

## Development of Online Legal Information System : Lawyers' Perceptions

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### ABSTRACT

The study ascertains the perception of academic and practicing lawyers about awareness of legal information resources and problems faced by them in accessing legal information resources. Their perceptions about the development of open access legal information system were identified in developing an open-access online legal information system. A structured open-ended questionnaire was used to collect data from respondents. Researcher collected 216 filled questionnaire from academic lawyers and 181 questionnaire from practicing lawyers working in eight institutions in Delhi (India). Data were analysed using Statistical Package for Social Sciences (SPSS) and results are presented in tables and figures. The study found significant difference in the responses of academic and practicing lawyers. 28 (13.0 %) academic lawyers and 28 (15.5 %) practicing lawyers rated online legal information resources poor. More academic lawyers were *very satisfied* compared to practicing lawyers in using commercial resources. It was ascertained that more number of practicing lawyers expressed 'somewhat satisfied' in using open access resources. Academic lawyers, 51 (28.7 %), expressed 'completely dissatisfied' and 33 (21.9 %) practicing lawyers stated 'completely dissatisfied' in using the open access resources. Practicing lawyers have highlighted that poor details on online legal information is a major hindrance in using legal information resources while academic lawyers mentioned several login requisites as one of the major problems. The outcome of the study can be used to develop suitable online legal information resources.

**Keywords:** Practicing lawyers; Academic lawyers; Legal information; Open access; Information system

### 1. INTRODUCTION

Undoubtedly, legal scholarship is perceptive, formalist and directed at legal professionals<sup>1</sup>. Legal professionals depend on varied information sources to satisfy their information needs in daily routine work. The information needs of academic and practicing legal professionals are different because of the nature of their work. The emergence of Internet-based legal information services offers tremendous opportunities as well as challenges to academic and practicing legal professionals, and law firms in particular<sup>2</sup>. Internet-based services facilitate lawyers and possess the potential to consolidate or expand the portfolio by offering services economically in a convenient way. A law firm faces the challenge to harness the internet and allied technologies so that the quality of services can be enhanced, leading to improvement in clients' satisfaction<sup>3</sup>. Interestingly, the development of online commercial resources has reduced the need for printed documents. Consequently, law libraries have reduced the number of print books in the library collection<sup>4</sup>. Both academic and practicing lawyers require assistance in gathering, filtering, scanning, navigating and evaluating legal documents. Moreover, both academic and practicing lawyers need to apply their minds prior to starting the search for legal information<sup>5</sup>.

It is very cumbersome and expensive for the common man to get legal information. Therefore, it is imperative

that all stakeholders involved in the creation, interpretation, and distribution of law strive to develop a legal information system<sup>6</sup>. Experts in the field have suggested that designers of online information systems ought to use information-seeking models as theoretical lenses to analyse users' behavior to identify the shortcomings of the existing systems<sup>7</sup>. Majority of practicing lawyers depend on discussions with colleagues as a channel for exchanging information more than external communications with others<sup>8,9</sup>. However, there is a significant difference in the requirements of practicing and academic legal professionals. Thus, this study strives to understand the differences in perceptions of practicing and academic lawyers in the development of an online legal information system. The study aims to achieve the following objectives:

- To know differences in the awareness of open access and commercial legal information resources among academic and practicing lawyers
- To know the perception of academic and practicing lawyers about open access and commercial legal information resources available in India
- To ascertain the level of satisfaction of academic and practicing lawyers in using online legal information resources
- To identify inhibits faced by academic and practicing lawyers in accessing existing online legal information resources
- To comprehend legal information requirements of

academic and practicing lawyers in India for designing an online legal information system and

- To design model online legal information system on the basis of the perceived needs assessment of academic and practicing lawyers.

## 2. LITERATURE REVIEW

Legal information is significant for both academic and practicing lawyers for the success of the legal system. Practicing lawyers may fail to support the case of their clientele because of the lack of reliable information. Similarly, academic lawyers cannot do research without understanding previous research done in the area. Therefore, it is imperative to comprehend the differences in the perception of academic and practicing lawyers. Laidlaw<sup>10</sup> enunciated that junior lawyers and interns were unable to deliver structured research work. Further, it was also found that trainees were good in getting information out of legal databases. Peruginelli<sup>11</sup> discussed access to legal data by common people and stressed that data can be communicated easily. However, in developing countries, the work is being done through intermediaries and it does not serve the purpose. Therefore, developing countries have to do a lot to disseminate legal information among citizens. Thanuskodi<sup>12</sup> highlighted that practicing lawyers prefer to consult their personal libraries and usually found it difficult to get legal information using digital law libraries. Khan<sup>13</sup>, *et al.* elaborated that lawyers prefer the English language. Majority of lawyers opined that online sources of information have made it convenient to get the information. Moreover, the study found that having educational qualification is highly important because lawyers with higher qualification had less uncertainty, and perceived their tasks to be less complex as compared others. Tuhumwire and Okello-Obura<sup>14</sup> described that it is imperative to understand the legal information requirements of lawyers, academics and the common man because of the complexity of resources. Furthermore, it is crucial to understand their requirement because a need arises due to a gap in knowledge.

