In order to construct a desirable system which matches the potential users' needs exactly, the examination of the juristic methods, the general problem-solving behaviour of legal specialists, and the special character of legal documents should all be taken account of. The requirements of legal professionals are derived from the special structure of legally relevant documents and from users' needs (Svoboda, 1981B).

Due to the following reasons, IBI recommended that a legal

information system is desired to be created and controlled by the state (International Bureau of Informatics, 1979) ;

- i). Legal data derives from public authorities. Therefore, they are responsible for ensuring that legal data is correct and complete.
- ii). The continuity and updating of the system cannot be left to the whims of any private decision-makers.
- iii). Overall information must be guaranteed, not limited to particular spheres or made to measure to suit a particular category of user.
- iv). Most important of all is the chief purpose of a legal informatics system, which is to spread knowledge of the law widely and effectively.

IBI's recommendation may be applied to the countries where the CLIS is in a developing stage with unique characteristics in legal system and with government policies. However, considering the success of LEXIS in developing a global system and the dominance of market ideology in the West, the proposition of IBI would be highly contentious. The government-based system may be an obstacle to development.

8.2.2.1. Access to legal source text

It is in the interest of users of legal information services that the information available is as complete as the user desires in a given situation.

Official agencies are supposed to guarantee completeness, accuracy and objectivity, and promptness of information sources, because they normally create information through the operation of their function and produce the sources as a part of their work. Therefore, the government should make available all kinds of legal data on the database based on official sources, and facilitate access to CLIS for legal source texts. Legal data, cases and

legislation, should be offered as comprehensively and completely as possible.

In contrast to government agencies, commercial enterprises might edit the raw data based on their editorial policy and commercial purposes.

8.2.2.2. Access to computerised service

Legal information included in CLIS is closely related to civil rights and is the basis for the legal professionals' work. So, it should be open to all interested parties, not to a restricted category of users. However, to date, lots of systems are strongly oriented towards one single user-group.

CLIS should be accessed easily by the people who need to use it, whether it is established by government agencies or private bodies. Users should have equal access to the service. In any case, unfair discrimination should be avoided. The Government should endeavour to encourage access by people and institutions to the information held by operational computerised legal information services. In other words, the government has to ensure that information retrieval systems actually provide all of the possible benefits (Skelly, 1984).

8.2.2.3. Participation of users

The principal role of a CLIS is to be an efficient research tool which creates better and quicker results than the conventional means. This can be achieved by the construction and maintenance of the system with consideration to the potential and actual users' needs in the various stages of the system design and in the operation of it.

It is very important for the lawyer and the system designer to communicate with each other in the initial stages, because legal professionals can often not express exactly to the computer industry what they need, and computer industries can not explain exactly what they can do for the legal profession (Meldman, 1969).

8.2.2.4. Coverage

Coverage and contents of a database are a primary reason for choosing it, for instance, the type of database, areas of law covered, years of the cases or statutes, jurisdictional coverage of the database, and whether citations to reported cases are included in the database, determine the selection of an appropriate system (CLIC, 1988/1989).

In case law, coverage of the higher court decisions, as well as the lower court decisions, and published court decisions as well as unpublished decisions are necessary for comprehensive searching. With legislation, CLIS should assist in accessing the bulk of statutory instruments, as well as statutes, and CLIS should quickly provide information on changes in laws and regulations. In addition, CLIS should contain not only references to amendments but also the full-text in force, and it should provide information about the various stages of legislation, if possible.

The government should endeavour to ensure or to encourage the creation of databases to cover those areas of information, fields of law and jurisdictions not otherwise provided for.

If the documents stored in the system are parts of whole documents created, the selection of them should be sufficiently representative and should be carried out according to the clearly defined standards. For statutory and case law, jurisdiction or region, category of law, field of law, and other elements such as

whether or not reported, can be used as criteria for selection.

The objectivity of the source should be recognised as a very important element for information source. For the objectivity of the source, the best way is that the author selects the relevant document, for example, in the German JURIS, selection of court decisions is done by the court (Goedan, 1986).

8.2.2.5. Cooperation among systems

It would be in the interest of the user to be able to get the fullest possible information with the least possible obstacles in existing systems. There is the possibility of integrating databases via networks, uniform retrieval methods, user-friendly systems and equipment.

It is very desirable to develop common technical standards.

As criteria for designing a interface for lawyers, Wilson (1991) suggested such elements as naturalness, consistency, non-redundancy, supportiveness, and flexibility. Legal information systems should endeavour to comply with common technical standards in order to facilitate co-operation, exchanges of information and the interrogation of data banks via networks.

In addition to these conditions, the Council of Europe explained about the relationship between the legal information service and the user, which should be regulated by rules provided in a contract, in standard contract clauses or in regulations. These rules should be made available in written form to a user at his request (Council of Europe, 1983).

8.3. Operation of CLIS

Computerisation of legal data, if properly organised, can supply the searcher with the full-text of materials, both current and

retrospective, immediate updating of texts, and direct access to any part of a text, without the intervention of the indexing process (Bull, 1980).

An information retrieval system consists of two parts; the updating and the retrieval process (Bing, 1984a).

The updating is composed of two subsystems, one is preparing data (text) for retrieval by adding value manually or automatically, and the other is storing of data by the systemisation of it for fast and efficient retrieval. For this process, database creation software is required, and is used for turning raw data into a working database. Such functions as facilitating data entry, adding indexing terms to data, and creating files, indexes, concordances and directories are done in this process in order to aid the computer in speedily processing future requests (Maggs and Sprowl, 1987).

Meanwhile, the retrieval process, the process to retrieve documents required by the user, is conducted by database access software. It makes it possible for the database user to interact with the system, and consists of three elements, such as transformation of the problem to a search request, retrieval itself and presentation of the result.

CLIS is a computerised system for the retrieval of legal text, identifying documents which discuss or explain certain legal matters. Therefore, it can be characterised as a document retrieval, full-text retrieval, and interest retrieval system (Bing, 1984a). It makes the user retrieve the required information in an interactive fashion.

8.3.1. Data input and updating

The efficiency of CLIS is determined by the quality, accuracy, and

comprehensiveness of the database. Legal source texts included in the system are not only useful but even crucial to the quality of the professionals' work, because the complete texts can be an instrument to support the rule of law, allow equal access to the law, and informed debates of issues of a legal nature (Council of Europe, 1983).

In principle, CLIS should be able to provide all required legal materials. The extent and quality of a database in computerised system are very important. It is concerned with the following factors ; the field of law covered, the type of data, the period of time covered, the updating system, the criteria for the choice of data, the form in which the data is available (full-text or abstract), and the source (origin) of data (Council of Europe, 1983).

Legal data input in the system should cover up-to-date information, as well as retrospective information. Users are especially interested in the most current material, and thus the time span between origin and retrievability of documents is as short as possible. Two weeks in legislation, one month in case law, and one to three months in literature are regarded as a adequate time spans (Goedan, 1986). The question to what extent retrospective documentation is needed depends on the kind of sources in question. In the case of legislation, all documents in force should be included, and statutes no longer in force may also still be important.

8.3.1.1. Nature and kind of legal data

There are various views about the scope of input data in CLIS, but three kinds of legal data, that is, legislation, court decision, and legal literature are widely regarded as necessary data to be included.

The Council of Europe recommended in "General principles concerning the protection of users of CLIS " coverage of these three kinds of legal source text, in order for the protection of users (Council of Europe, 1983). Specifically, coverage of legislative data such as the legislation of regional and local authorities, regulations, draft legislation, repealed legislation, and court decisions with headnotes, references, annotations, and legal literature such as textbooks, commentaries and articles are desirable.

A legal database has several attributes derived from the characteristics of legal data (Nunn-Price, 1980) ;

- i). Its sheer size ; any legal database has to be very large indeed
- ii). Its rapid growth and high rate of change within that growth; The legal data is not static but is constantly changing because law is an integral part of society.
- iii). Its complexity and inter-relationships, reflected in the needs for links and cross-referencing ; Each piece of text exists not in isolation but in relation to other text. The legal areas seem not only to overlap but to actively interfere.

The third characteristic of legal data, the inter-relationship between areas of law, stands out remarkably in statutory law. As a law is relevant as long as it is in force, and sometimes relevant when it is no longer in force, the value of an old document should be evaluated by different criteria from other documents and should be organised systematically with consideration to the links between laws bearing the same attributes.

Updating the database offers little difficulty with respect to cases, although the problem with statutory and codified materials is much more difficult (Maggs, 1978). In contrast to case law which can be input and cumulated simply on the database, statutory

law should reflect the amendment and revision of law and maintain the current documents on the database, as well as the old ones.

8.3.1.2. Data analysis

The communication link between man and computer is really the link between the database and the human brain, not between the terminal and the eye. Therefore, the problems of subject analysis are inextricably interwoven with an understanding of how we think, how we conceive concepts, how we communicate them, how we record them, how we save them for future use, how we use them, and how we reuse them in unlimited permutations and combinations to synthesise or conceive new ones (Ebersole, 1980).

There are basic communication problems common to all information retrieval systems, that is, the problems of syntax and semantics, and the generic problem and view point (Perez, 1982). All of them are related to the words (language) which are the major access points for the efficient search of relevant documents.

The law is unique among professional disciplines in that its raw material consists of documents. The law is an arrangement of words in documents. Words are the material of the legal profession. Lawyers have a special relationship with words which play a larger role in their business life, so they are concerned with techniques for finding the appropriate documents and words (Tapper, 1982). Therefore, the word or language should be particularly emphasised in the legal database and CLIS should be designed to make the most of the word's characteristics in respect of input and retrieval (Goedan, 1986).

A legal database comprises of legal data which is composed of words in the text implying legal meaning. Either colloquial language or legal terminology included in the legal text is significant in the search for appropriate information. In general,

the language used in statutes and regulations is reasonably clear and to the point, in contrast to the words used in judicial decisions which often obscured by the judges' eloquence and lines of legal reasoning.

The users of CLIS by being tied to language and not to ideas, will retrieve a very precise set of documents on the facts, since factual words are much easier to retrieve than legal concepts which can be articulated in a variety of ways (Voges, 1988). The retrievability of a document is determined by its word content, and by the vocabulary and stylistic habits of the document's author (Sprowl, 1976).

8.3.1.3. Indexing

Indexing can be done intellectually by human or automatically by machine. The coordination of terms can be carried out at the time of indexing or searching.

The free text searching system mentioned in Ch. 8.1.3 adopts the postcoordinate indexing by which coordination of terms is done at the moment of searching (Foskett, 1982). The controlled vocabulary system, on the other hand, adopts precoordinate indexing by which terms are combined at the time of indexing a document, the combination of terms being shown in the entries (Prytherch, 1987).

In legal database systems, both human intellectual indexing and automatic free-text indexing are applied.

In human intellectual indexing, data included in CLIS is analysed and indexed by a human indexer. Descriptive words or phrases which are preordained by a thesaurus or subject authority list and stand for ideas and concepts within the field of law, are assigned by the indexer. The degree of accuracy depends on the knowledge of the indexer, because the description of the contents of an

individual document is based on the indexer's human judgment.

Free-text indexing is carried out automatically by computer. The computer creates an index of every word in every document in the database. Therefore, no human intelligence interposes its values and judgments between the searcher and the database, and no indexing errors and omissions, or limitations on the depth of indexing exists. Useless indexing can be avoided or minimised by the creation of a "stop word list" for the system.

Three attributes of CLIS, speed, objectivity and flexibility (Slayton, 1973) can be fulfilled by full-text indexing, and thus the success of retrieval seems to be viewed very satisfactorily by a growing number of users (Berul, 1976).

8.3.2. Data structure

All information systems comprise elements of data. The structure is made up in the order of fields, records, files, subsystem and system.

Legal documents are more highly structured than literature documents, which is due to the formal processes leading to the origin of legal documents. Because of their nature, legal documents have peculiarities different from others (Svoboda, 1981b). In a legal database, two types of fields either text fields or code fields, are very important in selecting the pertinent terms and the index keys (Maggs and Sprowl, 1987).

Documents are posted to an inverted file that indicates the location of every word in the text. This serves as the index of the system, and greatly facilitates its operation.

Every information system may face a dilemma between too much information offered and difficulty in finding the relevant information. In order to resolve the problem, additional headnotes

and segmentation are recommended (Goedan, 1986).

Segmentation is widely adopted in full-text CLIS as a focus for research. It identifies the inverted file posting as being from a particular part of the document, as with field or segment indicators. In case law, the name of the case, the name of the acting judge, the date of the decision, etc. correspond to this category (Dabney, 1986). Among the segment indicators, two structural characteristics, cross-references and dates, are specially emphasised both in statutory and case law. This is because the cross-references provide relevant information, and the dates determine the applicability of the law.

The record consists of a set of fields. The system identifies what kind of characters are to be found in each field, how long the field is, how many times such a field occurs in the record and how that field is located within the records (Townley, 1978). The structure of a record is affected by the nature of the record, the space available, and the manipulation and transformation to be made.

The files consists of a collection of records, and are grouped together for convenience in accessing the data elements. There are several types of files, including document files, user files, vocabulary term files and search formulation files.

8.3.3. The search

A database should be easy to use. If it is not, the lawyer wastes time and risks getting an incomplete answer. The predominant task of CLIS is assembling collections of documents related to each other in a simple, well-defined way, and helping a researcher find an individual document (Sprowl, 1976).

Users may access the system without a clear understanding of the formal contexts of a relevant document. They wish to have both the most valuable documents as well as every relevant document.

8.3.3.1. Search query and strategy

The most critical part of research, in fact, is not the use of the computer itself, but the formulation of a query. It is called a "search query" or "search request", which is the user-dependent translation process, the translation of a vague problem into the formalism of a search language. It guides the computer in locating and retrieving the proper set of records, and specifies which fields are to contain what pattern of words, phrases, or numbers.

The nature of a "search request" varies depending upon the nature of the records and fields that are searched. There are many studies about efficient searching of CLIS, for instance, the model for an efficient search (Silverstein, 1990), the steps to perform an efficient search (Canadian Law Information Council, 1988/1989), and the ways to save time and money (CLIC, 1988/1989).

8.3.3.2. Search mode

The indexing of legal data by human intellectual and automatic full-text methods brings about different search modes, full-text searching and controlled vocabulary searching.

The controlled vocabulary approach dates back to that "primitive era" when the primary means of information retrieval was a total reliance on physical collections and on document surrogates such as indexes, abstracts, tables of contents, etc. (Voges, 1988). In a controlled vocabulary system, the query formulation and processing operations are relatively simple. The level of performance depends upon such factors as the nature of the documents, the indexing scheme employed, the quality and depth of

the indexing, and the familiarity of the users with the index (Bing, 1987b). Searching by a controlled vocabulary approach has several advantages such as synonym control, hierarchical features and cross-references, and the potential of the introduction syntax (Perez, 1982; Tenopir, 1984).

However, controlled information which is processed based on original sources and created by a third person, may rarely be as complete as the original information. In addition, the creation and maintenance of a good controlled vocabulary takes considerable thought, consistent policy application, and investment in manpower in order to prevent the proliferation of inconsistent entries.

Therefore, a controlled vocabulary approach has many disadvantages (Perez, 1982; Tenopir, 1984).

- a). A controlled vocabulary may result in less precision and less specificity because it is derived from a subjective, opinionated, intuitive human document analysis and description which produces abstracted generalisations.
- b). To develop, use, and update a good controlled vocabulary requires skilled personnel which creates expense.
- c). Information analysis and availability requires much time.

One of the first full-text retrieval systems was designed for law (Bull, 1980). CLIS in its full-text form has a very rich natural language, provides high performance of searches, and thus makes the lawyers interested in the systems. The search for relevant documents is not based on indexes prepared manually, but on words and phrases as they occur within the text itself.

The benefits of automatic indexing (Perez, 1982) lead to a number of advantages in full-text searching, and allow the inexperienced searcher direct and rapid access to the system, allowing location of the relevant information easily (Tenopir, 1984; Larson and Williams, 1980).

In contrast to the controlled vocabulary system, searching by a full-text system depends heavily on the quality of the query formulation provided by the user and on the power to process algorithms (Dabney, 1986). In short, a full-text system can use infinite vocabularies as index terms and has the greatest possible specificity, and thus it can ensure the greatest potential recall performance. As a result, it makes for cost efficiency, retrieval power, and ease of use.

