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Comparative Analysis between Legal Research, Pre and Post Internet Revolution Era

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Newly enrolled law students find it difficult to understand and know about the working of various databases and legal research in general. There are several legal databases to choose from each having a different user interface which becomes overwhelming. It becomes necessary to understand the working of each database to successfully complete any legal research. Most of the modern research methods depend on a similar concept of user interface and filtering of different topics. This system of filtering is not something new but has been evolved through the years with the technology revolution further refining the process with the help of a computer. So, knowledge about the old method of legal research, legal reporting helps in understanding the method of legal reporting and research used. The article explains the methods used currently and talks about different databases along with old methods of law reporting using West Publishing Co. (Westlaw) as an example.

Keywords: *research, internet, revolution.*

INTRODUCTION

According to Manheim, “Research is the careful, diligent, and exhaustive investigation of a

specific subject matter, which has as its aim the advancement of mankind's knowledge."¹ Research methods play a very important role in research, not only in the tenure of law school but also throughout the career of a lawyer. Information and Communication technology has alleviated the painstaking process of research and has indeed brought revolutionary changes in the study of law. Historical origins of legal research include all the methods that were used before the internet era and all the various resources that a researcher used to use during their legal research. The objective of the study is to understand how the methods of research before the information and communication technology era and how they changed post era. The purpose of this study is to highlight the essential and revolutionary changes that the internet revolution brought in the legal research and how these changes are better compared to the methods practiced post the revolution. The study of the past methods is, therefore, necessary to draw a comparative analysis of how the methods have improved for the better. The scope of the research is to study the history, methods of legal research in India as well as the west. Furthermore, it is to study the gradual development of the research methods into the sophisticated methods we use today. The period of the information revolution is also included in this study, as well as we will talk about the most recent developments in legal research.

LEGALRESEARCHIN PRE-ICT-REVOLUTION ERA

Research in the past can be summed up using one single word: books. Books did play a major role in research during the post computer era, but legal research is a discipline that is not something that can be done with just books. Just like modern-day even during that era, different journals, commentaries, and other multiple resources were quintessential. After digitalization, the methods used are still quite the same but with computer software adding more comfort and productivity to the research. There were different resources used in India and the west.

¹ Dr. S.R. Myneni, *Legal Research Methodology* (Allahabad Law Agency 2021)

LEGAL RESEARCH METHODS IN PRE-INTERNET REVOLUTION INDIA

Establishment of the first Supreme Court set up by the British Government: In 1774, the Supreme Court of Calcutta was established by the British government. During that time law reporting was not actively pursued and when it was done the published reports were not very organised. The government did not make many efforts to publish and report the laws during that era. Private reporters were the ones who reported those few cases without any assistance from the government.

The first instance of Formal Law Reporting: The first law commission suggested the idea of proper codification and law reporting of cases.² The act XII of 1843 has suggestions for correct recording and monthly publishing of cases heard by Sardar Adalats. The Indian High Courts act, 1861 included a provision that gave judgments of Madras, Calcutta and Bombay high court's judgments there quired validations to set them as precedents, this ultimately led to the start of organised law reporting in India.³

Law reporting Journals

Privy Council – Important Judgements given by the privy council were reported 77 volumes from 1872 to 1950.⁴

Federal Court – In its tenure from 1935 to 1949, the federal court report published all-important judgments.⁵

Supreme Court and High Courts – Several reporters that report supreme court judgements are the All-India Reporter, Madras Law J, Supreme Court Journal, etc, and judgements of high courts from various states are reported by Allahabad weekly reporter or ILR Patna.⁶

² Judicial Language Act, 1843

³ M.P. Jain, 'Law Reporting in India' (1982) 24 (2) Journal of the Indian Law Institute, 560-574

⁴ Mohd Aqib Aslam, 'History of Law Reporting in India an Overview' (*Legal Service India*, 2020)

<https://www.legalserviceindia.com/legal/article-1701-history-of-law-reporting-in-india-an-overview.html>

accessed 13 February 2022

⁵ *Ibid*

⁶ *Ibid*

Legal Research Methods used in the west before the internet revolution: Before the internet revolution happened in the 1970s, legal publishing in the United States has become a highly integrated and well-developed system of comprehensive publication and retrieval in hard copy. This development and evolution of this system can be credited to a few enterprising publishers who came up with the idea of sophisticated printing formats. Following is a sketch of the hard copy system developed in the United States.