Chowdhury<sup>15</sup>, *et al.* also supported this with viewpoints that uncertainty is not limited to a cognitive state of the gap in knowledge. However, it may be correlated with difficulties relating to information seeking and retrieval of legal information, lack of awareness and unfamiliarity with sources of information. Solomon and Bronstein<sup>16</sup> stated that chance encounters may expose lawyers to meaningful information and electronic information sources were found the most serendipitous. Bogoch<sup>17</sup>, *et al.* further stated that the Supreme Court's decisions are bindings precedents while Trial court and Family Court rulings carry persuasive validity. Oppenheim<sup>18</sup> emphasised that information professionals have a greater role to play as intermediaries between information and users. Furthermore, he stated that it is now the appropriate time to expand the role by acting as intermediaries between users and legislators to achieve what people really want. Rosa<sup>19</sup>, *et al.* observed that information systems in courts can help in reducing the number of pending cases. Besides this, it also increases service delivery to the citizens. Nevertheless, there are some risk factors in the design and development of information systems in courts. Kadli and Hanchinal<sup>20</sup> conducted a survey

of law students and found that law students predominantly use books, and the majority of students are familiar with online and offline databases in the field of law. Nevertheless, law students face inhibits in using online resources because of information overload and lack of search competencies. Khan and Bhatti<sup>21</sup> studied the use of academic law libraries in Pakistan and revealed that faculty members use law libraries to consult textbooks for teaching and other academic activities. In addition, the majority of faculty members also use dictionaries for searching legal terminologies and meaning of words. Poydras<sup>22</sup> emphasised the need to inculcate the necessary legal research skills among students so that students can solve legal problems. Further, he stressed that the curriculum of law courses ought to have legal information literacy components that students can understand how to get the desired information. Bhardwaj and Madhusudan<sup>23</sup> carried out a study on academic lawyers and found that (97.77 %) respondents are aware of open access resources; however, only (71 %) frequently use the resources and (15.55 %) rarely use these resources. The study also found that the main purposes of using these resources are case law searching (nearly 39 %), followed by project and assignments (26.66 %), and study and update (24.44 %). Ellis<sup>24</sup>, *et al.* elucidated that there are a number of factors that influence lawyers in pursuing online information sources such as, situational relevance, presentation, utility, and trustworthiness. In addition, the speed of content acquisition and interpretation given by the resources also matter a lot.

## 3. METHODOLOGY

The survey was conducted in eight legal institutes in Delhi using a structured questionnaire. These eight institutions were selected because viewpoints of respondents working in these institutions signify all types of legal professionals in the country. The questionnaire used in data collection had 27 questions including dichotomous (Yes/No), multiple-choice questions (MCQs), rating and opinion questions. The questionnaire established the level of the awareness of the respondents about legal e-resources and services and information from respondents pertaining to requirements of an online legal information system. Subsequently, the collected data was analysed using the Statistical Package for Social Sciences (SPSS). Finally, an online legal information system was designed and developed on the basis of respondents' responses. Development of online legal information system (OLIS) covered the preparation of software, data structures, metadata, search form, datasheet and retrieval of legal information. OLIS was tested for search strategy, search techniques, bugs and implementation of the designed online legal information. A number of testing techniques were used to test the functionality of OLIS. To gain a detailed understanding of how the legal community uses existing systems for their legal information needs which are part of their daily legal work, a need assessment survey was conducted using structured questionnaire circulated among 750 respondents of eight institutions in Delhi. The questionnaires were distributed among the population group from July to September 2013. Survey and data analysis were completed within six months in 2014. Total of 397 filled-in questionnaire was personally collected by the investigator, showing a response

rate of 52.9 per cent. 246 filled-in questionnaires were received from male respondents and 151 from female respondents.

**4. SCOPE OF THE STUDY**

The scope of the study was limited to academic and practicing lawyers working in eight institutions in Delhi. Academic lawyers include LLM students, research scholars and faculty members in academic institutions; practicing lawyers are those working in the High Court of Delhi and Supreme Court of India. The following eight institutions were selected to undertake the study: (i) Supreme Court of India (SCI), New Delhi; (ii) High Court of Delhi (HCD), New Delhi; (iii) National Law University (NLU), New Delhi; (iv) Faculty of Law, Delhi University (DU), Delhi; (v) School of Law, Jamia Millia Islamia (JMI), New Delhi; (vi) Indian Law Institute (ILI), New Delhi; (vii) Centre for Legal Studies, Jawaharlal Nehru University (JNU), New Delhi; and (viii) University School of Law and Legal Studies, Guru Gobind Singh Indraprastha University (GGSIU), New Delhi.

**5. DATA ANALYSIS AND INTERPRETATION**

Responses received from 397 respondent were recorded in the SPSS data entry sheet. Thereafter, all the responses were analysed using SPSS version 16. The results received after analysing the dataset are presented in Tables 1-2.