Full-text searching shifts the intellectual burden of indexing on to the searcher, and thus it may have many disadvantages (Perez, 1982; Larson and Williams, 1980). Due to the failure of the searcher to anticipate the words used in documents, either many irrelevant documents can be retrieved or some important cases can be missed. This may be derived from the problems of language, such as synonyms and syntax.

In order to cope with these problems, some resolutions such as the use of operators in query formulation and of output aids, and the application of thesauri, are suggested and will be described in a corresponding section (Perez, 1982; Voges, 1988; Tenopir, 1984).

In addition, simplified dedicated terminals with function keys and adoption of menu-driven systems or common command languages are insisted upon (Tenopir, 1984) as a method for improving search results. Simple systems were very useful at first stage. Nowadays, lawyers are more computer literate and many lawyers would rather have one terminal for all work and learn necessary search techniques.

Indexing may be expensive from the database producer's viewpoint, but full-text searching can be expensive to users in terms of computer time. The time required for full-text searching is three times more than for controlled vocabulary searching. (Tenopir, 1984).

Both of the two search modes, controlled vocabulary searching and full-text searching have advantages, as well as disadvantages, and thus they could not yield satisfactory search results alone.

In order to cope with the synonym problem and to improve the search results, a combination of a controlled vocabulary and a full-text system is recommended. This introduces a thesaurus as a retrieval aid, which is different from the thesaurus used for indexing the material included on the database. In this context, a thesaurus is a structure specifying synonym relations between words (Bing, 1988).

The combined system generally yields a better precision ratio and lower costs for searchers than does full-text searching alone, and it is verified in studies by Calkins Markey that the combined system yields the best results (Tenopir, 1984). The general trend toward combining full-text retrieval with small or abbreviated controlled vocabularies, in order to reap the benefits of both approaches, appears to be a pragmatic compromise. (Perez, 1982).

The use of a thesaurus in a full-text database has been most predominant in Europe, especially in Roman countries. According to the survey of legal databases in Europe (Lloyd, M., 1986), such systems as CEDIJ, CELEX, DG-JURA, ITALGIURE, JURIS, DATEV and SCHULTZ-DATALEX adopt it and use such devices as classification, cross-reference, keywords and summaries.

8.3.3.3. Search aids (operators)

The scanning of a problem may result in different search structures by different lawyers, according to their understanding of the problem. To be relevant, a document has to contain all the identified ideas. Ideas are identified by the use of connectors which are used to raise the ratio of recall and precision.

In order to assist the quality search, the following methods are used as a automated language enhancement; truncation (right and/or left), string searching, and ability to view a list of synonyms or to search for synonyms automatically. In addition, Boolean logic and positional logic are suggested for quality search (Voges, 1988; Slade and Gray, 1984).

Among the operators used, there is a priority sequence. LEXIS adopts the order of operators applied as follows: OR, W/n, Pre/n, NOT W/n, W/seg, Not W/seg, AND, AND NOT.

The semantic relation between ideas may be expressed by Boolean logic, and positional logic pinpoints the relative position of words and phrases in documents, that is, word proximity only, paragraph or words within a paragraph, and paragraph or sentence.

Some of the problems identified with full-text retrieval are caused by the inappropriate use of Boolean requests, not by the properties of text retrieval. The continuous development of existing methods, based on a deeper understanding of natural language texts and the advent of new methods, especially the expert systems and other types of knowledge-based systems, make text retrieval an exciting area of research and development (Bing, 1987b). For example, FLEXICON (Fast Legal Expert Information consultant), a new text-based intelligent system, develops a non-boolean search and retrieval mechanism, and provides assistance in refining the query and improving the search by relevance feedback (Gelbart and Smith, 1992).

8.3.4. Data output

The main goal of the information system must be the achievement of a high ratio of recall and precision. Due to the problems of synonyms and imprecise language, the problems of recall and precision are exacerbated in a full-text database. Recall

(relevance) and precision tend to be inversely related.

When a search is broadened to get better recall, precision tends to go down. Conversely, if a search is narrowed for better precision results, the recall ratio generally goes down (Perez, 1984). Relevance is such a subjective term that the judgment of relevance is influenced by such factors as the professional specialty, the traditional information aids available and personal value judgment (Svoboda, 1981c). Kinsock (1985) insisted from experience that the scannable number of cases should be no more than 35.

8.3.4.1. Output aids

Among the retrieval documents, users can select precise documents representing the meaning they require. This can be easily done by a display of the context in which the combined search terms appear in the document.

The display feature which is the appearance of the online text improves readability and esthetic consideration. For example, highlighting clearly distinguishes the search terms from the text displayed on the screen, makes for speedy judgment and can compensate for low precision ratio. It must be accompanied by easy movement between documents on the retrieved list and skipping within each document.

Some databases may have special characteristics that can be used to improve the relevance of the search output. In particular, the indexing of documents may be "weighted" to reflect the relative importance of the terms in relation to the subject discussed. The use of weighting is particularly useful in narrowing down a search. The weighted term searching makes it easier to produce a search output that is ranked in a sequence of probable interest to the requester (Lancaster, 1979). Therefore, ranking, weighting,

or document clustering are useful for searching relevant output.

KWIC adopted in LEXIS is also a useful output aid.

8.3.5. Interaction with the database

Lawyers are rarely happy to delegate their research, because their work is concerned with techniques for finding the appropriate documents and words.

They feel that if research is done through a intermediary, there are a number of obvious dangers, as follows (Tapper, 1982) ;

- a). The intermediary may misunderstand the problem either because the principal has failed to explain it properly, or because he has failed to follow the explanation correctly.
- b). In accepting the results obtained from the computer, the intermediary may err on the side of being comprehensive.
- c). The principal may himself have mis-formulated the problem.

Likewise, there is the danger of failure of communication and an over-cautious approach to the rejection of dubiously relevant material, even if the intermediary is professionally qualified and trained.

There is a another view that the legal professionals prefer to be a end-user. As the fundamental reasons, lower cost, enhanced productivity, more automated information management experience, and the lower average age of the legal professional population were illustrated (Berul and Lewis, 1986).

Even if many kinds of problems and dangers are likely in searching through an intermediary, lawyers often delegate the search to an intermediary. Especially, it is advised for an occasional user of online services to use an intermediary. Where an intermediary is employed, a higher level of searching skills is likely to be

developed and maintained. The need for standardisation which leads to increased convenience and efficiency, as well as for an integrated approach to information retrieval by the user, is not so critical (Clayton, 1987).

8.3.6. Management of system

The basic goals of the management of a legal information system are the guarantee of democracy, guarantee of efficiency, and democratic control over the management of the system (International Bureau of Informatics, 1979).

Therefore, the system must be developed and operated in order to maximise accessibility and availability.

CHAPTER 9 ANALYSIS OF KOREAN CLIS

Systems analysis is a foundation of and a prerequisite procedure for designing systems. It is a formal study and evaluation of existing activities and procedures, and a desirable system is designed based on the results of this study, which is suitable for the achievement of goals and is applicable to the present situation. Normally, system analysis is carried out by a formalised process, and Kindred (1980) described the 6 steps of systems analysis, especially for the electronic data processing system.

The Korean legal information systems, LIRES and SCS, both of which are the subject of investigation in this thesis, have already been developed following a general procedure of systems analysis. Therefore, it is not appropriate for the existing systems to be analysed based on the general theory of system analysis, but on the evaluative method for specific systems.

9.1. General description of the analysis of CLIS

CLIS is a sort of electronic data processing system which organises the flow of materials (or information), and it is characterised by the following determinant elements (Townley, 1978);

- a). the nature of information to be moved
- b). the principles identifying what is to be moved whence, whither, when
- c). the environment in which the movement is to take place

Systems analysis is the art of identifying all the procedures involved, the interactions by which the system works, and the elements in each interaction or the sub-systems involved in each interaction (Townley, 1978).

9.1.1. Evaluative Guidelines and Methods

Houghton (1985) asserted that three elements function as major factors in the online legal information spectrum, that is, categories of database, groups of information users, and types of information need.

There are many studies suggesting guidelines for the evaluation of CLIS applying various methods, such as a simple examination of the basic elements, and cost/benefit analysis (Larson and Williams, 1980; Strohofer, 1983; Council of Europe, 1976). In addition, systems are analysed according to the users' attitudes toward them. It is called "user study" when the users' needs and attitudes to the specific system are surveyed, and the condition of the system itself is evaluated based on the survey results. As described in 9.1.2, most studies on the analysis of existing legal information systems are carried out by user studies.

9.1.2. Review of the analysis of CLIS

- 1). Svoboda, W.R. (1981), Users of Legal Information systems in Europe, J. Schweitzer Verlag, Muenchen

This survey is composed of two parts, one is on the users attitudes (current and potential), the other is on the systems. A user survey was done in order to investigate the attitudes of users toward legal information systems. Interviewees amounted to 147 persons consisting of 3 groups, system designers, mid-users and end-users, and the view of the system and behaviour with regard to information sources, etc. were examined.

A systems survey was done of 10 systems which belonged to the development system (semi-operational) and fully operational systems. Questions applying to them consist of 10 items, such as historical background, scope of documentation, documentation

techniques, data processing, organisation and frequency of searches, documentation services, main end-user groups, main potential user groups, and financing systems.

2). Commission of the European Communities (1977), Technical study in Legal Information Retrieval

The Commission undertook a major study to design a complete legal database system. As a part of the study, a user survey was carried out to explore users' and non-users' attitudes to a number of legal databases and to the facilities they offered. The study also examined the working methods and information needs of lawyers.

3). Lloyd, M. (1986), Legal Databases in Europe ; User attitudes and Supplier strategies, North-Holland

The European Economic Community decided to commission a study of the legal database market in Europe titled "General access to legal databases/systems in Europe, among others those produced by public authorities in member States and by Community Institutions" in 1985.

72 interviews with the users and potential users of databases were carried out on 5 topics, i.e., working methods and information needs, the role of databases in the work, detailed comments on individual database system, supplier liaison and support services, and economics of database use. The findings of the study was discussed with the vendors of 8 databases selected in order to understand the vendors' view of the legal data base market.

Meanwhile, 21 databases in Europe were surveyed through face-to-face and telephone interviews, and by questionnaires. The aim of the survey was to collect some basic information on these databases, and then to construct some summary tables characterising the individual databases and profiling the legal

information retrieval market in Europe.

- 4). U. S. Department of Justice (1979), JURIS users requirement's analysis, Coopers and Lybrand

The aims of the survey were to provide the basis for later comparative systems analysis (JURIS, LEXIS, WESTLAW), and the guidance for judging the ability of each system. A survey was carried out on 25 current JURIS users, and questions such as legal research problems, information required, system usage patterns, system capabilities required, and level of satisfaction with the current system were examined.

- 5). U. S. Department of Justice (1979), Comparative Systems Analysis of JURIS, LEXIS and WESTLAW, Coopers and Lybrand.

The questions consisted of 5 areas, i.e., data sources and research tools, questions researched on CLIS, search frequency and approach, system friendliness, training and documentation, and most of them took a closed answer form (yes or no).

- 6). Iosipescu, M. & Yogis, J. (1981), A comparison of automated and manual legal research : a computer study, Canadian Law Information Council.

This study was done to compare manual and computer research techniques and the results of each for selected legal problems. For this research, 10 legal problems were selected, and they were searched by QUICK/LAW in order to examine the capabilities of the legal information system. The aims of the study were to compare the research approach in collecting, analysing and consolidating legal information, to compare the amount of time required, to compare the quality of the results obtained, and to compare the costs.

As such, the main purpose of this study is not the analysis of a certain system, but for the comparison of automated and manual research. So the findings of this study could be analogous to the effect of computer assisted legal research in general terms.

9.2. Overview of Korean GLIS

9.2.1. Developmental background

Although the importance of legal information cannot be ignored for legal research, and the situation of the information environment for legal practitioners could not be satisfied completely, there is little attempt to find out the present condition and problems in the environment. The more the amount of legal information has been increased exponentially by the rapid change of society, the more the degree of complexity of the legal information environment has increased, and thus the more the necessity for the systemisation of legal information has become critical.

It was in 1979 that the need for computerisation of legal information was realised and discussed for the first time in Korea. The Supreme Court perceived the necessity for a computerised system in order to store, process, and retrieve efficiently the huge amount of case law and began to develop the system.

In 1983, as a part of the master plan for the computerisation of government administration, the project on the automated retrieval of statutory law was adopted and developed in order to carry out legislative work efficiently.

9.2.1.1. System for Statutory law (LIRES)

Due to the complexity of governmental works, an innovative method was required for the efficiency of administration. As a result, a

master plan for the computerisation of government administration was set up in the Executive.

On 26, February 1983, the project on retrieval of statutory law was designated as part of the master plan. The major objectives of it were to facilitate the performance of legislative works efficiently, and to provide statutory information more accurately and quickly to government officials. As the main goals of the construction of the system and the major target users of the system were concerned with and limited to government agencies and staff in the Executive, it was attempted to design the system for those purposes.

The following year, the Task Force for the Development of Legal Information was instigated and was composed of staff belonging to the GLA (Government Legislative Agency) and the GCC (Government Computer Centre). Between January and June 1984, the Task Force started to study the existing software for information retrieval systems, such as STAIRS and UNIDAS, and to examine the existing CLIS, such as the Legal Information System in Japan, LEXIS and JURIS.

Due to the use of local language and the characteristics of legislative work, the Task Force decided to develop a program by adjusting it to the Korean statutory information system. Based on this study, the Task Force developed an original program which was a modification of the logical structure of the Japanese system and the physical structure of STAIRS.

From July 1984, the input of legislative data into the system on a small scale was begun for experimental purposes. The first meeting for the evaluation of the experimental system was soon held and the second meeting took place in December of the same year.

In order to minimise problems, an experiment was conducted in the

application of data to the system. Recurrent walkthroughs were held to discuss the findings which were applied to improve the system. The system was developed and input in the order of statutes, presidential decrees and ministerial ordinances, and then expanded to encompass all statutory instruments which were covered in the Collection of Laws of the R.O.K.. Systematic arrangement of the input data was carried out from January 1985 to May 1987.

In June 1987, the groundwork for system design and input was completed, and the system began to be introduced to government agencies by the installation of terminals and by training. Since 1987, the maintenance and updating of current law, as well as partial revision of the program have been performed by the development team.

9.2.1.2. System for case law (SCS)

The exponential increase of case law and inconvenience in using the printed case law sources brought about an interest in the introduction of a computerised information system.

In 1979, the Supreme Court commissioned KAIST (Korean Academic Institute of Science and Technology) to do a feasibility study of the computerisation of case law and to develop a retrieval program searched by the act and section referred to. KAIST designed the system, constructed an experimental database and input the data included in the Supreme Court Case Law in Card Form into the host-computer of KAIST (CYBER) in 1980-1981.

A database searched by act and section was nothing but a transformation from printed format into computerised one, and thus it would not be easy to locate the case law required. Therefore, in 1981, keyword retrieval was studied and an experimental system using 155 keywords was developed. The input of data continued

based on The Collection of the Summary of Supreme Court Case Law. In 1983, the host-computer had changed from CYBER in KAIST to UNIVAC in the GCC, and thus the database as well as retrieval and other programmes were converted.

Until that time, the basic sources for input were the summary form of sources which included the title of the case and major point of the case, so users' needs for full-text could not be satisfied. A plan for the input of the full-text of case reports was subsequently established, and the input of case law since 1981 was carried out. At the same time, supplementary work adding the full-text to the existing data was performed between 1984-1985 based on the Judicial Gazette or the Collection of Supreme Court Case Law. That is, existing data between 1947-1973 was supplemented by the Collection of the Supreme Court Case Law and that between 1974-1980 by the Judicial Gazette.

Up to then, the Supreme Court had utilised the other agencies' host-computer for the information system. In 1986, The Supreme Court rented a host-computer (UNISYS) for its own use and changed the retrieval package to UNIDAS. The program which relates to the existing system and is searchable by various modes, such as statutory laws referred to, the number of the case, the name of the case, the date of decision, results of decision, was developed.

In addition, retrieval by natural language was studied and developed in 1986, but it was a limited natural language system by which the words used in the text and registered on "the list of keywords" could be searched. The list was prepared based on the Abridged Dictionary of Legal Terms and on frequency used in the text. The number of terms extracted from Dictionary is 6,889, and updating has continued in order to meet users' needs and include current words.