LAW REPORTING IN THE UNITED STATES WITH WEST PUBLISHING COMPANY AS A CASE STUDY

The West Publishing Company of St. Paul Minnesota systematized, organized, and perfected the publication of case reports at the end of the nineteenth century.⁷ Jhon West began to publish the Syllabi, which contained the text of Minnesota Supreme Court cases and summaries of decisions from surrounding states, that turned out to be so successful that west introduced a successor entitled *the Northwest Reporter*.⁸ This reporter had text and summaries from all states the west considered as “North-western” as per Jhon West. The idea of a regional reporter like the northwestern one was to gather, from different jurisdictions, judgments, and decisions and sell them to lawyers. This concept was then expanded to the whole United States, dividing the country into 7 separate regions and publishing a reporter for each region. With the introduction of the Supreme Court Reporter and Federal reporter in 1886 completed the pattern and established a model which covered all the cases, everywhere instead of any regional publisher publishing limited cases.⁹ Even though official reports were published by many states and United States reports, West Publishing Company is associated with creating the most popular and systematic law reports.¹⁰

System for Legal Research which was introduced by the West Publishing Company: The primary aspect of the new form of literature created by Mr. West was the American Digest

⁷ Robert M. Jarvis, 'John B. West: Founder of The West Publishing Company' (2010) 50 (1) The American Journal of Legal History, 1

⁸ *Ibid*

⁹ Thomas Young, 'A Look at American Law Reporting in the 19Th Century' (1975) 68 (3) Law Library Journal, 294

¹⁰ *Ibid*

System.¹¹ The digest had seven broad categories of all the areas of the law which were further divided into about 430 topics with each topic being divided into subsections which were called “Key-numbers” that allowed the topic to be broken into as many subdivisions as required to cover the particular area of law.¹² The concept of a universal subject thesaurus was introduced by the west digest system, which although was not something new in science but was new in the field of law-related research. The “Key Number System” not only enabled lawyers to research any topic effortlessly by the subject it also pushed the lawyers to fit every issue into a particular conceptual framework.¹³

THE INFORMATION COMMUNICATION TECHNOLOGY REVOLUTION

According to UNESCO the term “Information and Communication Technologies (ICT) refers to forms of technology that are used to transmit, process, store, create, display, share or exchange information by electronic means.” The Information Explosion led to exponential growth in research material in almost every discipline that led to the use of computers for the handling of information.

ICT Revolution in India: Information and communication technology (ICT) in India can be traced back to the British Administration. The ICT revolution in India started with Indian Statistical Institute, Kolkata getting the first computer in the country in 1956, Followed by TIFR procuring a computer in 1956, and then IIT Kanpur getting an IBM in 1965 and another one in 1966.¹⁴ TIFR (Tata Institute of Fundamental Research) and IIT Kanpur opened up their computing facilities to academicians and scholars, giving India its first generation of programmers.¹⁵ Efforts then began, to put computers on a network, NCSDC (National Centre for Software Development and Computing Techniques) linked computers at TIFR and VJTI

¹¹ Robert C. Berring, 'Full-Text Databases and Legal Research: Backing into the Future' (1986) 1 (1) High Technology Law Journal, 27

¹² *Ibid*

¹³ *Ibid*

¹⁴ Pratyush Sinha, 'The Outsourcer — Story of India's IT Revolution' (*Medium*, 22 January 2017)

<<https://sinhaprats.medium.com/story-of-indias-it-review-of-book-the-outsourcer-567bd44718df>> accessed 18 February 2022

¹⁵ *Ibid*

using Bombay Telephone Lines in 1977.¹⁶ Later, ERNET (Education and Research Network) modeled on ARPANET was commissioned by the Department of Electronics (DoE) which connected 5 IITs, IISC Bangalore, NCSTCT, and DoE.¹⁷ And, very soon ERNET partners could connect to the world on a dial-up. In 1993, satellite link became operational at Bangalore (Software Technology Park) and now the software companies based there could do video conferencing with their international clients.¹⁸ Finally, the government allowed companies to set up private ISPs leading to the explosion of internet users in India.

Beginning of computer-based legal research in India: In 1991, Chief Justice's conference requested the national informatics center (NIC) to take up a project of computerization of Supreme Court and High Court and interconnect them through NIC-NET, then the computerization of various activities of the supreme court and the high court is being looked upon by the NIC. NIC had conceptualized two information systems namely COURTNIC and JUDIS which are now named as "Case Status". Taking upon this idea many private vendors also came up with their own databases.¹⁹ The Right to Information Act, 2005 also had a big role in the development and evolution of computer-assisted legal research. Section 4 of the RTI Act, 2005 has made it mandatory for government departments to publish certain information for the common public on irrespective websites.²⁰ This led to an increase in the availability of Acts, Bills, Rules, Regulations, Statutes, etc. which are frequently visited documents in the legal fraternity.