**5.1 Demographic Characteristics and Survey Responses**

The survey was conducted in eight major legal institutes comprising six law universities and two courts in Delhi, India, and 397 filled-in questionnaires were received from the respondents. Thereafter, data from the questionnaires were recorded in the SPSS version 16 data entry sheet. The results received after analysing the dataset are presented in Tables 1-2. The response rate in the questionnaires collection was 52.9 per cent. The response rate at all eight institutes was calculated. It was found that highest response was from SCI at 69.3 per cent, followed by ILI (60 %), DU (57.3 %), NLU (57.3 %), JMI (53.3 %), HCD (50.6 %) and GGSIU (49.3 %). The lowest response rate (12.0 %) was noted at JNU. Out of the total 397 responses, 216 (54.4 %) were academic lawyers and 181 (45.6 %) were practicing lawyers. Further, institution wise numbers of responses were analysed. It was found that the highest number of academic lawyers' responses were received at the ILI, 44 (20.4 %), followed by DU, 43 (19.9 %), NLU 43 (19.9 %), JMI, 40 (18.5 %), Guru Gobind Singh Indraprastha University 37 (17.1 %). The lowest response rate in the category of academic lawyers was recorded at JNU, 9 (4.2 %). Responses of practicing lawyers were recorded highest at SCI, 105 (58.0 %), followed by HCD, 76 (42.0 %).

**5.2 Awareness Level and Users' Rating of Online Legal Information Resources**

Academic and practicing lawyers use a number of resources and consult their peers. Therefore, it is imperative

to understand the awareness level of academic and practicing lawyers in using online legal information resources in India. Hence, the awareness level of respondents was determined. The study found that 216 (100 %) of academic lawyers and 181 (100 %) of professional lawyers are aware of online legal information resources. Further, the respondents were asked to rate the online legal information resources they are aware of. Fig. 1 shows that the majority of academic lawyers rated online legal information resources as good 63 (29.2 %), followed by very good 47 (21.8 %), fair 42 (19.4 %). However, only 37 (17.1 %) rated online legal information resource as excellent. Besides this, 28 (13.0 %) academic lawyers rated these resources poorly. In comparison, the majority of practicing lawyers rated these resources as very good 47 (26.0 %), followed by fair 42 (23.2 %). A considerable number of practicing lawyers rated online resources 'excellent' 36 (19.9 %). 28 (15.5 %) rated these resources poorly. It is ascertained that practicing lawyers' rating of the online legal information resources was better than academic lawyers'. The major reason could be the speed of retrieval of information because practicing lawyers need information in the shortest possible time for their cases

**Table 1. Difficulties faced by academic and practicing lawyers in using the online legal information- Crosstab academic lawyers (n =216), Practicing lawyers (n =181)**

The problem (s)	Academic			Practicing		
	Yes	Mean	SD*	Yes	Mean	SD*
Accessibility the legal information	109	1.50	.501	89	1.51	.501
Paucity of online help	107	1.50	.501	65	1.64	.481
Poor details of online legal information sources	72	1.67	.472	81	1.55	.499
Bewildering search screen	98	1.55	.499	51	1.72	.451
Poor design of website	89	1.59	.493	51	1.72	.451
Several logins requisite	69	1.68	.467	65	1.64	.481
Unclear access instructions	76	1.65	.479	44	1.76	.430
Lack of know-how in using database	64	1.70	.458	37	1.75	.436
Inadequate ICT infrastructure in law firms	68	1.69	.466	29	1.84	.368
Absence of Print provision	60	1.72	.449	29	1.84	.368
Slow downloading from database	59	1.73	.447	28	1.85	.363
Lack of training	44	1.80	.404	26	1.86	.352
Insufficient know of ICT	32	1.85	.356	18	1.90	.300
Lack of time	18	1.92	.277	16	1.91	.280

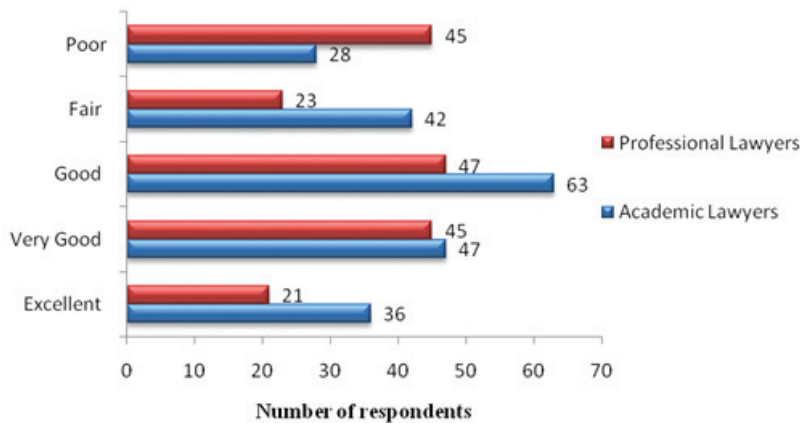
Notes: (i) Respondents were allowed multiple answers (ii) \* Standard Deviation.

**Table 2. Hindrances faced in searching open access resources academic lawyers (n=216), practicing lawyers (n=181 )**

Type		Less user-friendly	Incomplete	Not updated regularly	Interface not well	Not organized properly
Academic lawyers	Mean	1.31	1.56	1.52	1.53	1.39
	N	178	178	178	178	178
	SD*	0.463	0.498	0.501	0.500	0.489
Practicing lawyers	Mean	1.39	1.45	1.50	1.49	1.42
	N	151	151	151	151	151
	SD*	0.490	0.499	0.502	0.502	0.495

Notes: (i) Respondents were allowed multiple answers (ii) \* Standard Deviation

pending in the court of law. In addition, practicing lawyers need case law relevant to their cases and these databases help them to identify the relevant cases.