Meanwhile, the conversion of data applicable to the new computer and retrieval system, and the loading of new data has continued. A partial revision of the programme has taken place, but a critical change to the system, that is, a conversion from command-driven to menu-driven, was conducted in 1990 and finished in January 1991.

9.2.2. Necessity for and meaning of the system

9.2.2.1. System for statutory law (LIRES)

Nowadays, the growth in the quantity of written law is enormous. So, the amount of law in force, as well as of law enacted and revised is exponentially increasing. It may result in conflict and discrepancy between related laws. In addition, there is a two months gap between the promulgation of a law and the accessibility of that law to the public via printed sources. These are all good reasons for the construction of a computerised system.

In a law-governed society, the government administration is closely related to the law. As it were, the law is not only the source of government authority, but it is also the basis for the execution of government functions. Therefore, every government agency performs its function in accordance with the law, primarily the written law in Korea, and so a government agency needs to locate the pertinent statutory information efficiently.

The GLA is a central legislative agency in the Executive, and participates widely in the legislative process, such as the drafting and examination of bills. In order for the performance of legislative work, the GLA must investigate the relevant statutory information thoroughly and quickly.

Even though an efficient search for pertinent information is very important for the performance of all government work, it takes

much time and effort. Requests for statutory information are increasingly various and complicated. Most needs are related to law in force, but sometimes the questions are about repealed or revised law, or about bills in the legislative process. In most cases, statutes and statutory instruments are sufficient to meet the users' needs, but sometimes subordinate regulations and by-laws which are not normally covered in the standard statutory sources, are required.

There are several printed sources for statutory information in Korea which are described in detail in Ch. 4. Due to their simple organisation and lack of appropriate indexes, specific acts and sections including certain keywords cannot be located through them. Also, due to their limited coverage, certain kinds of information cannot be searched.

The primary purpose of LIRES is to support the GLA's legislative work. High ranking officials in the GLA realised the difficulties in locating relevant information necessary to their legislative work, and conceived a plan for a computerised system as an alternative. A project on the automated retrieval of statutory law was launched as part of the computerisation of government administration, and the GLA began to develop the system in cooperation with the Government Computer Centre (GCC) which is wholly responsible for the computer-related work in the Executive.

In order to construct a reasonable system, the GLA's staff who are an expert in legislative work and are trained in the computer field, joined in the system analysis and design, and collaborated with the development team in the GCC. Setting up the system and inputting the basic data were conducted under the control of the GCC, and the updating and maintenance of the system have been performed by the GLA. For ongoing development and management, one member of the development team moved his position from the GCC to the GLA.

The development and operation of the system are financed by government, and it can be used free of charge. At present, 110 terminals are installed in central government agencies including the Legislature and the Judicature, and the municipal offices in Seoul and Pusan. But, it can be said that it is still at a semi-operational stage, and the system is not used as frequently as expected.

The prime purpose of the development is to support legislative work, and so it is open to and used by limited user groups, including government officials, contrary to CLISs in other countries which aim to be widely accessible. In the long run, it must be desirable to be open to all people, for them to exist alongside the law. This is relevant to the GLA's basic policy, which is represented in the distribution of the Legislation to the smallest unit of local government to be accessible by the public and in the popularisation of the law understood easily by laymen as described in Ch. 4.3.2.2. For the administration according to the law, LIRES should be available to the government officials, and for the protection of civil rights and judicial rationalisation, it must be available to legal professionals.

Furthermore, it should be utilised to standardise the legal terms used in the legislation.

9.2.2.2. System for case law (SCS)

Even in a written law country, the importance of case law cannot be ignored. The case law is an actual description of the spirit of the law expressed in the judges' language and generated by the application and interpretation of the abstract written law.

The more society changes rapidly, the more the number of cases that are not covered in written law directly increases, and the more the supplementary function of case law is emphasised.

According to the importance of case law in terms of quality and quantity, the degree of reference to it and the necessity for its retrieval in legal research are expanding. Due to the characteristics of case law, it should be accessed by specified terms and facts.

Legal professionals, generally, use the printed sources of case law which are described in detail in Ch. 4. They are organised in a simple order, chronologically by the date of the decision, or numerically by the number of the case. For convenient searching of cases stemming from any written law, an alphabetical index of the act and section referred to, is published.

Even so, users' needs in searching relevant cases accessed by specified terms and facts cannot be satisfied. They require a comprehensive set of cases in order to examine the judges' views on the specific terms and topics in various factual situations.

A plan to develop the computerised retrieval of case law was developed in the Supreme Court in order to provide case law. The main goal of the systemisation is to support litigation by providing relevant information which can be referred to in trials and decisions.

The KAIST, a leading research institution in the science and technology field was commissioned to undertake the project. For the construction of a desirable system, experts in law and judicial procedure need to participate in the systems analysis and design. The development team was composed of the staff of KAIST who carried out the systems analysis and design independently.

A demonstration of the system was conducted in front of the Justices of the Supreme Court and judges, but it did not leave them with a good impression. Normally, legal professionals, especially judges, are experienced in the use of printed sources

and they are so conservative, that they tend to be hesitant about the reformation of the existing system. Moreover, the system as designed was not enough to persuade them, because it was no more than a machine readable format of existing printed sources without any prominent functions.

Later, the project shifted to the Supreme Court, and a project team was established, consisting of the staff of the Computer Unit of the Supreme Court. Based on feedback from users and the advice of experienced users of other CLIS, the team continued the revision of the system in order to adjust it to the judges' needs and research behaviour. The system is still developing and updating current case law, and is at a semi-operational stage. The development and operation of the system are financed by the government, and it is used free of charge.

The main objectives of the system are to support the judges' trials by providing case law information more accurately and quickly, and to facilitate and improve the efficiency of judicial work. Therefore, the system is open to the staff belonging to the Judicature, and thus only a limited group of users can access the system. At present, 40 terminals are installed in the courts in the Seoul area.

9.3. Operation of Korean CLIS

There are many studies about the evaluation of legal information systems. Most of them suggest guidelines for evaluations, among them the guidelines proposed by Strohofer (1983) and the questionnaire used by the Council of Europe (1976) for the investigation of legal data processing activity in Europe are comprehensive and thus can be used as standards.

In this section, the operation of the two existing systems was examined by written documentation, interviews with staff who

participated in the system design, and observation of system operation. Their current status and problems were analysed based on the general theory of CLIS explained in Ch. 8.

9.3.1. System for statutory law (LIREs)

9.3.1.1. Description of the system

The system is composed of two menus, one is for information retrieval and the other is for information management.

The menu for information retrieval is actually used by users in the search process. It is classified into three modes, retrieval by keywords, by specific act and section, and by the name of the act. The menu for information management is made for the management and maintenance of the system and used only by the staff concerned. It is formed of three parts, management of the acts for updating of basic information on the law, management of the main body of text and incidental rules for inserting and deleting current text, and management of keywords for maintaining keywords.

1). Hardware and software

In the beginning, data was stored in the host-computer in the GCC (UNIVAC 1100-61/E2, 400 MB). this was then replaced by another model (VAX 8810, 48 MB) in 1988, so all the data was converted. Software was originally developed by the development team (1 system analyst and 4 programmers) and was used for designing the system.

2). Coverage

a). Kind of data

Korean law in force are covered by the system. They are composed

of all levels of written law, such as the Constitution, statutes, statutory instruments, such as presidential decrees, ministerial ordinances by the Prime Minister and Ministers, and regulations. The law covered is limited to the national law of central government in force. Therefore, international law such as treaties, and by-laws of local government are not covered in the system.

In contrast to other information including case law, new statutory information is not cumulated with the existing law, but replaces it to maintain records of the law in force. Faced with frequent change, immediate updating of current law is a most important task.

On the other hand, the need for the history of law by legal professionals is so critical that the system should consider and reflect this. Since 1988, repealed laws or old versions of revised laws have not been deleted when the new laws are updated, which partly satisfies the need for old laws. Nevertheless, it is not enough to be a database for the history of laws.

At present, 3,144 laws belonging to all areas of law are covered in the system.

b). Basic sources and procedure

The foundation of the database was constructed on the basis of the Collection of Law of the Republic of Korea. It was managed by GCC and input in batch mode by coders and punchers engaged temporarily for that purpose.

The updating of current law is carried out daily by GLA based on the Official Gazette. Coders and punchers who are employed in the Computer Unit of the GLA do this on-line. For this work, the law section of the Official Gazette is extracted and copied, edited to

the format appropriate to the system, and then input into the system. During this process, statutes written in a mixture of Korean and Chinese characters are transferred into Korean Hanguel only.

Through this process, the laws newly enacted, revised and repealed are included immediately after their promulgation.

c). Data analysis

The database is composed of the full-text of the law, and is automatically indexed. The meaningless words occurring in the text are eliminated through the use of a machine-stored stop-word list, and all the remaining words are searchable in any combination. At present, the number of stop-words amounts to approximately 8,000 words, and the remaining words to 400,000.

3). Data structure

Data is stored on magnetic tape and constitutes the files prepared by the database programme. There are three kinds of files, that is, files on the acts, file on the text, and files on the words.

Files on the acts are composed of file on the names of laws and file on the attributes of laws. The former one is a file including the names of each law and code of law, consisting of 8 digits, and the latter one is a file including basic information every law: the government agency related, the number of the law promulgated, the date of the law enacted, revised and repealed.

With the attributes of the law, the areas corresponding to the statutes(A), presidential decrees(B), ordinances of the Prime Minister (C), and ordinance by ministers (D) are distinguished.

The File on the text is a simple full-text file of each act

as shown in (Table 9-1).

(Table 9-1: Sample record of LIRES)

.....

Title of the act

Date of enactment

Date of amendment

Code of the act

.....

The main body of the act

Section 1 (Title of the section)

Subsection

Division of subsection

The incidental rule of the act

Section 1 (Title of the section)

Subsection

In the file on the text, each act is arranged in the order of the code of law. It is formed of the main body of law and the incidental rules of law which are distinguished into C and D, and is arranged in the order of the section, subsection, and division of subsection.

Files on the words store the words which could be used for a keyword search, and are composed of the keyword file and stop-word file. Except for the stop words all the remaining words occurring in the text are categorised into keywords. Stop words are not significant for the search of relevant law and include the adjectives, adverbs, conjunctions, and senseless verbs. Every keyword has its own physical address, which identifies the locations of the keyword as it occurs in the text and indicates the name of the act and the number of the section.

4). Search

a). Search mode

LIRES is an interactive menu-driven system. Therefore, users can easily converse with the machine and search the information following the menu given on the screen.

There are three kinds of search mode, retrieval by the keywords, retrieval by the specified act and section, and retrieval by the name of the act.

Retrieval by the keywords can search the acts and sections which contain that keyword in their text. In this case, several keywords combined by Boolean connectors can be used.

Retrieval by the name of the act is used when the user could not remember the title of the act or the attribute of law exactly. Therefore, it can be considered as a prerequisite search for

retrieval by the specified act and section. Input of keywords which occur in the title of the act and which the user recognises, provides a list of acts in full-title and code numbers which include that keyword. Among the laws displayed, users can select the appropriate title or the code of act, and then use it for the retrieval of the text needed.

Retrieval by the specific act and section is used for searching for full-text, and is conducted by input of the title or the code of the act, and of the number of the section.

b). Search aids

In order to enhance the ratio of recall and precision, Boolean operators (AND, OR) are used for the combination of keywords. Documents which include the combined keywords in the same section are displayed. The combination of keywords can be done up to 10 times. In addition, in order to search the compound words, LIRES utilises right-hand truncation.

Although LIRES is a full-text database, it utilises limited operators mentioned above, and even positional operators are not adopted.

c). Search process

- i). Select a search mode on the menu screen moving the cursor.
- ii). Retrieval by the keywords
 - a). Type the relevant keyword; the number of occurrence is then displayed.
 - b). Combine the keywords using AND or OR to increase the quality of search. (available up to serial no. 10)
 - c). Select the number which is needed for output, and the form of output, on the screen or in print.

In both cases, a simple list of acts and sections or the

full-text of them, and the kind of attribute can be chosen.

- iii). Retrieval by the title of an act
 - a). Type a keyword likely to occur in the title of an act.
 - b). Display the list of the titles of acts which include that keyword and of the codes of the acts on the screen.
 - c). Select the appropriate one by moving the cursor.
- iv). Retrieval by the specific act and section
 - a). Type the title or the code of the act
 - b). Select the record from the main body of law (C) or incidental rules (D), or both of them.
 - c). Type the number of section needed.
 - d). Select the form of output.
 - v). Choose "End of search" on the menu screen.

5). Data output

The data retrieved could be displayed on the screen or printed in hard copy. In keyword searching, the keywords occurring in the text are distinguished by an asterisk in LIRES. In addition of this highlighting function, a display of part of the documents are adopted for output aids.

6). Management of system

a). Access to system

LIRES is an on-line interactive system linked by telephone. It operates during office hours. Generally, it is used by end-users who use the terminals installed in their government agencies, but sometimes searches are done by an intermediary on request.

b). Documentation

There are several kinds of documentation. User guides, official

reports of the system development, and articles presented by members of the development team are published.

c). Training

The GCC has a special training course which has been taken by the higher ranks of public officials on how to manage the terminals and how to search by LIRES. It is conducted quarterly with 30 people in each class.

9.3.1.2. Current status and problems

Originally, LIRES was developed to be utilised in legislative work. As mentioned above, legislative work is so complicated that GLA conceived the development of the computerised system in order to perform its work more conveniently, rationally and efficiently. Therefore, the primary concern of the development team was to support the work of the legislative staff in GLA who have a wide knowledge of law and the legal terms used in legislation. As it is, the system was developed for the legal experts based on their needs, so it is natural that the system has many problems from the viewpoint of the layman.

1). Language

Natural language included in the text is used for search terms. Experts in legislation should have enough knowledge of the natural language terms to search easily for the needed information by using them. On the other hand, the layman will meet with the problem of language in searching, because there is no way to control the synonyms, homonyms, or broader or narrower terms.

The system uses truncation for the search of compound words, but only right-hand truncation.

2). Lack of positional operators

Documents which include keywords combined by Boolean operators in the same act and section are retrieved. One section may be broken down into several subsections and divisions of subsections. They have different contexts, so retrieval in this way may locate irrelevant documents.

LIRES does not utilise such search aids as positional operators, which are the benefits of a full-text database in searching and improve the ratio of recall and precision.

3). Output aids

Documents retrieved are sorted and displayed by the kinds of attributes of law and in the order of the section numbers. It takes time to display the documents retrieved, but it is useful to read them systematically. The sequence of the displayed documents in the context of the whole is very useful to realise the present level of searching, but LIRES does not adopt this function.

Highlighting is adopted by use of an asterisk (*) following the word in this system. When the hit terms occur in the text more than twice, double stars (**) are used, but only on the first occurrence, with no stars on subsequent occurrences.

There is no function which displays the part of document around the hit terms, something like the KWIC function of LEXIS. If the document including the search terms is very long, the user is not likely to be interested in the irrelevant text.

Ranking which is based on weighted words and is useful to improve the relevance of retrieval, are not applied in LIRES.

4). Help function

A clear and explanatory error message is very useful for efficient searching, especially, for inexperienced end-users. LIRES does not adopt any kind of help function.

9.3.2. System for case law (SCS)

9.3.2.1. Description of the system

1). Hardware and software

The hardware used for the system has changed several times. Since 1986, data has been stored in the UNISYS, and the UNIDAS (UNISys Document Accessing System) package is used for the information retrieval system for case law.

2). Coverage

a). Kind of data

The case law covered is limited to reported Supreme Court case law. So, those parts of Supreme Court case law which are reported and published in the Judicial Gazette or the Collection of the Supreme Court Case Law are input. Lower court case law is not covered, even if it is a valuable decision.

b). Basic sources and procedure

Originally input was performed by batch-mode. Updating is done in batch mode by staff in the Computer Unit belonging to the Office of Court Administration, a subordinate bureau of the Supreme Court. Updating is carried out based on a diskette sent from the Office of the Judicial Researcher. Two copies of the diskette which is edited by the Judicial Researcher based on the Judgement Document are produced; one is sent to the Department of the Compilation of Case Law for Publication of the Judicial Gazette,

the other is sent to the Computer Unit for input into the SCS. After the publication of the Judicial Gazette, reference to the Judicial Gazette is included.

