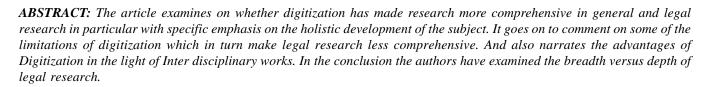
# Comprehensiveness of Digital Information in Digital Age – A Survey on Research Trends in National Law School of India University

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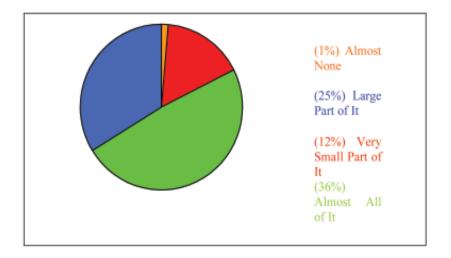
#### 1. Introduction

The world of legal research is changing. It's a world where legal libraries are being shut down due to lack of interest,<sup>1</sup> judges are citing online sources in their judgments,<sup>2</sup> and 94% of first year law students are completing over 80% of their research online.<sup>3</sup> These are not anomalies or statistical errors. The authors own findings, as graphed below, show that a substantial number of law students complete a large part, if not all, of their legal research online.

It is very evident from the graph 1 that a large number of students conduct a large proportion of their research online. While about 33.8% of students conduct all their research online, another 48.6% conduct a large part of it online. This data has been corroborated by a number of other independent studies.<sup>4</sup> An important concern is that digital databases cause a divide between students of elite institutions and those who do not have access to these databases. One of the objectives of this survey is also to emphasize the need to provide more students with not only access to legal databases but also to the training to use them. Moreover, the study in cost-efficiency highlights the practical viability of this proposition.

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Graph 1. Proportion of Legal Research Conducted Online

Most of the empirical research in this paper has been done on the basis of an online anonymous survey<sup>5</sup> [Hereinafter "Student Survey"] in addition to interviews with students and the Librarian at the National Law School of India University in Bangalore. An additional survey was done on the faculty and library staff of National Law School of India University, however, the purview of this article does not extend to a statistical analysis of the same, and only subjective comments have been cited from it.

There were a number of limitations in the process of research. The scope was limited to only legal research by law students, specifically by the 2nd, 3rd, 4th and 5th years of National Law School of India University. About seventy-five students answered the survey, and not all of them answered all the questions. The survey was short and the answers could not convey the subjective mindset of the Students.

Many issues, like the cost of printing versus photocopying, and its implications on the cost of the use of online resources, could not be covered. Finally, certain questions were difficult to phrase – like the question on the cost of sources – without resorting to clunky and somewhat biased wording. Most importantly, perhaps, the sample consisted of students from a small and elite institution, who are not necessarily representative of the entire body of law students in the country or in the world. While an ideal sample would have consisted of students with experience of both print and digitized sources, it is unlikely that the generation of students surveyed would have much experience with the former. It was not possible to predict whether this had a positive or a negative bias on their answers.

However, despite these obvious limitations, the author believes that the findings throw up interesting conclusions that may be the basis for a more exhaustive study at a later date.

# 2. Research Methodology

The researchers have relied on both primary and secondary sources of data for this paper. The primary sources of data are a survey formulated by the researchers for the students of National Law School of India University, a survey conducted on the faculty and library staff on National Law School of India University and notes on the basis of an interview with the Librarian of National Law School of India University. The secondary sources of data include a variety of books, scholarly articles and journalistic sources.

# 3. Aim and Objectives

The aim of this research paper is to study the impact of digitization on legal research. The objective of this paper is to therefore critically examine the effect of digitization on legal research by evaluating whether digitization has made legal research more comprehensive.

#### 4. Scope and Limitations

The scope of the empirical research in this paper has been restricted to the students studying in their 2nd, 3rd, 4th and 5th year in National Law School of India University, Bangalore. Moreover, the scope of this paper extends only to examining the effect of digitization on legal research done by law students. It does not extend to either the commercial legal research done by law firms or litigants, or to academic research done by people who are not students of law. An important factor to consider is that these surveys represent only the subjective perceptions of students, and do not necessarily represent concrete facts, or even an expert assessment of the utility of these sources. Another constraint was the inability to procure certain authoritative books on the subject.

# 5. Hypothesis

"Digitization has had a positive impact on legal research done by students by making it more comprehensive."

# 6. Research Questions

Has digitization made legal research more comprehensive? How? What are its limitations? Perhaps the most fundamental question when legal research is talked about is comprehensiveness. In the opinion of the students, this has been greatly aided by digitization.

# 6.1 The advantages of digitization

When students were asked if digitization had made their legal research more comprehensive, an overwhelming majority said that it had. However, something even more revealing came in the form of the answers to the question that asked for the advantages of digitization. 33.8 % of students said that they believed that legal information was more complete, which 71.6% claimed that obscure information was more readily available through online sources.

It's not difficult to guess why? The original system, because of its reliance on digests of cases, could not and would not provide access to all cases in a particular jurisdiction. Several cases were not published in reporters, and were thus not even considered 'real'.<sup>6</sup> The rationale behind this is not hard to identify. With the passing of years, the sheer volume of legal information kept increasing, and for the sake of some coherency it was necessary to restrict published information. However, in a profession like law, which relies heavily on the comparison between the past and the future, it is not as easy to restrict the literature as it is in other disciplines.<sup>7</sup> The practical implications of this are far-reaching since we cannot readily think about, and understand, the law until we are exposed to information about it, a lack of exposure to sources can severely hamper our understanding of various obscure points of law<sup>8</sup>.