**Figure 1. Rating of online legal information resources Academic lawyers (n) =216; Practicing lawyers (n) 181**

**5.3 Satisfaction Level in using the Commercial Resources**

Lawyers use a number of commercial resources in their research work. Therefore, the two groups of respondents were asked to reveal their level of satisfaction in using commercial resources. Fig. 2 elucidates that maximum academic lawyers are somewhat satisfied (113), followed by very dissatisfied (50), and completely dissatisfied (11). Only, 42 academic lawyers stated they are very satisfied in using commercial resources. Practicing lawyers (105) expressed that they are somewhat satisfied in using commercial resources, followed by very dissatisfied (35), and completely dissatisfied (6). A limited number of practicing lawyers (34) expressed very satisfied using commercial resources.

**5.4 Satisfaction Level in using Open-Access Legal Information Resources**

Open access resources facilitate academics and practitioners in conducting productive research and bringing change in their respective areas. It is a common perception among various

stakeholders in a society that open access resources have a positive impact on the scientific community by increasing accessibility, usability, productivity and sustainability<sup>25-26</sup>. The study ascertained that 178 (82.4 %) of academic lawyers are aware of open access resources and 38 (17.6 %) stated that they are not aware of open access resources. In contrast, 151 (83.4 %) of practicing lawyers expressed they are aware of open access resources and 30 (16.6 %) are unaware of these resources.

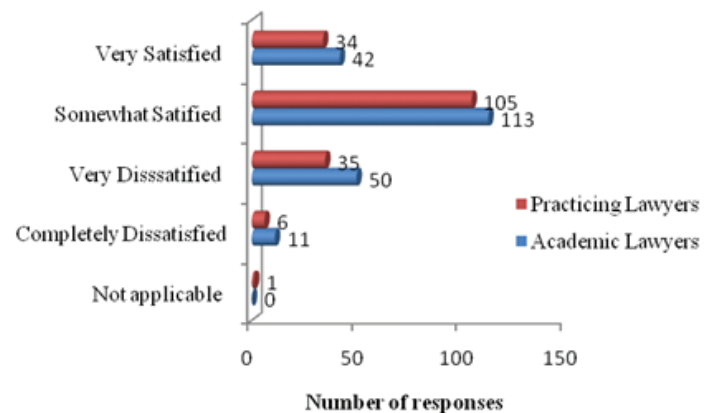
Satisfaction level in using open access resources was also determined.

Fig. 3 shows that 63 (35.4 %) of academic lawyers expressed that they are ‘somewhat satisfied’, 44 (24.7 %) expressed they are ‘very dissatisfied’ and 51 (28.7 %) ‘completely dissatisfied’ in using open access resources.

Much less number of respondents 20 (11.2 %) stated they are ‘very satisfied’ with open access to legal information resources. On the other side, a number of practicing lawyers 61 (40.4 %) revealed they are ‘somewhat satisfied’ and 44 (29.1 %) mentioned they are ‘very dissatisfied’; 33 (21.9 %) are ‘completely dissatisfied’ in using open access resources. A very limited number of practicing lawyers 14 (9.3 %) stated that they are ‘satisfied’ in using open access to legal information resources. It is clear from the data analysis that a number of practicing lawyers expressed they are somewhat satisfied and the number of practicing lawyers expressed dissatisfaction as well in using the open access resources. It can be ascertained that practicing lawyers explore the features and services more as compared to their academic counterparts.

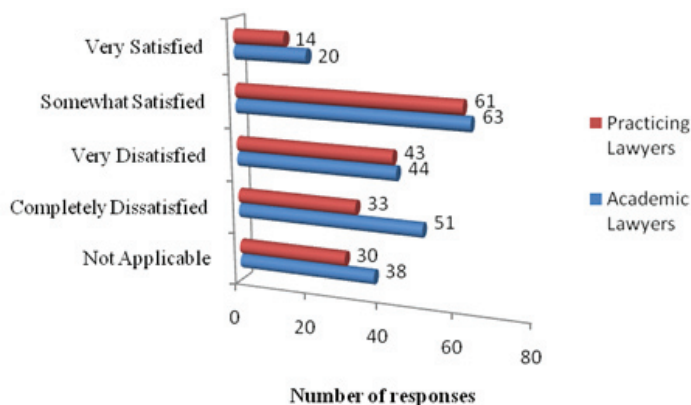
**5.5 Difficulties Encountered**

Academic and practicing lawyers use a number of resources including online and offline databases in the field of law in their daily routine. Nevertheless, law students’ face



**Figure 2. Satisfaction level in using the commercial resources Academic lawyers (n) =216; Practicing lawyers(n) =181.**





**Figure 3. Satisfaction level in using the open access resources Academic lawyers (n)=178; Practicing lawyers(n)=151.**

inhibits in identifying the appropriate online resources because of several reasons<sup>20</sup>. Thus, in order to develop an online legal information system, it is crucial to know the problems faced by academic and practicing lawyers in using online legal resources. A question was asked to the respondents to reveal their problems. Academic lawyers revealed that their major problems are: accessibility of legal information (109), followed by lack of provision of online help (107), bewildering search screen (98), poor design of website resources (89), unclear access instructions (76), poor details of online legal information resources (72), several logins required (69), inadequate ICT infrastructure in law firms (68), lack of knowledge in using online and offline databases (64), slow downloading from database (59). In addition, academic lawyers also stated that lack of training (44) is another hindrance in using the online legal information resources. The least mentioned difficulties in using the resources by academic lawyers are insufficient knowledge of information and communication technology (32) and lack of time (18). In comparison, practicing lawyers highlighted that major obstacles in using the online legal information are accessibility of legal information (89), poor details of online legal information sources (81), paucity of online help (65), several login required (65), bewildering search screen (51), poor design of website (51), unclear access instructions (44), lack of know-how in using the database (37), inadequate ICT infrastructure (29), absence of print provision (29) and slow downloading from database (28). Besides this, practicing lawyers also articulated that the less important problems in using the legal information are lack of training (26), insufficient knowledge of ICT (18) and lack of time (16).