At present, more than 23,000 cases are covered.

c). Data analysis

The database is composed of the full-text of case law, and it is automatically indexed. The words occurring in the text and registered in the list of keywords are searchable in any combination. Keywords selected from the text and dictionary amounts to 22,000 words.

3). Data structure

Full-text data is stored on magnetic tape and constitutes the files prepared by the retrieval package. There are three kinds of files, that is, keywords file [T1], index keys file [T2], and text file.

The keywords file is the list of keywords which are the natural language words used by judges and included in the text of case law, but the words registered on the list are the only ones regarded as keywords and usable as search terms. In this sense, SCS can be called a limited natural language system.

The index keys file is composed of 8 index keys, that is, a subject category divided into 7 subjects, the number of case, the name of case, date of decision, result of decision, statutory law referred to, the section in charge and Justice in charge. They can be used as keys and can be combined with keywords for searching of relevant case law.

The text file is the main store of case law, and consists of 4 parts as shown in (Table 9-2).

(Table 9-2: Sample record of SCS)

Document No.	Part 1	The no. of character

Subject category		
The number of case		
The name of case		
Date of decision		
Result of decision		
Statutory law referred		
The section of court in charge		
The name of Justice in charge		
Reference to Judicial Gazette		
Reference to Collection of the S.C. case law		
-----Part 2 (Title of case law)-----		
Fields: 01field consists of words giving one legal point		
02	"	
-----Part 3 (major point of case law)-----		
Fields: 01	"	
02	"	
-----Part 4 (Full-text of case law)-----		
Plaintiff (Prosecutor)		
Defendant (Accused)		
Original Judgment		
The text		
Reason		
	Chief Justice	
	Justice	

Part 1 is an outline of the case in a formatted field. Besides the 8 keys mentioned above, reference to the Judicial Gazette and the Collection of the Supreme Court Case Law, and reference to the original judgement are covered. Part 2 is the title of the case, and part 3 is the major point of the case, both of them are recorded in an unformatted field. Part 4 is the full-text of the judgement document.

Parts 2 to 4 are complete copies of original sources, such as the Judicial Gazette or the Collection of the Supreme Court Case Law, and the keywords occurring in them are searchable.

4). Search

a). Search mode

SCS was a command-driven system, and changed to an interactive menu-driven system and converted the data to an appropriate format from July 1989 to the end of December 1990.

There are two kinds of search mode, retrieval by keywords and by index keys, both of them can be combined together. Retrieval by keywords is carried out by inputting the keywords which occur in parts 2-4 of the text and are registered in the list of keywords. Keywords can be combined with each other and with index keys by Boolean connectors.

Retrieval by index keys is carried out by inputting the index keys consisting of 8 kinds, so in order to search in this way, the user should have exact information about the index keys.

b). Search aids

All kinds of Boolean operators (AND, OR, NOT) are applied in SCS. They are used for the combination of keywords and index keys.

Arithmetic operators, such as <, <=, >, =>, can be used for the index keys and limit the scope of retrieval. The system is based on a basic inverted file, but does not utilise the whole functions of full-text searching which includes the positional operators. Even truncation is not used in SCS.

c). Search process

- i). Select the kind of case law and search mode.
Among four files, 1 and 2 should be chosen and typed together both for retrieval by keywords (1) and by index keys (2). 3 and 4 which are reserved for the development of lower court case law, do not operate.
- ii). Type the relevant keywords or index keys sequentially; the number of occurrence of each one is then displayed.
- iii). Combine the keywords and index keys using Boolean operators (AND, OR, NOT) and arithmetic operators (available up to serial no. 17)
- iv). Display the retrieved documents on the screen or in print. Choose the kind of output from the options, all cases retrieved or a specific case, and whole text (part 1-4) or a part of the text.
- v). Select and reject among the documents retrieved using arithmetic operators.
- vi). Sort the documents retrieved into numeric order by ascending or descending sequence.
- vii). Choose the "end of search" option on the screen.

5). Data output

Data searched can be displayed on the screen or printed in hard copy. Although several functions which are useful to retrieve more relevant information are available in the full-text database, simple aids, such as a display of part of the document and skipping, are used in SCS.

6). Management of system

a). Access to the system

SCS is an on-line system linked by telephone. Users can use the system installed in their court during office hours. Terminals are installed in the administrative department, so judges can not easily access them and can not use them frequently.

b). Documentation

User guides and reports on system development are published.

c). Training

The section for training in the Computer Unit has organised a training course for the use of SCS since October 1991. More than half of the trainees are judges.

9.3.2.2. Current status and problems

SCS was developed to support the judges' litigation work, and thus it is open to the staff in the Judicature.

1). Language

SCS can be searched by limited natural language registered in the list of keywords which is insufficient to cover all the legal terms and facts included in case law. Case law consists of the natural language used by judges who each tend to utilise it differently. Thus the necessity for use of the entire vocabulary is much stronger than for sources of law. In SCS, there is no way to control the synonyms, homonyms, broader or narrower terms, and truncation is not adopted.

2). Lack of positional operators

Documents which include the keywords combined by Boolean operators in every part of the text are retrieved. There is no way to

control the distance between keywords, so it is possible to retrieve irrelevant documents.

3). Output aids

There is no function to display the part of document surrounding the hit terms, so the user has to make the time to read irrelevant text. Output aids, such as, highlighting, ranking, etc. are not adopted in SCS. And, the sequence of the documents displayed on the screen is not indicated.

4). Help function

Commands on the screen are not easily understood by users. So, a help function to indicate errors is necessary, but SCS does not adopt this. Changing the commands into understandable words, and transfer into dialogue mode is desirable.

9.4. Evaluation of Korean CLIS

9.4.1. Methodology

In this project, an outline of LIRES and SCS was examined by written documentation, interviews with staff who participated in the system design, and observation of system operation, and was analysed comparatively based on general theory, in Ch. 9.3.

LIRES and SCS were analysed according to the potential users' information needs and research behaviour, and their views on the computerisation of legal information. Even though a study of the potential users' attitudes to the system should be made before their construction, LIRES and SCS did not do this. Furthermore, the systems have actually not been widely used, and only a few professionals have experience in using them. Therefore, based on the findings of the survey, the current situation of the systems

were analysed and compared with the users' needs and behaviours.

The functionality of LIRES and SCS were examined by practical searches relating to selected legal problems, and the search results were compared with the results from LEXIS. LEXIS is the best known database in the legal profession and is one of the largest databases in the world (Susskind, 1992). Although comparing two systems at the semi-operational stage with LEXIS must be tentative, it can provide sound recommendation for the improvement of the systems.

Through the searching of the same questions by LIRES, SCS, and LEXIS, the functions, search process, and search results of each system were examined and analysed. Five legal problems were chosen by the writer with advice from a law professor who has much experience in the use of CLIS. For maximum efficiency of searching and for utmost utilisation of the systems' capabilities, searches of the two Korean systems were helped by system designers and of LEXIS by a expert intermediary.

9.4.2. Evaluation of the system based on the professionals' information needs and research behaviour

As explained in Ch. 7, the legal professionals who responded to the survey are, generally, not satisfied with their use of libraries, because current information cannot be obtained efficiently, and the information required cannot be located easily, leading to time-consuming research. Therefore, the expansion of the library collection was indicated as the best way to ensure effective legal research by practitioners and professors. To deal with these drawbacks, some alternatives should be devised.

The computerisation of legal information was attractive to a lot of respondents, and was seen as a reason for instigating a plan of

computerisation. Most respondents were drawn to the quick and easy method of retrieving needed information from a large quantity of information. Lots of respondents considered it necessary to establish a new government-sponsored institution, even though the Supreme Court was also pointed out as suitable agency to take charge of system development by many respondents.

Incidentally, the two computerised legal information systems, one for statutory law and the other for case law, were developed completely separately by different agencies, one belonging to the Executives and the other to the Judicature. The two systems were analysed based on the findings which resulted from the survey on the information needs and research behaviour of Korean legal professionals, described in detail in Ch. 7.

9.4.2.1. Analysis of Statutory Law System (LIRES)

Statutory information was regarded as of great importance both by professors and practitioners. The main reason for requiring statutory information is to identify whether statutory law relating to special subjects exist.

The LIRES system adopts a method of keyword searching. Therefore, all significant words included in the texts can be used as search terms. The words used in law connote the legal meaning, so keyword searching by LIRES can easily adjust to the users' needs, and the use of various operations installed in the system can raise the degree of search efficiency. But, the needs of comprehensive searching for special subjects cannot be satisfied, unless the adoption of a thesaurus is considered.

Besides this, the ability to search related law and the history of certain law was required by a small number of respondents. But, their needs are not met by LIRES.

There is a principle that legal disputes should be resolved by the law at the time the legal matter occurs (jurisdiction relating to the time). But it is not possible to obtain information about the history of law by the present system, because the system only includes the law in force.

Related law is required not only by professionals but also by legislators. One particular social issue tends to be provided for in several laws, and thus all laws relating to it should be traced exhaustively for a comprehensive solution to a problem. For the enactment or amendment of those laws relating to it, all related laws must be tracked down.

Most users require the full-text of statutory law. It should be expected as a matter of course, because Korea is a Civil Law country where the written legal texts are basic source of law and the interpretation of them is highly emphasised. LIRES is adequate to fulfill the users' needs for the full-text.

There is a tendency by practitioners and professors to prefer The Code of Law to the comprehensive Collection of Laws of the R.O.K. The reason for the preference is that it is composed of one volume, which makes it easily accessible, and they are familiar with it. At present, LIRES is open to governmental agencies. If it is possible to be accessed by the public (including professionals) for whom a terminal is installed nearby and the needed information is provided by the pressing of a few keys, attitudes toward the system might be very positive.

The method of search was pointed out as a main obstacle to use the printed sources, by practitioners and professors. If LIRES can overcome and supplement these problems, it could be a preferred source for statutory information and widely used.

Inclusion of the statutory laws in force in the CLIS is strongly required by a lot of respondents, followed by case law of the Supreme Court. Both the practitioners and professors and the respondents who have experience in the use of CLIS, required the inclusion of the constitution, statutes, statutory instruments, regulations and treaties in the system. LIRES covers all kinds of information, except for treaties.

Most respondents required that the system should be opened to the public or subscribers, and that it should be operated through a fee-based system which is charged by users' fee or institutions' budgets. LIRES is not open to the public. Terminals for using this system are installed only in the governmental agencies, and it is used free of charge.

More than half the respondents preferred an end-user system than a mid-user system. LIRES which is developed as a end-user system, although it falls short of users' requirements.

9.4.2.2. Analysis of Case Law System (SCS)

As mentioned above, the case law of the Supreme court was most strongly emphasised both by the group of practitioners and professionals, and respondents experienced in the use of CLIS. Identifying whether case law relating to a particular subject exists was indicated as a major reason for needing case law.

Even though it can be said that keyword searching could achieve this satisfactorily, SCS took a somewhat different approach to the ordinary keyword searching method. Among the significant words included in the full-text, the words registered on the list of keywords, a simple list without the consideration of synonyms, broader terms, etc., are the only ones which can be used as search terms. There is no vocabulary control, so that if the judge uses different words the case would not be found. Therefore, it would

be wrong to assume efficient search results from SCS.

Legal professionals require case law sources in order to identify the facts included in the case law, and to get information about the interpretation of legal terms and facts, and to obtain typical conclusions to legal problems. These requirements could be fulfilled only by the full-text, even if they usually examined, first of all, the major point of case law in order to find appropriate cases included in the printed materials.

Requirement of the full-text by most respondents should not be interpreted as a rejection of the title and major point of case law, as the basic sources used for input into the system, include them already. SCS includes either the title and major point of case law or the full-text of case law, and thus it should be sufficient to meet the users' needs.

Although the preferred sources of case law information were different from each other, that is, the Judicial Gazette was preferred by the practitioners and the Collection of the Supreme Court Case Law by the professors, they were commonly not satisfied with the printed sources, especially with the method of searching them. This is because these sources are arranged by the date and number of decision.

SCS developed various search modes and operations, so the problems of locating pertinent case law could be solved to a large extent. Both the groups of practitioners and professors, and the respondents experienced in using CLIS desired that all the Supreme court case law and the case law since 1948, the date of formation of the government, should be included in the system. SCS includes almost all the Supreme Court case law since 1947.

The management of SCS is similar to LIRES, so it may not meet the users' expectations.

9.4.3. Evaluation of the systems based on the practical use of them

The actual application of legal questions to the systems is useful in understanding their operations vividly and examining their capabilities precisely. In this section, the functionalities of the two systems explained above is summed up, and compared with those of LEXIS and the full-text system in general. In order to clarify the characteristics of each one, it is illustrated in the table as shown (Table 9-3).

Based on the recommendations of LEXIS for efficient searching which are defined in "How to use LEXIS", a description of each legal question, keywords and their variations, and connectors were clarified. In order to compare the occurrences of every keyword, combination of search terms, use of operators, and the results at the same level, keyword retrieval was conducted in LIRES, SCS and LEXIS. For this, the same keywords listed in each question were applied to the three systems.

LEXIS is comprised of several libraries divided by jurisdiction and/or subject, files, and documents. The questions were searched in English law by the CASES FILE for case law retrieval, and by the STATIS FILE for statutory law retrieval in the ENGEN LIBRARY.

9.4.3.1. Five questions and keywords used as search terms

The method described in Ch. 9.4.1 was applied to LIRES and SCS in order to observe their operation and to evaluate their capability by the practical application of legal problems.

< Table 9-3: Comparison of the functionalities of
LIRES, SCS, LEXIS with general ones>

full-text in general	LIRES	SCS	LEXIS
selection of database	no	yes	yes
thesaurus	no	no	no
keyword	natural lang.	limited n.l.	n. 1.
phrase searching	yes	no	yes
segment searching	no	yes	yes
Boolean operator	AND, OR	AND,OR,NOT	AND, OR, AND NOT
positional operator	no	no	yes
arithmetic operator	no	<, <=, >, =>	no
root expansion	right-hand tru.	no	yes
weighting, ranking	no	no	no
display of part of doc.	yes	yes	yes
KWIC display	no	no	yes
highlighting	yes	no	yes
skipping	no	yes	yes
help	no	no	yes

1). Question 1

A man has suffered from the publication of insulting remarks in a newspaper, injury to his reputation, and from the damage resulting. This is a case about libel and defamation by the publication. The words which are likely to appear in the databases are "defamation", "libel", "publication" and "damage".

2). Question 2

A workman was seriously injured by an accident which happened while he was at work. The employer who hired him, is insured. This is a case about an occupational accident and the employer's liability for it. The words which are likely to appear in the databases are "injure", "work", "employment", "employer", "accident", "insure", "compensation", and "liability".

3). Question 3

A businessman who became successful through the development of a product he patented, suffered a willful imitation of his invention and a loss in its commercial value. This is a case about willful infringement of valid patents and damage resulting. The words which are likely to appear in the databases are "patent", "infringement", "loss", "commercial value", and "damage".

4). Question 4

A husband gave nearly one hundred aspirins to his wife who had suffered from a fit of suicidal depression, hoping that his wife would take all the tablets at one time and attempt suicide. This is a case where the husband's criminal act incites or assists the wife's suicide. The words which are likely to appear in the databases are "suicide", "incitement", "abet", "assistance", "husband", and "wife".

5). Question 5

A written contract for the supply of goods was made out with a special clause to compensate for its breach. Due to a natural disaster, the delivery of goods was delayed. This is a case about a breach of contract caused by the delay of delivery of goods due to a natural disaster. The words which are likely to appear in the databases are "delivery", "goods", "disaster", "contract", "delay", and "loss".

9.4.3.2. Comparison of search results between systems and the findings

The search results of the five questions applied to LIRES, SCS, and LEXIS are listed (Table 9-4). They were generated by the use of keywords and connectors. Only the search results which can be considered to be relevant were listed. The difference between LIRES and SCS, and between these two systems and LEXIS can be analysed in several aspects.

1). Coverage

In information retrieval, the number of documents searched is affected by the size of the document set included in the database.

LEXIS files which have been searched for the questions are based on the English legal system, which has developed over a long period. Therefore, a large amount of case law and statutory law is included. On the other hand, the history of the modern legal system in Korea is much shorter than in other countries. Therefore, the amount of law, either statutory law or case law, covered in LIRES and SCS cannot be compared with the law in LEXIS.

