



# Action Committee on Modernizing Court Operations

## OVERVIEW OF ARTIFICIAL INTELLIGENCE IN COMMON LEGAL RESEARCH TOOLS

### A Statement from the Action Committee

*Our Committee supports Canada's courts in their modernization efforts. It provides guidance for addressing challenges, and highlights opportunities and innovative practices to modernize court operations and improve access to justice for court users.*

### 1. CONTEXT AND BACKGROUND

Managing the risks associated with the use of Artificial Intelligence in the legal context requires understanding how tools commonly used by courts and court users incorporate this technology.

As stated in the Action Committee's previous guidance on [Demystifying AI](#), artificial intelligence may be used by court officials, as well as court users such as legal professionals or self-represented litigants, to streamline legal research and assist with legal analysis. To support informed decision-making about the use of AI, this publication provides an overview of enhanced AI features that have been incorporated into three legal research tools commonly used in Canada – CanLII.org, Lexis+ AI, and Westlaw Edge Canada with CoCounsel ("Westlaw Edge Canada").

This publication is provided for informational purposes, and is not an endorsement of any particular tool, nor is the order in which the tools are presented in the publication indicative of a preference for any one tool. The information provided below should not be used as substitute for training or primary source information published by these tools' distributors. Please note that as with all technology, the features of the legal research tools profiled in this document are subject to change. The companies that publish them may add new functionalities or remove existing ones.

### 2. LEGAL RESEARCH TOOLS THAT INCLUDE AI

This publication provides an overview of three commonly used legal research tools that give users access to new or enhanced functionalities by **incorporating** generative AI into their existing tools. This publication was prepared using reference material published by the respective distributors on their website, and the description of the AI enhanced tools and their functionalities reflect the content of these reference materials.

These three tools are highlighted because they were developed specifically for use by legal professionals and information regarding their use of AI – including information on the selection, training and validation process for their generative AI, steps taken to protect user privacy and safeguard against bias – is readily available on their websites. The availability of reference material in both official languages was also considered.

#### 2.1 CanLII.org

CanLII.org is a website run by the Canadian Legal Information Institute (CanLII) – a non-profit founded in 2001 by the Federation of Law Societies of Canada. It gives users free access to legal decisions from all Canadian courts and over 300 federal and provincial administrative tribunals, as well as laws and regulations from all Canadian jurisdictions, for legal research. CanLII also publishes secondary resources such as law books, journals, articles and reports.



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CanLII.org uses Decisia, a tool developed by the software company Lexum that can be integrated into existing websites or intranet sites to manage and publish legal information and support legal research. Lexum was acquired by CanLII in 2018.

In 2023, CanLII.org introduced an automatic classification feature that uses AI algorithms and natural language processing techniques to analyze the content and context of legal documents. These techniques are used to extract subjects such as areas of law, legal topics, jurisdictions, and court levels, which then inform the tags used for the classification on the site. These AI-generated tags appear right underneath the italicized search results in CanLII, which are statistically generated. The feature was developed using a pre-training large language model customized by Lexum. This model was trained using cases from databases and case reports including the Law Society of Saskatchewan's Digest Database, the Law Society of Ontario's Ontario Reports, the Supreme Court Reports, and the Federal Courts Reports.

In 2024, CanLII introduced an AI analysis function that produces summaries of historical case law and legislation from Alberta, Saskatchewan, Manitoba, Prince Edward Island, New Brunswick, Newfoundland and Labrador, and the Northwest Territories. These summaries can be found under a tab entitled "AI Analysis" that appears when you open a decision, law or regulation. The AI Analysis summaries for case law include the facts, procedural history, parties' submissions, legal issues, disposition and reasons. In compliance with its official status as a bilingual province, the AI Analysis summaries for New Brunswick are available in both English and French. Summaries are also available in French and English for a selection of Quebec legislation and case law published after 2010.

The AI Analysis summaries for legislation only include an overview and the provision's outline, which is divided into descriptive subheadings and corresponding section numbers. CanLII gives users the opportunity to provide feedback for each AI analysis.

Lexum provides the following information about their process for selecting and training the large language models used to develop CanLII's AI tools:

- They tested various pre-trained models using around 3.2 million legal documents published in CanLII. This included around 3.1 million legal decisions, 100,000 commentaries and 85,000 statutes and regulations in French and English. Ninety percent of those documents were used for training, five percent for validation and five percent for testing.
- They used a separate set of documents collected from English decisions tagged with the appropriate keywords to make additional adjustments to the model.
- They performed additional testing using a separate set of 500 court and tribunal decisions that were tagged by editors.

According to CanLII.org's privacy policy, they automatically collect the following information – among others – for security purposes: 1) queries made using their search engine; 2) pages visited on CanLII.org; 3) the user's IP address and domain name, but they do not use that information to identify users. The log information is kept for six months. They may collect and keep personal information such as name, affiliate organization, and email address for users who communicate with CanLII through their Feedback form until the user's concern has been addressed.



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As with all AI tools, this tool may produce errors and, as such, users should ensure that they perform quality control of the results by comparing the AI generated summaries with the full text.