The major difference in the two groups of respondents was that more practicing lawyers highlighted poor details in online legal information (SD ~0.499) as the major problem when compared to academic lawyers (SD ~0.472). Several logins requisite is expressed by more number of practicing lawyers (Std. Dev.~.481) as compared to academic lawyers (~.467).

### 5.6 Hindrances in Accessing Open Access Legal Resources

Legal information is totally different from other types of resources. Author of a research study opined that primary legal information should be available free to all, and this can be

achieved through social negotiation and coordination among different stakeholders<sup>25</sup>. Therefore, the study tried to ascertain problems in using open access resources by two groups of respondents. A multiple choice question (MCQ) was posed to respondents. Table 2 elucidates their responses: academic lawyers' major problems have been less user-friendliness (mean 1.31, SD ~0.463), followed by not organised properly (mean 1.39; SD ~0.489), not updated regularly (mean 1.52; SD ~0.501), interface not good (mean 1.53; SD ~0.500). Out of the five choices, the one least mentioned by an academic lawyer is that open access resources are incomplete (mean 1.56, SD ~0.498). On the other side, practicing lawyers stated that their main problems in searching open access resources are that these resources are less user friendly (mean 1.39, SD ~0.490), followed by not organised properly (mean 1.42, SD ~0.495), incomplete (mean 1.45, SD ~0.499), interface not well (mean 1.49, SD ~0.502). An only a limited number of respondents stated that open access resources are not updated regularly (mean 1.50, mean ~.502). It is clear that a number of academic lawyers expressed that these resources are incomplete and not updated regularly as compared to practicing lawyers.

### 5.7 Choice on Different Types of Legal e-Resources

The nature of the work of academic and practicing lawyers is entirely different. Practicing lawyers' major purpose is to sort out the legal problems of their clients. Academic lawyers focus on solving research problems. Thus, their requests about different types of legal e-resources were determined through an open-ended multiple choice question in the questionnaire. Respondents were permitted multiple answers. It was identified that majority of academic lawyers opted for case law (194; SD ~0.303), followed by research articles (171; ~407), parliamentary debates (166; SD ~0.423), legal news (165; SD ~0.426), acts (159; SD ~0.442), speeches of eminent academicians, lawyers and judges (149, SD ~0.464), amendments (148; SD ~0.466), audio-video contents (132; SD ~0.489), commentaries (102; Std. Dev.~.500), trade notices (89; Std. Dev.~.493), notifications (89; Std. Dev.~.493). Academic lawyers opted the following types of resources least i.e., circulars (61; SD ~0.451), legal forms (60; SD ~0.500), book reviews (40; SD ~0.389). Practicing lawyers revealed their highest preference for the following: parliamentary debates (172; SD ~0.218), followed by case laws (171; SD ~0.474), speeches (148; SD ~0.387), acts (147; SD ~0.392), amendments (124; SD ~0.466), legal news (123; SD ~0.468).

There is a significant difference between the preferences of the two groups of respondents. Academic lawyers showed more preference for case law, research articles, legal news, audio-video contents whereas practicing lawyers preferred parliamentary debates, acts, speeches, trade notices, circulars, rules, and regulations etc. The difference in preference is due to the nature of their work.

### 5.8 Type of Case Laws

Academic and practicing lawyers use different types of case laws in their academic and professional work. Therefore, a question was posed to know the type of case laws they use in their work. The study found that academic lawyers prefer most

Supreme Court case laws 210(97.2 %), followed by High Court case laws 177 (81.9 %), constitutional Bench-Supreme Court 124 (57.4 %), Full Bench Decision-High Courts 50 (23.1 %). Academic lawyers preferred least High Court or Supreme Court Bench with Chief Justice 28 (13.0 %). Preference of practicing lawyers was almost the same and they most preferred Supreme Court law 174 (96.1 %), followed by High Court Case Laws 158 (87.3 %), Constitutional Bench-Supreme Court 85 (47.0 %), Full Bench-High Courts 8 (3.7 %), High Court or Supreme Court Bench with Chief Justice 4 (1.9 %).

### 5.9 Equal citations of law report service

Academic and practicing lawyers use several law reports to do research. Thus, a question was posed to know whether they need equal citations facility of law reports. It was found that a maximum number of academic lawyers 195 (90.3 %) expressed they need equal citations of law reports service while 21 (9.7 %) stated they do not need such service. Practicing lawyers 161 (89.0 %) stated that they need such service and 20 (11.0 %) mentioned they do not need equal citations service. In addition, respondents were asked to reveal which law reports they prefer most for equal citations. It was found that most academic lawyers opted 'Supreme Court Cases' (167), followed by 'Judgment Today' (161), 'All India Reporter' (129), 'Scale' (33) and 'Supreme Court Report' (20). Practicing lawyers expressed their preference maximum for 'Judgment Today' (151) followed by 'Supreme Court Cases' (147), All India Reporter (117), 'Supreme Court Report' (10), and 'Scale' (8).