In case law, judicial decisions in the U.K. have developed over a long period. The CASES FILE in the ENGEN LIBRARY includes either

(Table 9-4) : The search results of the five questions applied to LIREs, SCS, and LEXIS

systems	Question 1	Question 2	Question 3	Question 4	Question 5
LEXIS (S)	defamati OR libell w/10 publication OR publish AND NOT privilege (20)	injur! w/10 work employment OR Industrial AND Insur! AND NOT annotations (insurance) (34)	infringe! w/6 patent AND damage AND loss (3)	suicide w/5 incite! OR assist OR abet (10)	deliver! w/10 goods AND (disaster OR act w/3 God) (2)
LEXIS (C)	defamati OR libell! w/10 publication OR publish w/10 reputa- tion AND damages (18)	injur! w/10 accident w/10 (work OR employ- ment OR Industrial) w/20 insured (29)	infringe! w/6 patent AND loss w/5 commercial value (1)	suicide w/5 incite! OR assist OR abet w/20 husband OR wife (2)	deliver! w/10 goods AND (disaster OR act w/3 God) w/10 clause (12)
LIREs	defamation AND publication (1) defamation AND damage (1)	employer AND insured AND accident (2) employer AND (acci- dent OR accident compensation) AND liability (3)	patent AND infringement AND damage (1)	suicide AND (incite- ment OR assistance) (2)	contract AND delay AND loss (2)
SCS	dafamation AND publication (1) defamation AND damage (2)	employer AND insured AND accident (2) employer AND (accl- dent OR accident compensation AND liability (7)	patent AND infringement AND damage (1)	suicide AND (incite- ment OR assistance) (1)	contract AND delay AND loss (9)

reported cases in one or more of the law reports series (46 law reports in April 1992) since 1945, or unreported cases since 1980. In contrast to LEXIS, SCS covers only reported cases in the Judicial Gazette or the Collection of the Supreme Court Case Law. 80,000 cases are available on LEXIS, and 23,000 cases are available on SCS.

In statutory law, LEXIS consists of three files, STAT, SI, and STATIS FILE. The STAT FILE contains the up-to-date, amended texts of statutes. This includes all Acts currently in force. Its size can be estimated from the size of Halsbury's Statutes of England and Wales. The SI FILE contains the complete texts of the statutory instruments of general applicability currently in force. As with statutes, the size can be estimated from the Halsbury's Statutory Instruments Series. The STATIS FILE is a combination of the two files. In contrast to LEXIS, Korean LIRES covers the entire statutory law, statutes and statutory instruments, in which 3144 laws amount to 50 volumes are included.

In both systems, LIRES and LEXIS, the section of a specific statutory law containing the search terms is retrieved. The sources used by the two systems for input are composed of many volumes, and they include too many sections to count.

The quantity of data affects the result of the search. The amount of information retrieved by LEXIS either in case law or statutory law is much more than by LIRES and SCS, even though the terms used for the LEXIS search are more specific and combined with limiting connectors as shown in (Table 9-4).

2). Keyword indexing

The amount of data input has an effect on the terms searched by the system and their occurrences. In general, language used in statutory law is specialised and well-organised, contrary to case

law which uses the judges' own language.

In LIRES, natural language used in the text can be used as search terms. There are 8,000 stop-words and 400,000 keywords in this system. Limited terms are specially defined for legislation. Therefore, it is difficult for users to search for the required information successfully without a knowledge of the terms used in legislation.

In SCS, search terms are limited to the words which are included in the text and registered in the list of keywords. Therefore, only 22,000 keywords can be used for searching. Users cannot easily understand which words are registered in the list and which words are searchable.

In LEXIS, all the words in the original legal material can be retrieved, with the exception of regularly occurring words called 100 non-searchable words.

In order to compare the keywords included in the systems, the same keywords listed in the five questions are used as search terms. Certain terms did not occur in LIRES (eg. wife) and in SCS (eg. delivery and disaster), which occurred in LEXIS. Also, the number of occurrence showed different results between them. As a whole, LEXIS provides more keywords and occurrences than LIRES and SCS. This is a natural result, considering the size of its document collection and the low number of stop-words.

3). Search aids

A full-text system is in a better position to improve the quality of searches by the use of its functionalities as shown in (Table 9-3). LEXIS utilises various functions in searching the questions as shown in (Table 9-4). On the other hand, Korean systems adopt only a few search aids. To make matters worse, these search aids

cannot be utilised due to the small amount of information retrieved.

i). Connectors

In order to join the words and numbers included in the database, several kinds of connectors can be used. LIRES and SCS adopt the boolean operators. LEXIS, on the other hand, uses the proximity operator (eg., w/n, pre/n, w/seg) which enables to search for closely associated ideas.

ii). Variations of words

Words used as search terms can be expressed in various ways. In order to improve recall and not to miss relevant documents, some devices were developed. Right-hand truncation is adopted by LIRES, but SCS does not have any such function. In contrast to them, LEXIS utilises the asterisk (*) either in the middle or end of a word to substitute for one character. Also, the exclamation mark is used for right-hand truncation function.

iii). Field searching

In addition to these search aids, searching by segments is very useful to retrieve relevant documents efficiently. SCS can be searched by 8 index keys, as well as by keywords. Index keys and keywords can be combined for searching. LIRES cannot be searched by segment, although retrieval by the name of the act and retrieval by the specified act and the section are essentially segment searches. LEXIS adopts segment searching both in statutory law and case law, used in various parts of the text.

4). Output aids

In order to read and evaluate the documents efficiently, some devices have been developed. Highlighting, display of context in which the combined search terms appear in the document, display of part of the document, weighting and ranking, and skipping can be

used as output aids for fast scanning and selection of relevant information.

Among them, Korean systems have a few functions. LIRES can highlight the search terms in the retrieved documents, and display the part of a document which is a similar function to CITE of LEXIS. The skipping and displaying of part of a document are adopted by SCS.

On the other hand, LEXIS adopts most of these aids, except for weighting and ranking. LEXIS uses various display keys, i e, FULL, KWIC, VAR KWIC, CITE, and SEGMENTS. Therefore, users can easily scan the retrieved materials and decide relevant ones. It also allows page and document skipings.

5). Help

As described in Chapter 7, a lot of professionals in Korea have no experience in the use of CLIS. Therefore, help functions should be developed in LIRES and SCS for easy access and searching, error messages, or special instructions, for instance. But, these functions are not developed in the two systems.

LEXIS has a function to display a screen of help messages relevant to the stage the search has reached. Through the help desk, users can be assisted to solve the problems appeared during the searching of LEXIS by direct ring.

9.5. Integration of the two systems

Effective legal research can be carried out based on pertinent information, either in statutory law or in case law.

For efficient searching, it is desirable to be able to access both at one time. In other words, the entire legal information system should be available in order for the exhaustive and comprehensive

acquisition of relevant legal information whatever form it exists and wherever it is generated.

In Korea, LIRES and SCS have been developed and operated by different government agencies separate from each other. Even so, they are financed by the government budget and are used for the primary legal information mostly required by legal professionals. Users of legal information are extended from legal professional to para-legal professional and even to the public. This kind of trend necessitates the opening of systems to the public, which needs to be formally organised.

9.5.1. Provision of easy access to the two systems

Both of the systems, LIRES and SCS, are open to and used by limited group of users. At present, 110 terminals for LIRES are installed in central government agencies including the Judicature and Legislature, and the municipal office of Seoul and Pusan. For the protection of the "right to know" and the "right to access to information", these systems which include important information either in case law or statutory law closely related to civil life, should be opened to the public.

Online retrieval systems may be difficult to use, especially by end-users. Two possible solutions were suggested relating to the virtual-system interface, that is, a standardised command language and the networking of retrieval systems through a computer interface (Marcus and Reintjes, 1981). A standard command language can lead to the development of a new single system, but it cannot be adopted easily, as several factors inhibit this kind of solution. They are as follows ((Marcus & Reintjes, 1981).

- . The established character of the existing systems makes it unlikely that they will soon disappear.
- . It is not easy to modify existing operational systems in major ways, for purposes of either standardisation or improved

function.

- . Standardisation is always a difficult process, especially where it may be premature to state with certainty what makes for a better design.

The networking of retrieval systems through a computer interface is intended to achieve compatibility among heterogeneous systems through the use of common retrieval protocols, or by translating dissimilar protocols into a common set.

There are two kinds of data networks in Korea, one is HiNET-P operating by Korea PC Telecom Co. Ltd., the other is DACOM-NET operating by Dacom Corporation. The inauguration of the data network was from the establishment of Dacom Corporation in 1982. In 1984, DACOM-NET was opened, and was the first data switching network. Connecting three cities it extended to a national network in 1986.

It is a PSPDN (Packet Switched Public Data Network) and is connected with DNS in other countries. It applies an international standard protocol, X25, so users who need to acquire information by foreign services can be provided with it online through the network. Users can be connected by Dial-up Access and Leased Line Access and can easily access the network due to the expansion of 6 nodes and 39 Access points.

Until the revision of government communication policy, DACOM-NET had monopolised the network field. In 1990, the government changed the structure of communication enterprises to a competitive system. Due to this policy, Korea PC Telecom Co. Ltd. registered as an enterprise for VAN and opened HiNET-P.

HiNET-P provides the HiTEL service which is a videotex service based on KETEL produced by the Daily Economic Newspaper, and so economic information required in daily life is emphasised. DACOM-

NET provides CHOLLIAN I (videotex service) and CHOLLIAN II (text form service) which are composed of DBs produced by Dacom Co. since 1985 and provided by IP. It provides not only information relating to everyday life, but also professional information. Since the commencement of the commercial service in 1988, more than 100 DB including 25 professional DB are used for services. Due to the variety of DB, the number of subscribers and communication use is increasing exponentially.

Considering the history, the kind of data, the number of subscribers and communication use, DACOM-NET is in a superior position to HiNET-P in the network field. It is a nationwide network as well as being available to foreign databases. It possesses various kinds of specialised information, as well as general information for everyday life.

Therefore, it is desirable for the two computerised systems to participate in the CHOLLIAN II service and to provide legal information to the subscriber through DACOM-NET. If the two systems use that data network, subscribers can easily access them and locate needed information, because they are familiar with the use of the service provided through DACOM-NET. The needs for legal information can be met at the proper place and time.

9.5.2. Facilitation of use of the two systems

Generally, users suffer from basic computer anxiety, fear of database selection, and proper query formulation for retrieving relevant documents (Silverstein, 1990). An online retrieval system may be difficult to use, especially for end users, because of heterogeneity and complexity, that is, the inherent complexities of individual systems and the multiplicity of heterogeneous systems.

The obstacles which are faced in using different retrieval systems are as follows (Marcus & Reintjes, 1981).

- . The necessity to discover the appropriate databases and systems.
- . The necessity to follow separate procedures to gain access and account for costs.
- . The necessity to make actual access via different terminals and protocols and in separate locations, if the systems are not interconnected through a common network.

The networking of retrieval systems through a computer interface is likely to be useful in solving this kind of difficulty. The application of an interface to distributed databases has many advantages as follows (Marcus & Reintjes, 1981).

- a). The interface allows users to make requests in a common language.
- b). These requests are translated by the interface into the appropriate commands for whatever system is being interrogated.
- c). System responses may also be transformed by the interface into a common form before being given to the users. Thus, the network of different systems is made to look like a single "virtual" system to the user.
- d). The interface also provides instruction and other search aids for the user.

The two Korean systems connected to a data communication network will make computer access available to all those who need it. The main theme of this is the concept of a translating computer interface as a means to simplify access to, and operation of, the two heterogeneous legal databases.

For examining the applicability of a distributed database system to the two Korean legal systems, the basic theory and one system

as an example are described in this section.

1). Definition of distributed database system

A distributed system is any system involving multiple sites connected together into some kind of communications network, in which a user at any site can access data stored at any other site. Each site, in turn, can be thought of as a database system in its own right, and they are linked together to form a single "global" or distributed database (Date, 1986). In a distributed system, every location has computer capability to capture and store data, to process data, and to send data and information to other systems (Senn, 1989).

A heterogeneous distributed database is a type of distributed system in which several dissimilar DBMS's are running at different sites - more precisely, a system in which the DBMS's at different sites support different data models and/or different database operations. Each DBMS may cooperate in presenting to the user either global or local external schema. Cooperation is achieved by means of the use of a common data model to which each local DBMS maps. Users should not need to know at which site any given data is stored. They can behave as if the entire database were stored at their own local site. Data can be moved from one site to another as usage patterns change without necessitating any reprogramming; location transparency.

Distributed processing is closely linked to the communication of data. A data communications system is the backbone of distributed processing and the resource that makes it workable in the following ways (Senn, 1989) ;

- . Involving multiple sites connected together into some kind of communication line
- . In which a user at any site can access data stored at any site

- . Local databases in multiple sites are linked together to form a single global or distributed database

2). Objectives and Rationale of a distributed database

There are several reasons why distributed databases are developed as follows (Ceri and Pelagatti, 1984) ;

- . organisational and economic reasons
- . interconnection of existing databases
- . incremental growth
- . reduced communication overhead
- . performance consideration
- . reliability and availability

A distributed database system is suggested for meeting several objectives as follows (Date, 1986).

a). To provide "location transparency"

A request for some remote piece of data should cause the system to find that data automatically by consulting the catalogue. It simplifies the logic of application programmes, and it allows data to be moved from one site to another as usage patterns change, without necessitating any reprogramming.

b). To support "data fragmentation"

A system supports data fragmentation if a given logical object can be divided up into pieces (fragments) for physical storage purposes. A system that supports data fragmentation should also support "fragmentation transparency" - i.e., users should be able to behave in all cases as if the fragments were combined together by means of suitable join and union operations.

c). To support "data replication (replication transparency)"

Replication transparency means that users should not need to be aware of replication, but should be able to behave as if every logical object were represented by a single stored object. The basic idea is that a given logical object may be represented at

the physical level by many distinct copies (replicas) of the same stored object, at many distinct sites. The advantage of this is that retrievals can be directed to the nearest replica, and the disadvantage is that updates must be directed to all replicas.

Three objectives, that is, location, fragmentation, and replication transparency together imply that a distributed system should look like a centralised system to the user. Distribution per se does not have any effect on the user's view of the data, on the specific language used, and on logical data base design.

3). Elements of a distributed database system

The following elements required for the distributed database are suggested by Senn (Senn, 1989)

- a). Multiple general-purpose processing components
- b). High-level operating system

Individual processing nodes have their own operating systems that are designated for the specific computer. And there is a network operating system that links together and integrates control of the distributed components.

- c). Physical distribution of components

Individual computers and processing units are physically separated. They interact with one another through a communications network.

- d). System transparency

Users do not know the location of a component in the distributed system or anything about its manufacturer, model, local operating system, speed or size. The distributed operating system performs all activities involving physical location and processing attributes in order to satisfy the user's request.

- e). Dual component roles

Individual processing components can operate independently of the distributed system framework. Yet they can be brought in

as an integral element in the meeting of a network user's needs.

4). Advantages of distributed database

Date described the advantages of the distributed database as follows (Date, 1986).

- a). It combines efficiency of processing with increased accessibility.

The data is stored close to the point where it is most frequently used, and thus it can be processed efficiently. On the other hand, it is accessible to users on other databases via communication links.

- b). Local autonomy

- . It allows them to exercise local control over their own data, with local accountability.
- . It makes them less dependent on some remote data processing centre that will not be so deeply involved in local issues.
- . It allows those local groups to access data at other locations when necessary.

- c). Capacity and incremental growth

If it becomes necessary to expand the system because the volume of data has expanded or the volume of use has increased, it should be easier to add a new site to an existing distributed system than to replace an existing centralised system - provided sites are fairly autonomous.

- d). Reliability and availability

A distributed system offers greater reliability than a centralised one. It can continue to function (at a reduced level) in the face of failure of an individual site or individual communication link between sites.

- e). Efficiency and flexibility

Data in a distributed system can be stored close to its normal point of use, thus reducing both response times and communication costs.

Besides these advantages, Senn added (Senn, 1989).

a). Sharing loads

This is the ability to share work between sites. Load sharing permits one site to transport data to another node through communication lines, and have it processed there. The results are stored at the remote site and recalled to the originator when the system is free.

b). Sharing software

Software sharing permits a remote user to access the computer system at another node, enter data, and have it run on the remote computer, using the software stored on that system.

