Introduction

☐ Evolution of Legal Research & Expanding Data Sets

Over the past decades, legal research has made a significant transition from physical libraries to digital databases. In addition to larger volumes of documents becoming accessible, new types of data (such as practice blogs or digital filings) are expanding the definition of legal research. However, these greater volumes of data necessitate improved research methodologies. With each relevant datapoint exists thousands of irrelevant results that can cause costly delays in research projects.

☐ Digital Innovations

This paradigm shift also brings countless new tools and methodologies that are impossible to replicate in physical settings. Everything from automated case alerting to data visualization can, and should, be used to streamline digital research projects.

Search Engines

☐ Understanding Search Engines

From Google to GPS apps, search engines provide our primary method of retrieving digital data. All search engines, including those used for legal research, rely on an index and an algorithm. Indexes are created (and constantly updated by) either extracting important excerpts from data points or scanning those sources in their entirety. As new data points are added to a database (e.g., new opinions are published), they are added to the index. The algorithm then takes users’ search queries and compares their search terms against the indexed terms to provide matching results. Different algorithms rely on varying factors when procuring results, but all algorithms are designed to retrieve the most relevant results possible. (If you would like to see which factors are used in the Fastcase algorithm, you may locate and edit them in the search settings.)

☐ Distinctions in Legal Searches

Search engines require several modifications in order to effectively retrieve legal results. Legal documents contain added complexity based on precedential value, age, subsequent treatment, and a myriad of additional factors that are not present with general web searches. As greater precision is required to locate effective legal results, users must implement strategies in their searches.

Principles of Digital Legal Research
Legal research broadly benefits from approaching each project with a cyclical mindset:

- **Due Diligence, not Exhaustion**
  Effective legal research requires a careful balancing of diligence and time-management. While two or three searches are rarely sufficient, it is just as damaging to invest too much time into one query. Sometimes a line of research is unsuccessful and time would be better spent by engaging in an alternative approach.

- **Avoiding the Twin Pitfalls**
  While search engines provide an efficient method of locating law, they are far from infallible. Search engines construe queries as literally as possible. While this practice is largely beneficial, search engines cannot understand language distinctions that are intuitive for humans. This results in two core issues—synonymy and ambiguity.

  Search engines can not comprehend that multiple words may pertain to one concept. While judges and lawyers understand that “car,” “vehicle,” and “automobile” all relate to the same concept, search engines lack this nuance. As such, the term “car” will not automatically return results for “automobile,” even if a case discussing “automobiles” would be valuable to a search for “cars.” To solve this problem, researchers may introduce synonymy by including alternative terms in their queries.
Alternatively, ambiguity occurs where one term may apply to multiple concepts. For instance, “negligence” expands to both tort and criminal law. To increase search precision, researchers may reduce ambiguity by including operators that specify which areas the search engine should avoid.

**Filtering**

Filters allow users to narrow or expand their results after an initial search has been conducted. There are distinct strategies for broadening or narrowing search results as needed, but filters provide a solid starting point. It is always worthwhile to familiarize yourself with the filters inside of your legal research platforms.

**Terms and Connector Searching**

**Boolean Operators**

Boolean operators are words that allow researchers to complete “terms and connector” searches, which define the relationships between terms in a query. Both Fastcase and Docket Alarm contain quick-references for all the operators that are supported in each. “Boolean Tips” may be located in Fastcase’s support tab and a “Cheat Sheet” may be found in Docket Alarm's search bar. The impact of each operator is contained in the table below:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AND or &amp;</td>
<td>libel AND damages</td>
<td>Results must contain both “libel” and “damages”</td>
</tr>
<tr>
<td>OR</td>
<td>premarital OR prenuptial</td>
<td>Results must contain either “premarital” or “prenuptial”</td>
</tr>
<tr>
<td>NOT</td>
<td>negligence NOT criminal</td>
<td>Results must contain “negligence” but not the word “criminal”</td>
</tr>
<tr>
<td>w/3 or /3</td>
<td>custody w/15 interrogation</td>
<td>Results must contain “custody” within 15 words of “interrogation.”</td>
</tr>
<tr>
<td>* or !</td>
<td>testif*</td>
<td>Results must contain some variation of the stem “testif” such as testified, testify, testifying, etc.</td>
</tr>
<tr>
<td>?</td>
<td>mari?uana</td>
<td>Results must contain m-a-r-i-_-u-a-n-a with any letter substituted for the question mark</td>
</tr>
<tr>
<td>‘ ’</td>
<td>“estate tax”</td>
<td>Results must contain the exact phrase “estate tax”</td>
</tr>
<tr>
<td>( )</td>
<td>(confront OR cross-examine)</td>
<td>Parentheses tells the engine to complete internal operations before searching for external terms</td>
</tr>
</tbody>
</table>
Order of Operations

Unless a user defines priorities for their search by using parentheses, operators will be conducted in the following order:

- **W/5** • “**WITHIN**” operator runs first.
- **AND** • “**AND**” operator runs second.
- **NOT** • “**NOT**” operator runs third.
- **OR** • “**OR**” operator runs last.

Utilizing Digital Workflows

- **Visualizations**

Visualizations are one of the many tools available in modern digital legal research. One example is the litigation timeline in Docket Alarm, while the timeline view provides another such example in Fastcase. The Fastcase timeline allows researchers to quickly ascertain which cases are the most modern, relevant, and precedential in a single glance.
Data-Driven Lawyering

New docket data points have enabled lawyers to inform their decision-making with historical records. For example, lawyers can now analyze grant rates and order timing for a specific motion type in front of a specific judge. This new influx of data may also be used to improve client relationships by setting expectations with data, not anecdotes.

Skip Square One

Another advantage of digital workflows may be found in the bountiful documents. Rather than studying the local court rules to compose a carefully-formatted document, researchers may now locate a successful past filing and adopt its formatting. This allows researchers to spend less time on clerical matters and more time on their clients.

Learn your Platform

Ultimately, spending a few weeks with the intention of truly learning your legal research platform will pay off by avoiding countless hours of fruitless research in the future. Each platform has its own tips and tricks that may turbocharge your research efforts. Both Fastcase and Docket Alarm are designed to get you the best results in the least time possible. However, each platform is filled with dozens of tools that may be employed in that task. It is up to each individual researcher to take advantage of as many tools as possible.

Thank you and good luck with your future legal research endeavors!