ICT Revolution in the West: The idea of the computer developed from a notion of turning machine developed by Alan Turning in 1936. The first computer was successfully built by two University of Pennsylvania Professors, John Mauchly and J. Presper Eckert which was called the Electronic Numerical Integrator and Calculator (ENIAC). It is considered the grandfather of the digital computer and it filled a 20 foot by 40-foot room and had 18000 vacuum tubes.²¹ In

¹⁶ *Ibid*

¹⁷ *Ibid*

¹⁸ *Ibid*

¹⁹ Raman Thothatri, *Knowledge Management: A resource book* (Excel Books, 2003) 249

²⁰ Right to Information Act, 2005

²¹ Timothy Williamson, "History Of Computers: A Brief Timeline" (*LiveScience*, 1 December, 2021)

<<https://www.livescience.com/20718-computer-history.html>> accessed 18 February 2022

1953 the first computer language was developed by Grace Hopper. Finally, it was in 1974-1977 that several personal computers started hitting the market including Scelbi & Mark 8 Altair, IBM 5100, etc.²²

Computer-Based Legal Research in the United States: Prof. John Harty started putting U.S. Supreme Court cases on the tape. Prof. Harty's idea gave an impetus to various other organisations to digitize legal data. Ohio Group and Data Corporation came together in the year 1967 which led to the creation of OBAR²³ (Ohio Bar Automated Research) a practical working system for electronic legal research for the lawyers of Ohio.²⁴ Thomas Plowden-Wardlaw of New York and Judge David Dixon of Missouri looked carefully at the development of the OBAR system in 1969-1970 and were inspired to develop LEXIS which started to provide the full text of New York and Ohio codes and cases in 1973.²⁵ Finally in 1974 Lexis introduces its own telecommunications network and in 1975 lexis service is installed in university law libraries.²⁶

LEGAL RESEARCH IN POST ICT REVOLUTION ERA

In this era, there is an excellent availability and interconnectivity of legal reference material with the help of computerized databases. This does not mean that traditional research methods stand completely replaced, but it does help in reducing the efforts required to manually access various journals, books, and databases.

Different Databases and Websites in use in India

Although there is still a long way to go, the online legal research infrastructure in India has improved to a great extent because of the ICT revolution.

Official online websites:

²² *Ibid*

²³ Frank J. Troy, 'Ohio Bar Automated Research- A Practical System of Computerised Legal Research' (1969) 10 *Jurimetrics Journal*, 2

²⁴ *Ibid*

²⁵ 'The LexisNexis Timeline' (*LexisNexis*, 2003)

<http://www.lexisnexis.com/anniversary/30th_timeline_fulltxt.pdf> accessed 18 February 2022

²⁶ *Ibid*

The Supreme Court of India - The website of the Supreme Court of India is a well organised and sophisticated website containing the full text of the constitution of India, Former Judges, Chief Justices, and Registrars. The website also has links to JUDIS, Case Status, Cause List, and Daily Orders.²⁷ It also has the judges' library which has useful in-house databases namely JUDIS, SUPLIB, SUPLIS.

1. SUPLIS - It is the database of all case laws decided by the supreme court of India.²⁸
2. SUPLIB - Various law reports, academic journals, and research articles are compiled by this database.²⁹
3. LEGIS - It is a database of statutory materials such as bills, acts, joint committee reports, law commission reports, parliamentary and assembly debates, rules, by-laws, schemes, etc.³⁰

Important and extensive databases

- Manupatra Online Legal Database: It is the most extensive database of Supreme Court judgments, High Court Judgements, Tribunal Orders, and Legislations. Bare acts; legal, taxation, and business policy databases are also available here.³¹
- LexisNexis: LexisNexis is a worldwide provider of workflow solutions designed specifically for professionals in legal, corporate, government, accounting, academic, law enforcement, and risk management markets.³²
- Westlaw: It is an international database that provides statutes, public records, case law materials, law reviews, journals, and other legal resources primarily related to the United States. But Westlaw India also caters to the Indian Markets.
- SCC Online: It is a collection of over 380 databases, with quicker and more accurate