### 5.10 Commentaries Search

Commentaries provide interpretations of various rules and regulations cited in the case law and acts. IT is very useful when lawyers have to understand the context of law. Therefore, it was asked from the respondents whether to include commentaries in the online legal information system or not. 193 (89.4 %) of academic lawyers stated they need commentaries and 23 (10.6 %) stated they do not require commentaries in the OLIS. In comparison, practicing lawyers 163 (90.1 %) asked to incorporate and 18 (9.9 %) asked not to include commentaries in the OLIS. Further, respondents were asked to describe the preferred elements to search the commentaries. It was found that most academic lawyers prefer content page (190), followed by subject index (48), case law index (35). However, the highest number of practicing lawyers asked to include content page (163), subject index (48), and case law index (6). There is no significant difference found between the preferences of the two groups of respondents.

### 5.11 Search Strategy

Professionals use varied types of search strategies to get the desired results. It depends on the preferences of professionals about their requirements. Users display a number of strategies for getting the information relevant for solving the problem. However, users report frustration with conducting course-related research similar to everyday life research<sup>27</sup>. Therefore, respondents were asked to reveal their preferred search strategy. The study found that 120 academic lawyers preferred basic search and 185 advanced searches.

Further, a question was asked to describe their preferences for search operators. It is found that majority of academic lawyers opted for Boolean operator (122), followed by range operator (67), concept operator (55), proximity operator (43), fuzzy search operator (15), string wild card operator (14), wild card (14), query level (13), selectable truncation (11), not same operator (8), same operator (7). The preferences of practicing lawyers were different and majority of them asked for Boolean operator (83), followed by concept operator (37), range operator (35), proximity operator (26), query level (13), string wild card (10), wild card (7), selectable truncation (7), same operator (7), fuzzy search operator (7). Practicing lawyers expressed their lowest preference for 'not the same operator' (3). There is a significant difference in the choice of academic and practicing lawyers in using search operators to get the relevant information.

### 5.12 Search Elements for Judicial Information

Lawyers use various search elements to get the desired information. Thus, a question was asked to know the order of preference to retrieve the desired judicial information out of the online legal information. Respondents were allowed to give multiple answers. It is found that academic lawyers opted most the appellant or respondent (198; SD ~0.277), followed by date of judgment (164; SD ~0.501), case no (156; SD ~0.499), acts/statutes (141; SD ~0.477), case note (121; SD ~0.477), date: after (120; SD ~0.498), Bench strength (112; SD ~0.488), Judge name (110; SD ~0.501), subject (106; SD ~0.420), date: before (96; SD ~0.498), section wise (98; SD ~0.499), sub-subject (89; SD ~0.493). Academic lawyers preferred the lowest search using synonymous (37; SD ~0.378). Besides this, practicing lawyers' highest preference was noted for appellant or respondent (152; SD ~0.368), case no (145; SD ~0.400), date of judgment (145; SD ~0.400), acts/statutes (122; SD ~0.470), judge name (102; ~.497), bench strength (101; SD ~0.451), date: after (95; SD ~0.501), case note (92; SD ~0.495), date: before (86; SD ~0.501), court wise (80; SD ~0.498), subject (79; SD ~0.461). The lowest opted elements by professional lawyers are section wise (75; SD ~0.494), sub-subject (56; SD ~0.464), synonymous (28; SD ~0.363).

### 5.13 Legislative Information Search and Browsing

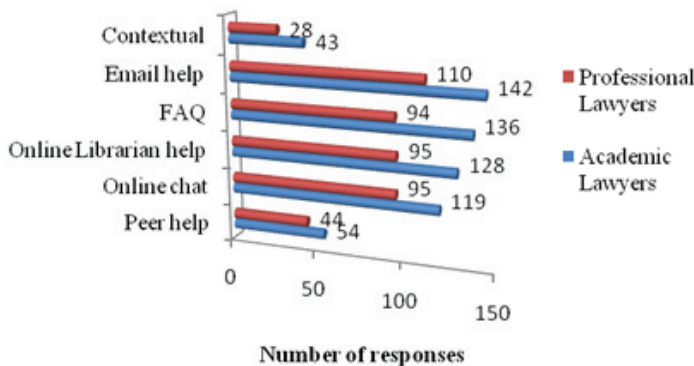
Legislative information is used heavily by lawyers. However, different legal professionals use it in varied ways. Thus, the study ascertained differences in the requirements of academic and practicing lawyers in legislative information search elements. Respondents were allowed multiple answers. It was found that the majority of academic lawyers sought to act no. (166; SD ~0.423), followed amendment under the act (159; SD ~0.442), the bill no. (130; SD ~0.491), house i.e., Lok Sabha/Rajya Sabha (125; SD ~0.495), date of enforcement (108; SD ~0.501), date of Presidential assent (103; Std. Dev.~.501), citation (71; Std. Dev.~.471), subordinate legislation (64; SD ~0.458) and repeal on date (56; SD ~0.439). Contrary to this, practicing lawyers expressed their preference highest for act no. (151; SD ~0.373), followed by amendments under the act (112; SD ~0.487), the bill no. (106; SD ~0.494), house i.e. Lok Sabha/Rajya Sabha (95; SD ~0.501), date of enforcement (86;

SD ~0.501), date of Presidential assent (77; Std. Dev.~.496), citation (62; SD ~0.477), repeal on date (50; Std. Dev.~.448) and subordinate legislation (49; Std. Dev.~.446).