In the Korean situation, development of distributed databases is useful for either IP (information providers) or users. LIRES and SCS are developed by the producers of the information itself. So, they are in a position to obtain current information easily and immediately and keep the system up-to-date. The advantageous position of Information Providers results in quality systems and in benefits to the users. Interconnection of the two systems through these advantages can lead to useful information sources.

5). Problems of distributed database

The objectives of a distributed database give rise to the following problems (Date, 1986).

a). Optimisation of query processing

There are many possible strategies for processing a given query. The response time for each strategy varies from one second to days. Thus, optimisation is clearly crucial.

b). Update propagation

The basic problem with data replication is that an update to any given logical data object must be propagated to all stored copies of that object. A difficulty that arises immediately is that some site holding a copy of the object may be unavailable because of a site or network failure at the time of the update.

c). Concurrency

Concurrency control in most distributed systems is based on locking. The one problem with locking is that the total time for update could be more than in a centralised system, the other problem with locking in a distributed system is that it can lead to "global deadlock".

d). Recovery

Two-phase commit protocols are required whenever a single transmission interacts with multiple autonomous resource managers. Site A (participant) must do what it is told by B (coordinator).

e). Catalogue management

In a distributed system, the system catalogue consists of two elements ; one is the usual catalogue data which regard the relations, indexes, users etc., and the other is all the necessary control information which enable the system to provide the desired location, fragmentation, and replication transparency.

6). Example (CONIT: Connector for Networked Information Transfer) by Marcus and Reintjes (1981)

A). Search philosophy of CONIT

The problem addressed was how inexperienced users could perform successful searching when each database tends to have its own specialised vocabulary for searching and the search functions themselves can be highly specialised and individualised by systems and databases. The solution to these potential problems is based on a natural-language approach to searching. This approach emphasises the use of a natural-language keyword stem as the basis for searching. In the searching operation itself, the keyword stems are matched against both free-vocabulary and controlled-vocabulary terms under which documents have been posted.

Taking advantage of these trends, the authors sought to demonstrate that inexperienced users could access information from multiple heterogeneous databases with a natural-language, keyword-stem approach. The mechanism for doing so includes the instruction by a computer interface to users in how to apply this keyword approach in the interface context.

Implementation (CONIT) used the M.I.T.MULTICS computer system and connected the ARPANET and TYMNET computer networks. Three different major retrieval systems were chosen to be part of the interfaced retrieval network; Lockheed DIALOG, ORBIT, and MEDLINE. The ORBIT and MEDLINE systems have basically the same command language, but there are important differences in a few functional areas. DIALOG represents a system with a very different command language and set of retrieval functions that differ in several major aspects.

B). Description of CONIT

It emphasises an approach in which the interface is a common system into which and from which requests and results are translated automatically as they flow between user and serving system. This approach has the virtue that a user attempting to retrieve information, when entering through the access mechanism provided by the common interface, sees a single virtual system in which all the complexities of the different retrieval systems and databases are hidden; only a single uniform, easy-to-use system is apparent.

By this network of interface and retrieval systems, the goal of convenient use of heterogeneous computer resources is achieved, at least for the particular application of an interactive bibliographic retrieval systems. A sample search is given in (Table 9-5).

There are four aspects of this approach for better utilisation of computer resources through networking.

- i). Concentration on the information-transfer application with particular emphasis on online bibliographic retrieval.
- ii). Utilisation of several different existing stand-alone interactive systems without modification
- iii). Emphasis on serving the ordinary end user-that is, the user experienced in neither computer programming, general computer usage, nor the use of interactive retrieval systems.
- iv). Replacement of existing, heterogeneous, often difficult-to-use computer/human interfaces with a simpler, common, easier-to-use interface.

a). Language design

Ideally, language used by the computer for communication with the users should be effective, efficient, and easy-to-use, especially for inexperienced users. So, the interface is designed by the following principles.

- i). simplicity in language design and clarity of instructional dialog
- ii). provision of instructional information when needed by the user
- iii). modularity of design
- iv). rapidity of response to user commands
- v). provision to the user of informative feedback explaining
 - . how the system has interpreted the user's request
 - . what it intends to do in response to the request
 - . what the current status of the system is
- vi). user control over the interactive dialog

b). Software design: The rule table approach

This model was developed to characterise the interaction of

independent and heterogeneous processes as they would be involved in interface operations. In this situation, although the messages coming from the retrieval systems were designed for human interpretation, they are actually interpreted by a computer process, the interface. The model should point to the design of a software structure that would provide an effective, flexible mechanism for implementing a major part of the message interpretation, translation, and response functions inherent in this kind of computer-mediated but human-oriented message interchange.

A table-driven interpreter is adopted for handling the bulk of the message-interaction functions for the translating interface situation. So, each action by the interface is governed by a table of rules.

There are four types of actions.

- i). sending messages to the user and/or connected retrieval system host computer
- ii). resetting the context description
- iii). incrementing the pointer to the "current position" in the input stream
- iv). performing some "special action" from a set of subroutines

Each rule has a maximum of six parts.

- . Context string (CS) : a character string that specifies the contexts for which the rule may apply
- . Match string (MS) : a character string to be matched in the input stream
- . Host message (HM) : a message (part) to send to retrieval system
- . User message (UM) : a message (part) to send the user
- . New context (NC) : revised context put in effect after rule execution
- . Special action (SA) : any other particular function to be performed

This table-driven interpreter makes for easy and flexible preparation, debugging, documenting, reading, and modification of the rules of interaction.

c). Retrieval function comprehensiveness

A basic problem in implementing a translating computer interface for information retrieval to actual systems is that not all retrieval systems are capable of carrying out any one given retrieval function.

< Table 9-5: Sample search of CONIT >

U1: START

C1: +++CONIT (Welcome to CONIT)

For more help on how to use CONIT, type help

U2: HELP

C2: +++CONIT

For explain commands, type explain commands or e commands

U3: E COMMANDS

C3: +++CONIT (EXPLANATION OF COMMAND)

NAME	ABBREV	SHORT EXPLANATION
explain	e	Used to get explanation about using CONIT
pick	p	Used to pick a database
find	f	Used to find documents in a database
show	s	Used to show information on database
stop		Used to stop CONIT session

U4: E PICK

C4: +++CONIT (EXPLANATION OF PICK COMMAND)

To pick a database, type pick X (* X is the number of name of DB)

For an online list of database, type show data

U5: SHOW DATA

C5: +++CONIT (Database subject area)

1. Physical sciences
2. Engineering
5. Social sciences

For a list of the DB in subject area, type show data x

U6: SHOW DATA 5

C6: +++CONIT (Databases in social sciences are listed)

- | | | |
|----|------------|---|
| 51 | SOCSCI [D] | Social Sciences Citation Index (* D=DIALOG) |
| 52 | SOC [D] | Sociological Abstract |

U7: PICK 51

C7: +++CONIT (CONIT will connect to the DIALOG system. To make this connection CONIT will first phone the TYMNET network.)
User is connected to the DIALOG system and to the SOCSCI DB.

U8: E FIND

C8: EXPLANATION OF FIND COMMAND

For searching x term, type find x
For combining sets of retrieved documents,
type combine set 1 and set 2

U9: STOP

C9: +++CONIT

End of DIALOG session

CHAPTER 10 SUMMARY OF RESEARCH

10.1. Research on information sources and on professionals' attitudes towards them

Finding the source of law which is a basis for the legal professionals' research work, either practicing or scholarly, is a major concern. Printed sources for statutory law and case law are primary tools for this. In Chapter 4, the kinds of printed sources, availability centering around maintenance and distribution, and accessibility centering around organisation and arrangement were examined. For this, each title was surveyed based on evaluation check points.

In Chapter 7, the degree of satisfaction of legal professionals with the existing primary legal sources was examined. Also, their information needs and research behaviour and their attitudes toward the primary sources were surveyed. The professionals were divided into two groups, professor and practitioner, and were examined separately in order to compare the results. Primary sources were classified into two categories, sources for statutory law and case law which have been considered as basic sources mainly used by professionals. The respondents' attitudes toward them were surveyed independently.

Furthermore, in relation to the computerised system, the professional's opinions on the coverage and contents of primary information to be included in the system was examined. In addition, the respondents' general attitudes towards legal information and research, and their view of computerisation were surveyed. Survey results were compared with the operation of the two systems.

Primary legal sources are, in general, published by government

agencies as a performance of their functions authorised by law. Government agencies are the producers of original legal information, and thus they are in an advantageous position to provide current information quickly.

On the other hand, official publications have some disadvantages such as their printing and distribution in a limited number of copies. It is a matter of fact that there are problems in their accessibility and availability. Government agencies' bureaucratic attitude tend to maintain the existing policy of editing and publication. Although there are many problems in searching for needed information, they tend to follow a traditional method passively without any effort to develop improved search modes.

In this section in Ch. 10, the professional's attitudes towards major sources of legal information and tendencies toward legal research are discussed. Then, the professional's information environment centering around the printed information sources, is summed up based on the results of the research carried out in Chapters 4 and 7. Primary sources which are considered as typical ones and are the basis for input into the systems are divided into statutory law and case law.

10.1.1. Major sources of legal information and legal research

It is common to use the library as a major source of information. According to the survey in Ch. 7, Korean legal professionals, especially legal scholars, showed different attitudes from the general tendency. That is, more than half of the professor group mainly used their private collections as major sources. This may be caused by their traditional research habits willing to have and use their own books. Professors, mostly, are specialised and concerned with a specific subject field. Therefore, they are apt to collect the books in that field, and they can easily understand the contents of their collections and how to use them.

Furthermore, the reason for having their own collection can be related to the present library situation. Professors were not satisfied with the library because of the difficulties in acquisition of current information and in the location of needed information. So, insufficient collections and inefficient search modes resulted in the infrequent use of the library by professors.

In contrast to professors, practitioners considered the library as a major source for legal information and utilised it frequently. The degree of satisfaction with the library is much higher than with professors. Different attitudes between them may be caused by the distinction of their work and information needs. The aims of an information search by practitioners is to acquire relevant information relating to legal problems which range over wide subject areas.

The value of information, that is, the acquisition of appropriate and timely information, can be a factor to determine the quality of a professional's work. For this reason, professionals tend to locate their information by themselves, although they are assisted by their assistants in routine work.

Professionals, either practitioners or professors, preferred to access legal information by specific subject terms such as suicide, defamation, and commercial value. This need cannot be met by the printed primary sources. The acquisition of relevant information and the time required for it are not only related to the condition of information sources, such as the existence of appropriate sources and their organisation, but also they are affected by education and training in the use of information sources.

In Korea, there is no formal course for legal research including how to use legal sources and to locate needed information, either in law schools or in the Judicature Research and Training

Institute. Therefore, it is likely to be difficult for legal professionals to search information efficiently.

10.1.2. Information sources for statutory law

Statutory law was indicated by practitioners and professors as the most essential information; it was required for identifying the existence of written law relating to special subjects.

In Korea, an interpretative method of legal research is widely adopted. It is based on the interpretation of the written law, especially of legal terms included in legal texts. This kind of approach is generalised in both scholarly and practical fields, so primary statutory sources should be adjusted to this research method in order to meet the users' needs.

Primary sources for statutory information are typified by the Official Gazette and the Collection of Law of the Republic of Korea which are edited and published by government agencies and are the basis for input into LIRES.

The Official Gazette is published daily by the Ministry of Government Administration, and includes laws newly enacted or revised. Through it, current information on statutory laws can be traced on a daily basis, so it is useful as a current awareness tool for statutory law. But, users' needs to locate statutory information on special subjects cannot be satisfied by it, even though the monthly alphabetical index by subject can fulfill them to some extent. Meanwhile, the major function of the Official Gazette is to notify government activities to public officials. So, it seems that the Official Gazette is not subscribed to and used as a source for current statutory law by legal professionals and the general public.

The Collection of Law of the Republic of Korea is a comprehensive tool for statutory law in force. Main volumes were published in loose-leaf form, and supplements are published frequently in order to keep up-to-date. So, the value of the Collections is dependent upon its maintenance, that is, the addition of new laws, the removal of repealed laws, and the replacement of revised laws quickly and accurately. It means that the usefulness of this information source is based on the skill and character of the staff who are in charge of that work. Sometimes in a library, its maintenance is controlled by a clerical assistant who does not realise the importance of filing accurately.

The Collection of Law is categorised by legal structure, and each volume is arranged systematically by a sub-structure. The final volume is an index volume which is alphabetically arranged by the title of the act. Therefore, without knowledge of legal structure and the exact title of the act, users must browse through the source in order to locate relevant law. Thus, the users who need statutory laws about special subjects or legal terms and have no pre-knowledge about them can not easily find them. Due to the difficulties in accessing them, the legal practitioners, legal scholars and legislators, as well as layman, have problems in locating needed information efficiently.

Professionals tend to access the Collection of Law directly, but there is no subject index. So, new and obscure fields of law, and subjects related to several fields cannot be easily and comprehensively searched, even by use of the existing index, which is arranged by the title of the act. Legal terms in the text but not in the title are impossible to retrieve.

Furthermore, the Collection of Law covers the statutory law in force only. The old versions of existing laws and the repealed laws are very important for historical research into the present legal system and for the settlement of legal trials which occurred

in the past. But, the users' need to locate these cannot be met by the Collection.

In the survey, professionals responded that they are not satisfied with the search mode of the Collection of Laws, only with its contents and scope. There was evidence that they had problems in locating the needed information through it, even if they were specialised in the law.

A requirement for statutory law was indicated in the survey in the order of full-text, related law and history of law. Due to the nature of printed sources, needs for related law and history of law cannot be completely satisfied, although The Collection of the History of Laws of R.O.K. partly complies with the need for historical information.

10.1.3. Information sources for case law

Sources for case law were considered as very important sources by professors and practitioners in order to identify the existence of case law relating to special subjects. Both groups tended in the first instance to approach the Collections of Case Law which are normally arranged by the date of decision and the number of the case. Therefore, many problems in locating appropriate case law on special subjects are encountered with them.

Representative sources for case law are the Judicial Gazette and the Collection of the Supreme Court Case Law. Both of them include the reported cases which are chosen and edited by judges in charge of those works independently and by different procedures. So there is a possibility of inconsistency in the scope and contents of cases which may be derived from different subjective views.

In the Judicial Gazette, selection and editing are left to the Judicial Researcher without any detailed guidelines. On the other

hand, in the Collection of The Supreme Court Case Law, the Justice who is mainly in charge of the case reviews delegates to his assistant (Assistant of Justice) the preparation of the draft of the report. The drafts are examined by the Examination Committee of Case Law, and then published. The positions of Judicial Researcher and Assistant of Justice are filled by judges. They are too frequently rotated for these judges to become specialised in reporting work. This may be a reason for the more serious problems inherent in the reporting system.

In principle, only reported cases are published in the printed sources. As mentioned above, whether the case is reported or not is dependent on the judges' own views, thus it is a probability that the valuable cases will be excluded from reporting and from publishing. It is possible to deprive the users of the opportunity to access and use them. If the reporting is done by the judges who make decisions, more reliable reporting can be obtained quickly and accurately.

In the U.K., the cases selected according to the basic criteria are reported by barristers following the physical production cycle (Brown, 1989). Possibility of missing the important cases by law reporting results in the tendency to refer to unreported cases. House of Lord declared that it would decline to allow transcripts of unreported judgments to be cited before it without special leave. Such leave would only be granted if counsel was prepared to give an assurance that the transcript contained some new and relevant principle of law binding on the Court of Appeal, and whose substance was not to be found in the reported authorities (Munday, 1983).

Respondents' opinions showing a preference for the coverage of all Supreme Court case law, and the inclusion of the full-text of the judgment record without title and major point of case law are likely to be related to this.

The Judicial Gazette is an official bulletin of the Judicature. Activities of the Judicature are reported in it, as well as current case law. Therefore, the Judicial Gazette can be used as a primary tool to access the current case laws. To increase availability, sections of case laws are extracted from it and distributed to the subscribers. But, it is not widely distributed to users outside of legal practitioners, in contrast to The Collection of the Supreme Court Case Laws which is extensively distributed to the individuals or institutions for scholars and practitioners.

There is a striking difference of views between professors and practitioners as to the most used source. The professors indicated The Collection of the Supreme Court Case Law and the practitioners indicated the Judicial Gazette. Due to the limited distribution of the Judicial Gazette, professors do not have the advantage of this with its availability of current case law and of comprehensive case law.