²⁷ Megha Srivastava, 'Update: A Guide to India's Legal research and Legal System' (NyuGlobal, 2021) <https://www.nyulawglobal.org/globalex/India_Legal_Research1.html#Section_10> accessed 18 February 2022

²⁸ Megha Srivastava (n 27)

²⁹ *Ibid*

³⁰ *Ibid*

³¹ Akashdeep Singh, 'Role of Information and Communication Technology in transforming Legal Education' (2018) 5 (3) International Journal of Research and Analytical Reviews, 973

³² *Ibid*

advanced search along with an easy-to-use interface.³³

WORKING AND USE OF NEW ONLINE DATABASES

Information Retrieval System: Most of the databases in India and around the world are based on a concept which is called the Information Retrieval (IR) System. Storage, organisation, and access to the text as well as multimedia information resources are different functions of the IR system.

How does the IR System function?: Firstly, with the help of advanced search, it identifies information that is relevant to the areas of interest of the target users. It then analyses the contents of the sources by matching the user's query to the contents of analysed sources. The next step is to match the search statement with the stored database and retrieve relevant information. The user with the help of this system can also make necessary adjustments in the system to get the desired results.

Free Text Search System: According to Miller-Keane Encyclopedia "Free text searching is a search mode in which titles, abstracts, full-texts, or other natural language fields of bibliographic or source databases are searched for one or more words, whose proximity to each other may be specified to increase the specificity of the search."

COMPARATIVE ANALYSES OF RESEARCH METHODS: PRE AND POST REVOLUTION

Legal Methods: Pre ICT-Revolution

Disadvantages

Firstly, there is a scope of mistake i.e., human error and even technical error in old forms of reporting. In the digest system³⁴ that was adopted by Westlaw, there is a lot of scope for error since indexing is done by humans, also, due to multiple subdivisions, a researcher had to spend a lot of time navigating his way to the desired text since it was very complex, which was

³³ *Ibid*

³⁴ Robert C. Berring (n 11)

a problem for inexperienced researchers. Secondly, due to the rigidity of the publishing system, slight changes and updates were a challenge. New editions of the whole text had to be published to update them. Also, in the process of arranging the different sub-topics into particular subgroups, the editor used his own opinion, hence the texts instead of being direct representations of judgements were now arranged into subgroups and reflected some opinions of the editor.

Advantages

Even though there are flaws and inadequacies in the old system of reporting, it still was a sophisticated system with comprehensive subject arrangements and a complete set of case reports. By the mid-twentieth century, organisations had created a complex set of systems for the production of documents which revolutionized the legal research methods to what they are today.

Legal Methods: Post ICT Revolution

Disadvantages

Particularly in India, the Internet is not accessible by a huge chunk of the population, which includes law students and lawyers. This section of researchers faces a setback as all the databases require the internet to be accessed. It also puts at disadvantage, people who are technologically illiterate, as these databases require significant technological literacy to be operated. A lot of training is required to master these databases. Vocabulary control is also required since homonyms i.e. if a concept is denoted by more the one term or phrase the search system can miss out on a good chunk of data. Since a lot of data is available on the online database it leads to inefficiency due to a lot of irrelevant and inaccurate data coming up regularly.³⁵

Advantages

The full-text system and information retrieval system get rid of several old flaws. Firstly, there

³⁵ Robert C. Berring (n 11)

is no more scope for any human error nor is there any chance for an editor to misplace a case by placing it in the index in a way that forecloses access by researchers. Secondly, the rigidity in published hard copies can be replaced because when there is a new update to a particular decision, judgment, the publisher can update the online databases easily and efficiently in a non-time-consuming manner. Thirdly, now there are several functions a researcher can perform with easy access to the full database, rather than partial and inefficient access to the old databases.

CONCLUSION

By this study, one can draw a comparative analysis of how legal research methods were different in the Pre and Post Information and Communications Technology era. We can also conclude that emergence of computers and the internet led to a rapid change in legal research methods. We can observe closely and exactly how and when the ICT revolution started, in India as well as the west, and how closely it affected the methods of legal research by comparing the timelines. We can also observe the origins of legal research methods, the complex systems that they evolved into gradually and how these systems are required for a person to access numerous academic researches, judgments, legislations, statutes, etc., and how the ICT manages to run the set asks efficiently. In the above research, we could carefully see the processes that go into the databases to give us our desired search results. We also study the various disadvantages and advantages the different methods of legal research had. One can conclude that both, old, as well as new methods of legal research, have their advantages and disadvantages, but one has to decide which method of research is appropriate for this study.