So what truly makes legal information more comprehensive? Scholars believe that it might not just be the resources available, but also the possibility of accessing them. Even in the Student Survey, it has been observed that a huge percentage of people, nearly 37.3%, found both free and commercial online sources more accessible than print sources, while 42.7% thought that free digitized sources were more accessible than print sources. This may be at least partially based on the fact that online sources are easily indexed by keywords, and people do not have to rely on a structure developed by a particular indexer.<sup>9</sup> Their thoughts are free and unbridled by structure.<sup>10</sup>

# 7. Interdisciplinary Work

In the opinion of certain authors,<sup>11</sup> automation of legal information has opened up unforeseen avenues for networking and interdisciplinary work. It has led to an end of the now outdated belief that 'law' is a field wholly different from all others.

The availability of legal information online is much higher than other fields. While some believe this will end the cartelization of legal information and decrease the profitability of lawyers, the future belongs to those who appreciate that exclusive access to information cannot be maintained.<sup>12</sup> This might, of course, be a great thing - since this foray of non-lawyers into the legal field has also led to a lot of inter-connected research and networking that has seen an expansion of all the fields concerned.<sup>13</sup>

Law libraries are largely self-contained and often the only way to get a book from another discipline is to go to another library or get an inter-library loan. This reinforces the 'informational' distance between different disciplines as well as between legal and

non-legal materials. Digitization, in breaking down these barriers and informational organizations, tends to promote a more holistic view.<sup>14</sup> This holistic view is especially important in today's day and age, when more and more judicial decisions cite a variety of non-legal sources from a wide range of disciplines, including literature, economics, politics and philosophy.<sup>15</sup>

# 8. Breadth v/s. Depth

As one of the respondents to the Faculty Survey very succinctly put it, 'digitization does lead to improvements in the range of sources consulted, if not for the depth of research'. One of the biggest problems with digitization is that the searches are either very precise, and therefore do not yield many results or cover all relevant results, or the searches are broad and lead to a loss in efficiency.<sup>16</sup> In a study it was concluded that computer-assisted research only returned about twenty percent of the relevant documents for a particular case, even though precision was a high seventy-nine percent.<sup>17</sup>

This becomes especially difficult because of some of the key limitations of keyword searches themselves. A computer is simply not equipped to sort the relevancy of legal documents, especially since they do not take common synonyms into account.<sup>18</sup> Moreover, while human indexers can easily correlate facts and rules that are not located together in a judgement, a computer-assisted search requires a much broader search to cover them.<sup>19</sup> However, various measures are being taken to counter this – such as the use of head notes by Westlaw.<sup>20</sup>

Another thing to consider is that the lack of organization, which in itself promises to be one of the advantages of law, appears to also hinder legal research. A library provides students with a ready framework in which to organize their thoughts and a feedback mechanism. On the other hand, an electronic search largely means that they proceed in a vacuum. They receive little or no feedback about whether or not you are closer to your goal.<sup>21</sup>

Many of the respondents in the Student Survey responded that the limitations of online legal research were that reliable sources were much more difficult to find. On the internet, there is a distinct lack of organization and information is completely unfiltered.<sup>22</sup> With such a mass of different sources available to the students, the critical task of sifting through it to find the most pertinent information becomes difficult. Moreover, while earlier legal reporters were unquestioned, it is more difficult to attach credibility and authority to the online resources.<sup>23</sup>

The anonymity on the internet further compounds this problem.<sup>24</sup> This is especially true since students reported errors and difficulty in finding citation information. It is also very likely that because storage space is at a premium in a print library, there is more importance given to sorting materials by relevance. This means that while it is unlikely that a print library would store inter-disciplinary material, it is more likely that it would have material pertinent for an average law research project, thus increasing the efficiency of students.<sup>25</sup>

# 9. Conclusion

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No one can really deny that legal research has been greatly impacted by digitization – no one can deny that this has been a positive change in many ways, even if it hasn't been a universally positive change. However, there are still practical problems with the availability of stable internet access and stable websites that many students find problematic. This is, on the whole, an issue that is likely to get resolved over time as our country and our colleges continue to invest in better technology.

As for comprehensiveness, it was observed that most students believed that legal research had been made highly comprehensive with the advent of digitization. This has helped students in a number of ways – not only to understand various aspects of law but also in situations like mooting where access to case law can help a student substantiate their points. However, with an increase in the number of results comes a huge decline in efficiency, as students are forced to shift through a number of documents to find those relevant to their research. Many students are ill-equipped to do so.<sup>26</sup> The solution appears to be better training – not just in using the databases themselves but in finding the relevant information from them.<sup>27</sup>

Moreover, with reliable sources being more and more difficult to find, this leads to a new role for librarians, who must now undertake the difficult task of separating reliable sources from unreliable ones, and guiding students to them in turn. They must provide the necessary authority and authorization to sources.<sup>28</sup>

Students must understand that at this point, neither print resources nor digitized resources are adequate by themselves to

provide the required comprehensiveness in their research. A thorough survey of both is required to give them adequate insight into the topic, and one cannot be used at the exclusion of the other.<sup>292</sup> Most books, for example, are not digitized at all. However, many print resources do not have information on current topics, which might be more adequately covered in online resources.

Despite this, one can conclude that digitization has had a positive impact on legal research by making it faster, more costefficient, and more comprehensive.

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