The search mode of case law sources was pointed out as a serious problem both by professor and practitioner groups. In case law, facts and legal problems are expressed in judges' language, so the necessity for retrieval by natural language in case law is more critical than in statutory law.

The Judicial Gazette and the collection of the Supreme Court Case Law are arranged chronologically by the date of decision which is not only forgotten easily but also cannot meet the users' common need for access by subject. The table of contents in the Judicial Gazette and the Collection includes 'title of the case'. In addition, the Collection includes 'statutory law referred to' as well. They can be used as access points to locate relevant cases relating to a research topic. Quarterly and annual indexes of the Judicial Gazette, and the cumulative index of The Collection of the Supreme Court by statutory law referred to can be used for

searching.

Normally, legal disputes are so complicated that lots of issues are intermingled with each other, and thus they necessitate reference to several statutory laws. Therefore, the citation of all statutory laws referred to is useful to be included either in the table of contents of the main text or in a supplementary index. These citations tend to omit important information which deals with issues necessary for understanding of case. Furthermore, in some cases, a certain section of the act covers a vast amount of subjects, so it is difficult to locate needed information easily unless it is subdivided into detailed subjects.

Although there are finding tools to locate the relevant case law in existing sources, it is difficult to meet the users' needs. Due to the nature of case law which is a legal judgment on an actual case made by judges in their own languages, it should be searched by the natural language used by judges, as well as by legal terms used in legal disciplines. This kind of need cannot be satisfied by a traditional manual search of printed sources.

It is common in both groups that the full-text of cases should be included in the system. However, there was a difference in the sources which were used for input, professors preferred the full-text of the judgment record and practitioners preferred the full-text of the Judicial Gazette. The Judicial Gazette contains the full-text of the judgment record, and the title and major point of law decided by that case. It can be interpreted that professors rarely want the inclusion of additional reports carried out by the Judicial Researcher and do not admit their usefulness. These reports can be used as finding tools for relevant case law, and thus should be included in the system, despite problems of editing and selection.

Generally, the major point of the case chosen by the reporter in

the judgment record, was emphasised by professionals. It may be caused by the fact that the major point of the case gives the gist of the case law, so it can be used primarily as a standard to examine the relevance of the case. However, this in itself is not sufficient to understand the case law. So, after screening the necessary cases in this way, users are directed to the full-text of selected cases. Therefore, the inclusion of the full-text either in printed sources or computerised databases is a prerequisite for meeting the professors' need for a typical conclusion to legal problems and the practitioners' needs to get factual information similar to the cases faced. For these purposes, factual data and specific subjects must be retrieved.

Lower court case law is required by professionals for understanding trends and for the confirmation of factual data examined by the lower court. It is especially important in any decision by the Supreme Court to annul a judgment and return that case to the original court. The Supreme Court case law is a final decision based on the legal review of lower court case law, so legal problems with a factual aspect relating to a specific case can be understood through the lower court case law. Further, there may be important cases which are valuable as case law, but are concluded without appeal to the Supreme Court. This is because whether to appeal to the Supreme Court is decided by the parties, not by the nature of the case. The professional's needs for lower court case law can be met in part by the Collection of Lower Court Case Law.

10.2. Research on CLIS in Korea (LIRES and SCS)

Besides printed sources, two kinds of computerised system, LIRES and SCS, are developed and operated in part. These are constructed based on the fundamental primary sources and have enlarged the retrieval functions by utilising computer capabilities.

In general, the system designer conducted surveys in order to develop systems satisfying users' information needs and research behaviour. In Korea, the two existing systems have been developed without prior surveys.

In this project, the operation of the two existing systems was surveyed and the results are described in Chapter 9. In order to examine their functionalities more distinctly, five actual legal problems were applied to and searched by LIRES and SCS, as well as LEXIS. The search terms and their combination, and the search results in each system were examined. As shown in (Table 9-4), the results of these between the two systems and LEXIS appeared quite differently. It probably derived from the differences in the coverage and functionalities.

The functionalities of the two systems were compared with that of LEXIS as described in 9.4.3.2. In this section, the research on LIRES and SCS is summed up and is compared with LEXIS centering around coverage, language, search mode, data output and management of each system.

10.2.1. LIRES

1). Coverage

The LIRES is basically grounded in the Collection of Law of the R.O.K. and is maintained based on the Official Gazette. Statutes and statutory instruments are covered together, different from LEXIS which consists of STAT, SI, and STATIS. In LIRES and LEXIS, the section of a specific statutory law containing the search terms is considered as a separate document. The sources used by the two systems for input are composed of lots of volumes, and they include too many sections to count.

Most professionals responded that the scope of statutory law included in the Collection of Law of the R.O.K. provides sufficient coverage in the system. Contrary to this general attitude, respondents who have experience in using CLIS stressed that in addition to the law in force, the history of statutory law should be covered by the system. Increasing capacity and decreasing cost of storage can cover a large amount of statutory data without problems. Considering that tracing the history of law through printed sources is difficult and complicated, the coverage of it in LIRES is likely to be very useful in meeting the professionals' needs. An affiliation with the Korea Legislation Research Institute could prove helpful in achieving this.

There is a need for related laws to allow a comprehensive search of statutory information relating to a subject. The sophisticated functions of a computer can provide information about related law. At present, among the needs of statutory law for full-text, related laws, and history of laws, LIRES can only meet the need for full-text.

2). Language

It is a principle in a civil law system that all the social fields are provided for in written law. Therefore, the areas covered in statutory laws range so widely that there are many terms which the users, even legal professional, cannot recognise easily. In legislation, "The standard of terms used for statutory law" prepared by GLA is used as a guideline. But, only a basic terms are listed in the standard.

In LIRES, natural language words in the text, except for 8,000 stop-words are considered as significant words and used as search terms which amount to 400,000 words. Limited terms are specially defined for legislation, and therefore it is difficult to search without a knowledge of the terms.

In LEXIS, all the words in the original texts can be used as search terms, with the exception of 100 non-searchable words.

There are no devices to control the words, such as synonyms, homonyms, and broader and narrower terms both in LIRES and LEXIS.

3). Search mode

LIRES adopts two kinds of search modes, one is keyword searching, and the other is searching by a specific act and section.

In keyword searching, all significant words included in a text can be used as search terms, and compound words which frequently appear in law can be searched by right-hand truncation. These search terms are combined by the Boolean operators, AND and OR. It can adjust to the users' needs flexibly, but the need for comprehensive searching on a specific subject cannot be satisfied, unless the development of a thesaurus is considered.

LIRES does not use positional operators. Documents which include specified search terms in the same section of the act are retrieved. This may result in the retrieval of irrelevant documents, because a section may be so broad that it consists of several subsections and divisions of subsections with different contents. Therefore, it is necessary to limit the scope of retrieved documents to one subsection which can function as a kind of proximity operator.

LEXIS, on the other hand, utilises various functionalities. In order to search the words variously expressed, the asterisk to substitute a letter and the exclamation mark for truncation, are used not to miss the relevant documents. In addition, various proximity operators which enables to search for closely associated ideas are adopted by LEXIS.

Besides keyword searching, LIRES adopts searching by a specific act and section. It can be considered as a machine-readable substitute for the manual searching of printed sources. Users should have precise preliminary information about a specific act and section which provides the specific subject needed. Obscure information about the name of an act can be verified through the retrieval of the name of that act. Specific act and section searching by LIRES provides only a small benefit in that the most current information is available and that the unknown name of an act is searchable.

LEXIS uses various segments for searching. This is very useful to retrieve relevant documents efficiently.

4). Data output

There are several output aids in a full-text system for quality retrieval. Only a few of functionalities are adopted in LIRES. Highlighting search terms in the text which are distinguished by an asterisk, is adopted by LIRES. Documents retrieved are automatically sorted, and displayed and printed in systematic order arranged by the attributes of the law.

Also, a simple list of the acts and sections, or the whole text or part of the text can be chosen for displaying and printing. However, the sequence of the documents displayed is not shown on the screen, so it is difficult for the users to comprehend what stage they are at and to take action during the display of documents. Also, the display of the section of the document around the hit terms is not adopted. The ranking and skipping functions are not found in LIRES.

In LEXIS, in order for fast scanning and selection of relevant information, several devices are developed. Such display keys as FULL, KWIC, VAR KWIC, CITE, and SEGMENTS are used variously.

Also, page and document skippings are allowed. But, ranking function is not adopted.

5). Management of system

Statutory information is not only related to the work of the legal professional, but also it is closely associated with people's lives. The availability and accessibility of statutory law, and the provision of needed information accurately and quickly corresponds to the protection of civil rights.

At present, LIRES is only open to government agencies, and so access to it is limited to government officials. It should be opened to the public as soon as possible.

And, development of help function and a wide range of training program should be considered in preparation for opening the system. Help functions for easy access and searching, error messages, or special instructions are necessary for the users who have little or no experience in using CLIS.

Normally, users' needs for legal information are represented by a mixture of statutory and case law. In order to satisfy the needs efficiently, it is desirable that both are examined at the same time. For this purpose, the integration of LIRES and SCS should be considered.

10.2.2. SCS

1). Coverage

SCS includes the full-text of reported Supreme Court case law. It covers the complete text of the judgment record and the reports including the title of the case and the major point of the case.

SCS is constructed based on the Collection of the Supreme Court Case Law (1947-1973) and the Judicial Gazette (1974-), and maintained by data from the Judicial Gazette. The coverage of these sources are different from each other, although both of them include only reported supreme court case law. So, the basic sources for input into SCS are not consistent in their coverage of data.

Most professionals responded that Supreme Court case law should be covered in the system, but there was a difference in their views on the scope of case law to be covered. Professors insisted on the coverage of all Supreme Court cases whether reported or not, in contrast to practitioners' attitudes on covering Supreme Court cases reported in the Judicial Gazette. The difference between them might be derived from the availability of the Judicial Gazette and the frequency of its use, and the disparity of their functions and information needs.

Considering the problems of the system in terms of reports, difficulties in accessing unreported cases, and users' needs, all the supreme court cases should be covered in SCS.

In contrary to the general attitude of professionals, respondents who have experience in using CLIS had a different view. They insisted on the coverage of lower court cases, as well as Supreme Court cases. It may be construed that they already understand the benefits of the system, and the capacity and function of the system as a tool for overcoming the drawbacks of printed sources.

Only reported Supreme Court cases are input into SCS, so the needs for lower court case law cannot be satisfied by the SCS.

In LEXIS, the CASES FILE in the ENGEN LIBRARY includes either reported cases in the law reports or unreported cases, and judicial decisions from all level of courts are covered.

LEXIS constitutes the most extensive single source for unreported English case law, and provides the simplest and most effective way to find an unreported case (Cole, 1988).

2). Language

In case law, the factual information relating to legal problems and the unique language used by judges are very important. So, natural language included in text should be used in searching.

SCS has a keyword file which is composed of natural language used by judges. Keywords included are limited to significant words used in the text and are registered on the list of keywords which is too deficient to meet users' needs sufficiently. Therefore, it can not only be said that SCS does not fully utilise the benefits of natural language but also that it cannot enjoy the advantages of a controlled vocabulary. This is because there is no vocabulary control for synonyms, homonyms, broader and narrower terms.

In order to be a desirable system, it should transfer completely to natural language in order to retrieve all relevant documents in the different language used by judges. Furthermore, for the retrieval of documents relating to a specific subject, a controlled vocabulary should be developed.

In LEXIS, all the words which are expressed in judges' own language can be retrieved.

3). Search mode

SCS adopts two kinds of search modes, one is keyword searching, and the other is searching by index keys which consist of the names of 8 different segments, the date of decision, the name of the Justice, etc.. Therefore, users can search case law based on a subject category, the number of the case and the name of the case,

date of decision, result of decision, statutory laws referred to, and section of the court in charge or the Justice in charge. These index keys can be combined with each other and combined with keywords. Searching by keywords and index keys can be intermingled, so users can easily increase or decrease the range of searching.

As mentioned above, keywords which can be used as search terms form a limited natural language, that is they are only part of the significant words included in the text. So, documents which include these words in their text can be retrieved. Search terms can be combined by Boolean operators (AND, OR, NOT). There is no truncation function in SCS, so compound words cannot be handled flexibly.

SCS does not adopt positional operators. Documents which include search terms or relate to index keys are retrieved. This may result in the retrieval of irrelevant documents. This is because case law, usually has long sentences, and consists of very long documents. However, SCS adopts arithmetic operators (greater, lesser, equal) which can be used for defining the range of documents retrieved.

In LEXIS, keyword and segment searching are available. And, boolean operators, proximity operators, truncation, and asterisk for substitution of a character and exclamation marks for truncation are used variously.

4). Data output

Due to the length of documents, the highlighting of search terms and the display the section of the document around the hit terms are necessitated in SCS. But these measures are not adopted. Documents retrieved can be sorted on command, and displayed and printed in numerical order. It is useful to examine the

development of, and changes in, the case law.

Part of or all of the text can be printed out. So, displaying the title of the case, first of all, is likely to be helpful in judging the relevance of documents. Specific cases can be chosen for display or printing. However, the sequence of parts displayed within whole documents retrieved is not shown, which poses the same problem as in LIRES. Ranking is not available in SCS.

In LEXIS, several devices which are useful to read and evaluate the documents efficiently are used for case law, as well as statutory law.

5). Management of system

Like statutory law, case law is not merely related to legal professionals, but to para-legal professionals, and even to the public. At present, SCS is open to courts and other agencies in the Judicature located in Seoul. It should be opened to the public in order to be utilised widely by all interested people.

And, help function should be developed for end-users who have little or no experience in using CLIS. According to the survey, professionals have little experience of using computers in daily life or in CLIS. Thus, it is most important to develop a user-friendly system which can be used easily by end-users without obstacles. Actually, SCS uses complex commands which need to be understood by end-users. It is necessary to change to clearer and more understandable commands and to transfer to an interactive dialogue system.

CHAPTER 11 CONCLUSIONS AND RECOMMENDATIONS

11.1. Proposal for improvement of information environment in Korea

Every element which comprises the information environment surrounding legal professionals not only has its own problems, but these also intermingle with each other and aggravate the situation. Therefore, the present condition of each element should be improved, and then the whole information environment can be enhanced.

11.1.1. Information sources

The legal research method generally adopted in Korea is the interpretation of legal terms in the text in terms of their legal meaning. So, professionals prefer to access the required information by specific terms.

Printed information sources are basic tools which provide easy access for manual searching. At present, none of the printed primary sources of either main texts or indexes is organised to meet their need for specific subject searching. It was affirmed by the examination of sources in Ch.4 and verified by the survey in Ch.7 that the professionals were not satisfied with the search method of primary sources.

Printed sources are a basis for constructing CLIS. The development of CLIS could not replace the printed sources but facilitate the use of information efficiently. Therefore, the improvement of printed sources should be carried out parallel with the development of CLIS, in respect of search mode and data coverage. to develop the search mode, the arrangement of the main text, as well as of the index, and the addition of cross-references should

conform to the users' needs and their information seeking behaviour. To increase the coverage, the data covered in printed sources should be available as much as possible.

In order to increase the availability of sources, they have to be widely distributed. Mailing lists for free distribution should be constructed according to the degree of use and necessity for them. Subscriber-based distribution should be carried out so that the sources are easily available to individuals or professional institutions on demand.

11.1.2. Education and training for legal research

The acquisition of appropriate and timely information is a factor to determine the quality of professional work, so legal professionals tend to locate their information for themselves. A few of the professionals have been trained formally in law schools in the use of legal information and legal research in Korea.

Houghton (1985) suggested that as the teaching of information sources is introduced into law schools' curricula, the information problem inside the profession will diminish. The lack of education of legal research results in problems in finding the necessary information efficiently. In particular, library materials which are not organised in relation to the users' behaviour, and information sources which are not arranged to help them find information easily, make this information retrieval more difficult.

Under the present situation, education and training in the use of information sources and libraries are prerequisites for efficient legal research. Therefore, legal research should be included as part of the formal curriculum in law schools and teach manual searching, as well as computerised searching in preparation for the popularisation of CLIS. Cooperation between legal scholars and

practitioners is necessary not only for research activities, but also for the training of future legal practitioners.

11.1.3. Library

The library has been emphasised as the most important social institution in research activities, and it has been utilised as a centre for information sources.

The trend of legal professionals, especially legal professors, tending to avoid the library, and their inclination to possess and use their own collections is likely to relate to the present situation of law libraries which are mainly used by legal professionals.