**5.14 Online Help Features**

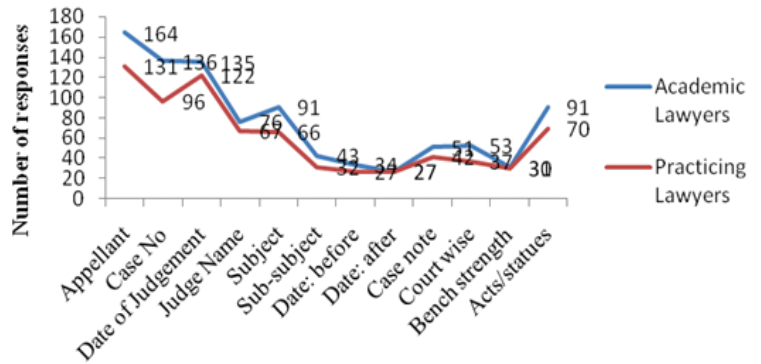
Online help is crucial to provide the best services to users. By using the online help feature in any system, considerable time and money can be saved. Therefore, a question was posed to know the preferred online help features. Respondents were asked to reveal their preferences through multiple answers. Fig. 4 shows that majority of academic lawyers preferred e-mail help (142), followed by frequently asked questions (136), online librarian help (128), online chat (119), peer help (54). Contextual help (43) was opted least by academic lawyers. Practicing lawyers also opted for e-mail (110) the highest choice of help, followed by online chat (95), online librarian help (95) and frequently asked questions (94). However, practicing lawyers expressed the lowest preference for peer help (44) and contextual help (28). Practicing lawyers asked for librarian help. A study by Oppenheim<sup>18</sup> supports that information professionals have a greater role to play as intermediaries between information and users. Furthermore, he stated that it is now the appropriate time to expand the role by acting as intermediaries between users and legislators to achieve what people really want. Thus, librarians can expand their role by providing online help to lawyers.

**5.15 Provision of Online Account and Allied Elements**



**Figure 4. Desired Help features in OLIS (Academic lawyers (n)=216; Practicing lawyers (n) =181)**

A model information system must have an online account to save search results. Online accounts have several other benefits. The two groups of respondents were asked to give their opinion about incorporating online account features in OLIS (Fig. 5). It was found that 88.4 per cent of academic lawyers favor having online account feature and 11.6 per cent stated they do not need an online account in OLIS. However, in comparison, less number of practicing lawyers, 82.3 per cent, favored to have such service and 17.7 per cent declined. Further, it was asked to the respondents which elements they would prefer to have in the online account. Majority of academic lawyers stated appellant or respondents (164), case no. (136), date of judgment (135), subject (91), acts/statutes



**Figure 5. The choice of elements for online account (Academic lawyers (n) = 191; Practicing lawyers (n)=149)**

(91), judge name (76), court wise (53), case note (51), sub-subject (43). The lowest noted choices of respondents were: date: before (34), bench strength (31), date: after (27). On the other side, practicing lawyers mentioned the most preferred elements for online account as appellant (131), followed by date of judgment (122), case no. (96), acts/statutes (70), judge name (67), subject (66), case note (42), court wise (37), sub-subject (32), bench strength (30), date: before (27) and date: after (27).

**5.16 Filtering of Results**

Filtering the search results can help users to get the appropriate information. Besides this, it also saves the time of the users. Users can filter search results on the basis of their requirements. A number of parameters can be added to filter the search results. A question was posed to respondents to describe whether they need filtering of results. It was found that academic lawyers 183 (84.7 %) stated 'Yes' and 33 (15.3 %) mentioned 'No' to include filtering of results. Preferences of practicing lawyers were less than academic lawyers, and only 140 (77.7 %) advocated to include this service and 40 (22.1 %) denied for filtering of results. Besides this, respondents were also asked their preferences for filtering parameters. Respondents were permitted multiple answers. It is found that the majority of academic lawyers preferred subject-wise (171; SD ~0.298), followed by date wise (141; SD ~0.422), court wise (91; SD ~0.450), statutes wise (63; SD ~0.475), judge wise (62; SD ~0.475), advocate wise (29; SD ~0.366) and tribunal wise (25; SD ~0.460). In contrast, the practicing lawyers most preferred court wise (139; SD ~0.285), followed by subject wise (129; SD ~0.280), statute wise (120; SD ~0.290), date wise (99; SD ~0.459), tribunal wise (55; SD ~0.470), judge wise (48; SD ~0.476) and advocate wise (30; SD ~0.411).