## 2.2 Lexis+ AI

LexisNexis describes Lexis+ AI as a fully bilingual generative AI powered legal assistant service that uses generative AI and proprietary search technology to perform searches involving both English and French legal content. The responses generated by Lexis+ AI are based on data from LexisNexis' repository of Canadian legal content and use cases. Lexis+ AI is a paid subscription service.

Lexis+ AI allows users to:

- Ask legal questions in conversational format using natural language
- Draft documents such as legal memos, client emails, letters or contract clauses
- Quickly summarize legal decisions from the LexisNexis databases
- Analyze documents uploaded by users to create summaries or respond to questions

LexisNexis provides the following information about the steps it takes to ensure quality control, safeguard against bias, and protect privacy:

- It includes links to citations and supporting references in responses to mitigate the risk of hallucinations and uses existing LexisNexis services to identify and validate the most relevant responses to prompts.
- It implemented human-in-the-loop processes, including:
  - subject matter experts, data scientist and engineers to evaluate, and adjust as necessary, the responses generated by the prompts
  - legal experts who are specifically trained to evaluate language models to test the responses produced by Lexis+ AI
- It does not use the information that customers input into Lexis+ AI for their requests to tune or train its models. User prompt history is deleted automatically after 90 days, and users also have the option to delete it manually. LexisNexis does however use aggregated and anonymized customer data, such as the following, to improve customer experience:
  - Information provided either directly by the customers such as contact information, account login credentials, payment information, feedback or queries sent to customer support, and information about users' organization (including ID);
  - Information collected automatically regarding user device interactions with LexisNexis's service such as IP addresses, location information, data usage information; and
  - Information collected from third parties such as social networks linked to LexisNexis's service or location information provide by third party service providers.
- It was developed in accordance with the Responsible AI Principles established by the LexisNexis parent company, RELX. These principles include:
  - considering the real-world impact of AI solutions on people



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- taking action to prevent creation or reinforcement of unfair bias
- explaining how their solutions work
- creating accountability through human oversight
- respecting privacy and championing robust data governance

### 2.3 Westlaw Edge Canada with CoCounsel

In 2024, Thomson Reuters launched Westlaw Edge Canada – an enhanced version of the classic Westlaw that is built on the CoCounsel Core generative AI which provides users access to AI-enhanced legal research and organization tools.

The CoCounsel Core generative AI is powered by the GPT-4 large language model. It gives users access to eight core legal skills which allow them to: extract information from documents; review and compare documents; search through large databases – including a user's own files, which can be uploaded to the system; draft correspondence and refine letters, emails and other documents; help prepare for a deposition; create a timeline using evidence or case documents uploaded by users; and summarize complex documents. It is also the basis of Westlaw's CoCounsel generative AI legal assistant.

The AI enhanced legal research tools that have been integrated into Westlaw Edge Canada include the following features:

- **AI-Assisted Research:** gives users access to answers generated only from Westlaw content.
- **KeyCite Overruling Risks:** warns users when a legal decision that appears in a search result was either invalidated or overruled or relies on such a decision.
  - A red flag is used to identify bad law – a decision that was either reversed or not followed in the same jurisdiction or by the Supreme Court
  - A yellow flag identifies decisions that have a negative history or treatment but have not been reversed or overruled
  - A blue H is used for decisions that have a direct history but are not known to be negative
  - A green C is used for decisions that have no direct history in the courts but were mentioned in other decisions.
- **Judicial Consideration for Statutes:** help users find the most relevant cases that meaningfully interpret and clarify legislation.
- **KeyCite Cited With:** helps users quickly identify cases that have a pattern of being cited together.
- **Legal Topic Suggestions:** shows the user examples of legal topics related to their keywords as they type them.

The organization tools that are available in Westlaw Edge Canada include the following features:

- **Outline Builder:** allows users to create a customize downloadable outline using information extracted directly from their search result.



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- Graphical View of History: displays a user's search history as a map to allow them to easily retrace their steps.
- Table of Contents: extracts case headings for all the cases in a search.
- Keep List and Hide Details: allows users to easily create a list of useful cases for later review, and to control which cases from that list are displayed.
- Select Term Highlighting: allows users to assign specific colours to search terms or phrases to navigate their search results.
- Snippet Navigation: can be used to preview text from search results that is the most relevant to the keywords while remaining on the same page.
- Proceedings Filter: allows users to quickly find legal decisions based on the types of proceedings – summary judgment motions and applications, motions and applications to dismiss, motions and applications to strike, and motions and applications for leave to appeal.

Thomson Reuters provides the following information about the steps it takes to ensure quality control, safeguard against bias, and protect privacy:

- To address the issue of hallucination with their AI products, it uses manually designed and peer-reviewed tests for CoCounsel. These tests represent real-world legal work and are supervised by lawyers. Their results are used both as a comparator to results produced by CoCounsel and to train a large language model to perform automated reviews.
- Its products include prompting guardrails that ensure its Generative AI only produces responses that are defined and limited by information that belongs to, and has been verified by, the company.
- It does not use user content or prompts to train or improve CoCounsel Core or any third-party generative AI LLM. The prompts are not stored in the generative AI of third-party partners who are contractually prohibited from using customer information to train their models.

Westlaw Edge Canada is a paid subscription service which allows users to change their language preferences to French. However, although the Cocounsel generative AI integrated into this tool can answer questions in different languages, English is recommended for queries since it is the default language of the tool.