Libraries should be equipped with a sufficient collection, with frequent updating and systematic organisation of the collection enabling it to be used efficiently. Computerisation of information sources certainly does not make the printed sources in the library obsolete, but rather it complements the printed sources.

The development of a computerised system and an increase in its use do not suggest an ignorance of the value of printed sources. To build up a desirable information environment, the enhancement of library conditions and the improvement of computerised systems should be developed together.

Also, specialised services should be provided by subject specialist librarians to meet the professionals' needs.

The preparation of the prerequisite conditions for effective library services is so important. So, the study of law libraries in Korea is needed for the construction of a desirable information environment. It should be done by the examination of the present situation of libraries for legal professionals, then by suggestions for their desirable management based on that

examination and on the theory of law librarianship.

11.2. Proposal for improvement of existing computerised systems in Korea

The two systems in Korea are currently underdeveloped and their functionalities need to be improved. Of the functions which can be utilised in a full-text system, only a few of these are applied in the two systems. Therefore, functionalities of the systems should be supplemented in the direction of maximising access to them.

In order to facilitate the use of the systems by target groups and to prepare opening them to the public, the problems and constraints in locating pertinent information should be tackled and their capabilities should be augmented.

11.2.1. LIRES

1). Expansion of the coverage

LIRES includes statutes and statutory instruments in force. Considering the professionals' need for the history of law and the difficulty to locate it, LIRES should expand the coverage of law to the old versions of law and repealed law. The law covered in LIRES is limited to the law of central government and to national law. In order to meet the increasing need for local government administration and for international relationships, LIRES should include by-laws and treaties.

2). Language

In general, language used in statutory law consists of specialised and well-organised words. In LIRES, keywords included in the text are limited terms, which are specially defined for legislation and are not familiar with the public. Therefore, without knowledge of

the legislative terms, it is difficult to search efficiently. For retrieving pertinent documents efficiently, existing natural language should be complemented by the addition of controlled vocabulary.

3). Search mode

Search aids for keyword searching should be amplified by the utilisation of positional operators and of expanded Boolean operators.

Considering the structure of acts, it should be possible to confine the required documents to the same subsection of an act. This would be an alternative of proximity operator. Also, the Boolean operator, NOT, and the left-hand truncation function should be added.

Segment searching should also be widely applied. At present, only searching by a specific act and section is adopted in LIRES. Various segments such as the government agency instigating the law, date of enactment and promulgation number of the act could also be used as access points. It is also desirable to search by the date and number of the act by connecting arithmetic operators. In addition, retrieval of related laws and cited laws should be developed to meet the users' needs, like LEXIS searching by the authority segment.

4). Output

In order to judge the relevance of documents retrieved quickly, a KWIC display should be available, and to comprehend the users' current position within the search, the sequence of documents on display should be indicated.

Furthermore, for displaying and printing specific documents from among all the documents retrieved, a skipping function should be

adopted. The application of weighting and ranking functions is likely to be useful in order to screen valuable documents.

5). Management

LIRES is developed by a government agency in the Executive for administrative purposes, and used in government agencies without charge. It should be accessible to the public. For solving the legal matters faced or preventing them in advance, LIRES need to be open widely. In fact, increasing requests for legal information mean the necessity to be open to the public. Although LIRES is created by government finance, it should be operated as a fee-based system. So, maintenance costs including subscription fees and variable costs should be charged.

For the benefit of users, detailed documentation about LIRES should be prepared in various forms and training should be carried out widely. For searchers who are not familiar with it, help functions should be provided.

11.2.2. SCS

1). Expansion of the coverage

The coverage of SCS, Supreme Court case law reported in the Judicial Gazette or the Collection of Supreme Court Case Law, must be expanded. Of unreported cases, valuable cases can be included. Therefore, it is necessary that all Supreme Court case law, whether it is reported or not, should be covered in order to meet the need for comprehensive searching.

The inclusion of lower court case law is useful for the professional. Due to the huge quantity, coverage of all lower court case law is almost impossible. So, the input of lower court case law included in existing printed sources is desirable. If the

judgment document of a lower court is recorded on diskette as with the Supreme court, and the computer capacity is adequate, the input of lower court case law may be easily achieved.

In addition, commentaries on case law contained in journal articles provides valuable information both for the practicing field and the scholarly field. They are result of combined research, which reviews case law based on in-depth theory, so it is advisable for them to be covered in the system.

2). Language

In general, case law is expressed in judges' own language. All meaningful natural language included in the text of case law must be incorporated as search terms, whether registered on the list of keywords or not. In addition to natural language, controlled vocabulary should be applied. It is desirable to use the list of keywords as controlled vocabulary, provided that it is expanded to cover the keywords comprehensively and to control the synonyms, homonyms, and broader and narrower terms.

3). Search mode

In general, case law is very lengthy that various connectors combining search terms are strongly required. However, SCS uses only boolean operators. In order to locate the relevant case law efficiently, positional operators which enable to search for closely associated ideas among long documents are required. Furthermore, in order not to miss relevant case law, variations of words expressed variously by judges should be searched using truncation and asterisk like LEXIS.

Commands used in SCS are English language based, so they have to be transferred into understandable Korean language. It is

necessary to change the system to an interactive dialogue system, and to develop advanced help functions.

4). Output

Functionalities for a KWIC display, the sequence of documents displayed, and ranking based on frequency weighting are required as output aids as with LIRES. Furthermore, considering the size of the documents, SCS should adopt the highlighting function as a necessity.

5). Management

Under the Korean litigation system, the parties can proceed without designation of counsel. So, it is desirable that the system is open to the public and provide relevant case law required, as a fee-based system as with LIRES. The documentation and training program should be enhanced.

11.3. Recommendations for facilitating the use of two computerised systems

For protection of the right to know and the right to access to information, the systems including important legal information should be open to the public and provide the opportunities to access.

It is desirable for users that statutory and case law information should be combined and searchable in one stage. Given that the main objective to use legal information is to resolve the legal problems faced, information systems which cover case law or statutory law should be linked for easy access and searching.

In the Korean legal system, both of them are closely related to each other. Statutory law is a basis for judicial decisions, and a

judicial decision is an interpretation of statutory law.

Therefore, it is necessary and desirable to connect the two systems with the existing data communication network, instead of constructing a new legal information network. This would have the following advantages; extra expenditure for construction is not needed, and subscribers to the data network services can have easy access and search them along with other information sources available through that service as and when they are developed.

Therefore, it is advisable for the two computerised systems to participate in the CHOLLIAN II service and to provide legal information to the subscriber through DACOM-NET. If the two systems use that data network, subscribers can easily access them and locate needed information, because they are familiar with the use of the service provided through DACOM-NET. The needs for legal information can be met in the proper place at the proper time.

The two Korean systems connected to the data communication network will make computer access available to all those who need it. The main theme here is the concept of a translating computer interface as a means to simplify access to, and operation of, the two heterogeneous legal databases.

A system can be considered heterogeneous when it has different computers at each site, or different operating systems, or different database management systems (Ceri and Pelagatti, 1984). The two databases we have discussed fit these criteria, so the development of distributed databases recommended in this thesis belongs to a heterogeneous database system.

The two legal systems we consider linking were developed separately by different organisations. One belongs to the Executive and the other to the Judicature, and they cannot be simply merged. Therefore, the best way may be to develop a

distributed database. Then, the two systems are accessible from the same terminal and with one set of commands whether this is the set used originally by LIRES or by SCS, or the command language of the interface.

A distributed database system should be designed to maximise the availability and accessibility of the two systems, and to utilise the advantages of a distributed database system.

In the Korean situation, development of a distributed database is useful for both IP (information providers) and users. LIRES and SCS are developed by the producers of the information itself. So, they are in a position to obtain current information easily and immediately and to maintain up-to-date information. The advantageous position of the IP results in the quality of systems and the benefit to users. Interconnection of the two systems with these advantages can lead to a useful information source.

When use of the systems is expanded, a survey on the attitudes of system users towards the operation of the two systems should be conducted in order to develop them. It will be advisable for a future survey to expand to larger sample including para-legal professionals or the public, taking into account the needs of legal information by wider groups. Also, attitudes towards secondary legal sources and non-legal sources must be studied, taking into account interdisciplinary trends.

According to the development of information technology, there are some possibilities to improve access to the systems, and the user interface and search design. Hoover (1991) stated that the third stage of computer use regarding legal scholarship make available for new ways of looking at legal information, artificial intelligence, and that the three promising technologies, OPACs, CD-ROMs, and optical imaging, enhance legal research capabilities.

Legal material is now being published on CD-ROM. An advantage of CD-ROM is that it can be networked, allowing users in multiple locations on a area network to make use of them.

Moreover, hypertext systems are being developed for legal information retrieval, in which the choice of what material to use and in what order to use it, is entirely in the hands of the user. This flexible access gives the semblance of a database structured specially for each user (Wilson, 1989).

FLEXICON (Fast Legal Expert Information Consultant) was designed to provide a solution to most information retrieval needs of legal professionals (Gelbart and Smith, 1992). It offers an effective non-boolean search function and a menu-driven user interface, assistance in formulating meaningful search requests via thesauri and relevance feedback. In addition to retrieving relevant cases, FLEXICON developed automatic text analysis and processing of information.

These kinds of development in legal information retrieval must be considered to apply to the two existing systems in the future.

APPENDIX

QUESTIONNAIRE

1. The name of the institution you are working, and the position in the institution.
2. Educational background
 - a. LLB
 - b. LLM
 - c. PH.D
 - d. non-educated in law school
3. Do you have a professional qualification to engage in legal practice ?
 - a. yes
 - b. no
4. How long have you followed the legal professionals ?
 - a. less than 5 years
 - b. 5-10 years
 - c. 10-15 years
 - d. more than 15 years
5. Do you have a specialised field in law ?
 - a. yes ()
 - b. no
6. What is your major source of legal information ?
 - a. private collection
 - b. office
 - c. library in your institution
 - d. other library
7. How much information can you obtain from library ?
 - a. complete
 - b. almost complete
 - c. adequate
 - d. insufficient
8. What is the major obstacle in the use of the library ?
 - a. insufficient collection
 - b. distance of the library from the office
 - c. regulations in the use of the library
 - d. time limitations of the library use
 - e. the others
9. What is the major difficulty in the use of the library collection ?
 - a. lack of basic legal materials (ex: Collection of Statutory Law and Case Law)
 - b. acquisition of current information

- c. missing volumes
- d. unsystematic organisation of library materials

10. What is the most convenient access point to the legal information ?

- a. access by specific terms
- b. access by legal structure
- c. the others

11. Are you assisted by others for your research ?

- a. yes
- b. no

* If you are assisted by others, please answer the Question 12 and 13.

12. From whom do you usually receive the assistance ?

- a. assistants in the office
- b. librarian
- c. colleagues
- d. the others ()

13. How much assistance do you receive from them ?

- a. comprehensive search of the subject
- b. search of the specific items
- c. simple and routine assistance
- d. the others

14. How much time do you spend for information search ?

- a. less than 6 hours
- b. 6 hours - 1 day
- c. 1 - 3 days
- d. more than 3 days

15. Are you trained for legal information search ?

- a. yes
- b. no

16. If you are trained, what kind of training do you have ?

- a. formal lecture in law school
- b. informal lecture in law school
- c. training in the institution for legal practice
- d. the others

17. What kind of information do you need for legal research ?
(order of importance)

- a. statutory law
- b. case law
- c. legal doctrine

* The questions from 18 to 22 are about legislation.

18. For what reasons do you need the statutory materials ?
(order of importance)
- a. Identify whether the statutory laws relating to special subject are existing.
 - b. Identify the related laws which are concerned with specific law relating to special subject.
 - c. Examine the legal text
 - d. The others
19. What kind of information do you need ? (order of importance)
- a. full-text of statutory law
 - b. history of statutory law
 - c. related laws
20. How do you access to the full-text of legislation ?
- a. textbook to collection of statutory law
 - b. commentary to collection of statutory law
 - c. journal article to collection of statutory law
 - d. notes in the code to collection of statutory law
 - e. directly access to collection of statutory law
21. What kind of source do you generally use ? (order of importance)
- a. abridged code of law
 - b. unabridged code of law
 - c. collection of Korean laws in force
 - d. Official Gazette
 - e. the others ()
22. How much are you satisfied with the most used source ?
- complete almost com. adequate insuf.

scope of material
contents of material
method of search

* The questions from 23 to 34 are about case law.

23. For what reasons do you need the case law information ?
(order of importance)
- a. Identify whether the case law relating to the special subject are existing.
 - b. Identification of the title, the number and the date of the specific case law.
 - c. Examination of full-text
 - d. The others ()
24. What kind of information do you need for case law ? (order of importance)
- a. Major point of case law
 - b. full-text of case law
 - c. Related case law
 - d. History or change of case law
 - e. Applied statutory laws to the case law
25. What information do you need to find in the case law ?
(order of importance)
- a. Identification of the fact included in the case law
 - b. Conceptualisation of the fact into the legal concept
 - c. Interpretation of legal terms and essential fact
 - d. Typical conclusion of legal problems
26. How do you access to the full-text of the case law ?
- a. Textbook to collection of the case law
 - b. Commentary to collection of the case law
 - c. Journal article to collection of the case law
 - d. Notes in the code to collection of the case law
 - e. Directly to collection of the case law
27. What kind of source do you generally use ? (order of importance)
- a. Collection of Supreme Court case law
 - b. Judicial Gazette
 - c. Case law in card form

d. Comprehensive Guide to the Case Law

e. The others

28. How much are you satisfied with the most used source ?

complete almost com. adequate insuffi.

scope of material

contents of material

method of search

29. What kind of source do you use for current case law ?

a. Judicial Gazette

b. legal newspaper

c. daily newspaper

d. monthly journal of case law

e. the others

30. For what reasons do you need the current case law ? (order of importance)

a. Understanding of current trends in case law

b. Acquisition of current information relating to the subject

c. analysis of the specific case law

d. the others

31. What kind of sources do you use for lower court case law ?

a. Collection of Lower Court Case Law

b. legal newspaper

c. monthly journal of case law

d. daily newspaper

e. the others

32. For what reasons do you need the lower court case law

a. Identification of the fact included in the case law

b. Understanding of trends in lower court case law

c. Examination of interpretation on the lower court case law

d. Review of the decision by the lower court to the specific case pending in the higher court

33. How much are you satisfied with the Judicial Gazette ?
complete almost com. adequate insuf.

scope of source
contents of source
method of search

34. How much are you satisfied with the Collection of Supreme
Court Case Law ?
complete almost com. adequate insuf.

scope of source
contents of source
method of search

* The questions of 35 and 36 are about legal doctrines.

35. What kind of source do you generally use for information of
legal doctrine ?

- a. textbook
- b. commentary
- c. journal article
- d. the others

36. For what reasons do you need the information of legal
doctrine?

- a. Identify whether the legal doctrines relating to the special
subject are existing.
- b. Examine the contents of legal doctrine
- c. Review the application of legal doctrine to the specific
case and the result of it
- d. the others

37. What is the best way for effective legal research ? (order of
importance)

- a. Expansion of library collection
- b. Reorganisation of library materials
- c. Provision and utilisation of research assistants
- d. Computerisation of legal information

* The questions from 38 to 51 are about computerisation of legal information.

38. For what reasons do you agree to a proposal of computerisation?
- a. Quick and easy searching of needed information among a large quantity of information
 - b. Comprehensive and exhaustive searching of needed information
 - c. Solving the problems of space for the conservation of information
 - d. Acquisition of current information
 - e. the others
39. For what reasons do you disagree to a proposal of computerisation ?
- a. It is convenient to search by the present manual method.
 - b. Most of the information required are covered in the existing printed materials.
 - c. It might be very difficult to search the proper information by computer.
 - d. the others ()
40. Do you have experiences in the use of computer in the daily life ?
- a. yes
 - b. no
41. Do you have experiences in the use of computer for legal information ?
- a. yes
 - b. no
42. What kind of legal information should be covered in the computerised system ? (order of importance)
- a. Case law of Supreme Court
 - b. Case law of Supreme Court and lower court
 - c. Statutory laws in force
 - d. Statutory laws in force, repealed and revised laws
 - e. legal doctrine
43. What kind of statutory laws should be covered in the computerised system ? (please tick off the proper ones)
- a. Constitution
 - b. statutes
 - c. statutory instruments

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