**5.17 General Features Sought by Respondents**

Online information should have the features required by its users. General features can help users to do their research work conveniently and keep them up-to-date. Therefore, an open-ended question was mooted to describe the general features needed to be incorporated in OLIS. Majority of academic lawyers mentioned Search within search (195; SD ~0.297),



Save the search results (173; SD ~0.400), mail the search results (166; SD ~0.423), save into account (155; SD ~0.451), dissent judgment (137; SD ~0.483), over-ruled judgments (131; SD ~0.490), relied upon judgments (119; SD ~0.501), equal citation in law reports (91; SD ~0.491) and further referred (Citor) (83; Std. Dev. ~.488). Notes (74; SD ~0.476) is a less preferred feature by academic lawyers. Significant difference was found between preferences of practicing lawyers; they most preferred search within search (151; SD ~0.373), followed by save the search results (139; SD ~0.423), over-ruled judgments (122; SD ~0.470), mail the search results (113; SD ~0.486), equal citation in law reports (108; SD ~0.492), save into account (106; SD ~0.494), dissent judgments (95; SD ~0.501), relied upon judgments (91; SD ~0.501), further referred (74; SD ~0.493). Lowest preference by practicing lawyers is seen to note (48; SD ~0.443).

### 5.18 Social Networking Tools and Online Training

Social networking sites have empowered people to connect with others and follow their updates. Application of social networking tools assists users to stay connected with the latest happenings in their subject of interest. Hence, respondents were asked whether to include social networking tools in OLIS. It was found that 161 (74.5 %) of academic layers supported to include social networking tools and 55 (25.5 %) denied. While 116 (64.1 %) practicing lawyers supported and expressed 'Yes'; 65 (35.9 %) stated 'No'. The comparison shows that more academic lawyers supported to incorporate social networking tools than practicing lawyers. Besides this, the two groups of respondents were asked to reveal their preference on the social networking sites to be incorporated in OLIS. Interestingly, 130 academic lawyers and 60 practicing lawyers preferred Facebook and Twitter. 30 academic lawyers and 121 practicing lawyers have opted for Google+ and LinkedIn.

An MCQ was asked to know the preferred method of online training. It was found that academic lawyers 196 (90.7 %) advocated having online training and 20 (9.3 %) declined such service. 161 (89.0 %) practicing lawyers stated they need online training in OLIS and 20 (11.0 %) did not favor. Subsequently, it was also asked to reveal their favorite method of online training. Study further found that majority of academic lawyers favored training through e-mail (123; SD ~0.483), online tutorial (114; SD ~0.495), chatting 97 (SD ~0.501) and multimedia programme (77; SD ~0.490). Practicing lawyers most preferred e-mail (125; SD ~0.418), chatting (118; SD ~0.444), online tutorial (96; Std. Dev. ~.492) and multimedia programme (43; SD ~0.444). Practicing lawyers preferred chatting more than online training.

## 6. DISCUSSION AND CONCLUSION

Undoubtedly, the Indian legal system is more complex and Indian courts are more prodigious compared to other countries. The number of people who seek justice from Courts is huge and millions of cases are pending in the Courts. Government agencies, including the National Informatics Centre (NIC), have developed databases of judgments of various courts in India. However, they do not have a comprehensive search facility. It is very cumbersome to retrieve records. Moreover,

each court's database has to be searched separately for a comprehensive search covering the whole of India<sup>24</sup>. Open access legal database and commercial databases developers fail to understand the requirements of academic and practicing lawyers. Therefore, satisfying and developing the system according to the needs of all stakeholders was a major task before the researcher. A questionnaire was developed so that differences in the requirements of academic and professional lawyers could be understood. Subsequently, OLIS can be developed matching the requirements of both the groups. The study found significant differences in their requirements. 28 (13.0 %) academic lawyers rated available resources as poor. Majority of practicing lawyers rated online legal information resources as very good (26.0 %), followed by fair (23.2 %). A considerable number of practicing lawyers rated online resources 'excellent' 36 (19.9 %). 15.5 per cent rated these resources 'poor'. Practicing lawyers rated online legal information resources better than academic lawyers. Number of practicing lawyers stated they are somewhat satisfied and more number of practicing lawyers expressed dissatisfaction as well in using the open access resources. Practicing lawyers are inclined to have more features and services compared to their academic counterparts. Practicing lawyers highlighted that these resources are incomplete and their interface not good. More practicing lawyers mentioned that poor details on online legal information are a major problem compared to academic lawyers. Several login requisites are expressed by more number of practicing lawyers compared to academic lawyers. Academic lawyers showed more preference for case law, research articles, legal news, audio-video contents while practicing lawyers expressed more preference for parliamentary debates, acts, speeches, trade notices, circulars, rules and regulations etc. The difference in preference may be because of the nature of their work. As far as the preference of general features in OLIS is concerned, academic lawyers preferred search within a search, save the search results, mail the search results, save into account.

A significant difference was found between the preferences of practicing lawyers. Practicing lawyers preferred highest the feature of search within a search, followed by saving the search results, over-ruled judgments, mail the search results, equal citation in law reports, save into account, dissent judgments. Surprisingly, practicing lawyers showed the lowest preference for 'notes' of the case law. The major reason could be that they prefer to read the full judgment and decide the relevance of the case law on their own rather than depending on the case note. The online legal information system was developed taking into consideration the differences found in the responses of academic and practicing lawyers. The online legal information system is accessible at <http://www.olisindia.in>. The findings of the study will be useful to information disseminators, compilers and information sources developers to incorporate search features and allied functioning to match their needs. Besides this, information scientists can also use the findings to develop resources having the appropriate features. The study also guides library professionals and system developers in comprehending the difference in opinions of academic and practicing lawyers.



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