Exploring AI at High-Risk legal Institutions

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Abstract

This report explores the potential for integrating artificial intelligence (AI) tools into the operations of high-risk institutions like Canadian courts and tribunals. It outlines best practices in change management and governance, drawn from previous research on change management and technology in law other high-risk sectors like healthcare, and provides a roadmap for AI implementation that balances efficiency, security, and access to justice. Key recommendations include retaining an AI / legal technology expert, developing robust policies around cybersecurity, data governance, and ethical AI use, and fostering a culture of innovation within high-risk legal institutions. The report emphasizes stakeholder engagement, user-centric design, and ongoing training to ensure the sustainable integration of AI tools, with examples for improving case management, document automation, and legal research. These strategies are designed to help institutions modernize its processes while preserving principles like judicial independence, procedural fairness, and public trust in the administration of justice. The report concludes by offering actionable steps for piloting AI technologies and providing options for both short-term improvements and long-term planning.

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Overview

The purpose of this report is to inform high-risk legal institutions like Canadian courts and tribunals of the best practices and procedures for identifying, evaluating, and implementing tools that incorporate AI into their operations. Following an explanation of these best practices and procedures is an initial overview of a methodology to evaluate AI tools based on my own expertise in technology and legal process engineering, the culmination of my research with the Canadian Institute for the Administration of Justice, as well as my previous experience as a law clerk.

Modern access to justice requires the responsible integration of tools and information technology (IT) into legal processes, offering an opportunity to not only modernize the courts but to improve access to justice through tools like videoconferencing, asynchronous case management, and AI-assisted support systems. The overarching goal is to create a more efficient, accessible, and transparent legal system.[1]

The practical reality of change management in the justice sector is that the justice system has very few differences in limitations with other high-risk public institutions, such as law enforcement or health care. Despite this reality, the ideation, implementation, and management of change in the justice sector lag far beyond its comparators. Recent studies, including my own research, suggest this lag is mostly attributed to a combination of risk aversion and a preference for "management by committee" that its comparator sectors lack. These factors, however, are not easily attributable to judges or similar decision-makers. Interviews with both staff and judges at courts across Canada have indicated that the majority of these factors are attributable to the public service departments that are intended to support operations for these justice institutions

The sum of my research indicates a combination of issues with outdated practices and governance models, particularly in courts, whereby the public service departments responsible for supporting and administering the institutions are using government-standard practices and appear responsible not to the judiciary but to the executive branch, calling into question judicial independence.[2] This leads to dissonance in both goals and leadership. In goals, there is a stark difference between the judiciary's goal in providing the just, most expeditious and least expensive outcome of every proceeding with the executive branch's goal of meeting statutory and policy requirements on time and on budget. In leadership, when there is an understandable confusion for public service departments (responsible to the executive branch) supporting and administering the courts where the judiciary's goals and needs are not necessarily the executive branch's goals and needs.[3] This dissonance has resulted in a "chicken and egg" scenario which logically makes it impossible for public service departments to *support* their respective courts while also attempting to *run* those courts. The practical reality of this dissonance is that, where the executive branch exercises a high degree of control over the resources and infrastructure of a court, judicial independence may be compromised by the judiciary's dependence on

[1] See for example *Federal Courts Rules*, SOR/98-106 at s 3; see also Aubert, Benoit, Gilbert Babin and Hamza Aqallal, "Providing an Architecture Framework for Cyberjustice" (2014) 3:4 Laws 721.

[2] See *Ref re Remuneration of Judges of the Prov. Court of PEI; Ref re Independence and Impartiality of Judges of the Prov. Court of PEI,* 1997 CanLII 317 (SCC), [1997] 3 SCR 3.

[3] This finding is the result of interviews with judges and court staff conducted both independently and through collaborations with the Canadian Institute for the Administration of Justice and the Access to Justice Centre for Excellence, the results of which will be published academically; on the impact of competing goals between executive and judicial branches on the administration of justice see for example Green, Andrew James and Yoon, Albert, *The Most Dangerous Branch?* (SSRN, 2024), online: https://ssrn.com/abstract=4737617.

the executive for the basic functioning of a court.[4] Naturally, if the executive exercises its control over the resources and infrastructure for a court in a way that diverges from the judiciary's goals and needs, neither party is likely to adequately accomplish their goals or provide services.

Due to the radical and necessary nature of implementing a change like AI tools, this report prescribes a series of best practices and steps that should assist in responsibly exploring uses of AI tools by high-risk institutions without compromising their security or exposing them to liability. These practices and procedures bridge the innovation gap between where the justice sector *currently is* in its limitations and resources and where the justice sector *should be* based on its comparator sectors.

Qualifications

I am qualified to advise on and oversee the implementation of AI tools in legal processes due to my extensive background in AI regulation, legal technology, and access to justice. I hold a Juris Doctor (JD) from the University of New Brunswick, and I am currently pursuing a thesis-based Master of Laws (LLM) at Osgoode Hall Law School, studying the impact of technology in legal processes on meaningful access to justice. This academic foundation is complemented by my role as a Research Fellow at the Artificial Intelligence Risk and Regulation Lab (AIRRL) and the Access to Justice Centre for Excellence (ACE), where I lead research on justice process design and the use of technology in the justice system. As the first fellow of the AIRRL, I focus on managing AI implementation risks.

Professionally, I have served as a Judicial Law Clerk at the Federal Court, contributing to the Federal Court Technology Committee and its AI Working Group.[5] I also consult on AI usage in legal practice, business development, and corporate strategy in the private sector. My notable contributions in the field of AI regulation include collaborating on the development of the Federal Court's *Notice on the Use of Artificial Intelligence in Court Proceedings* and their *Interim Principles and Guidelines on the Court's Use of Artificial Intelligence*, and my continuing participation in the evolution of policies to govern the use of AI in legal institutions.

My research efforts include assessing and mitigating risks posed by Canadian legal clinics using AI tools, leading a pilot project on using AI to enhance empirical studies on access to justice by modernizing court procedural data collection and analysis, and conducting an empirical study consisting of a survey of 115 judges from Canadian courts on their perceptions of technology in the administration of justice, providing insight into the varying perceptions among the judiciary across several characteristics, including differences between trial and appellate courts. Through the Canadian Institute for the Administration of Justice I have co-authored several reports and articles on the interaction between technology and access to justice, with forthcoming contributions to the Windsor Yearbook of Access to Justice and various textbooks:

- Nathan Afilalo, Daniel Escott and Argyri Panezi, *New Brunswick Access to Justice Summit - Digital Transformation: Putting People at the Heart of the System*, (Montreal: The Canadian Institute for the Administration of Justice, 2023), online: https://ciaj-icaj.ca/wp-

[4] BC Smith, *Judges and Democratization: Judicial Independence in New Democracies* (Abingdon, Oxon: Taylor & Francis, 2017) at 68.

[5] Please note that this report reflects my personal views, research, and conclusions, and does not reflect the official stance or position of the Federal Court or the Courts Administration Service.

content/uploads/documents/2024/01/ciaj-icaj_2023-access-to-justice-summit_nb-report_en.pdf?id=17747&1706548237;

- Nathan Afilalo, Daniel Escott and Archie Zariski, *Report on Canadian Judges and Technology*, (Montreal: The Canadian Institute for the Administration of Justice, 2023), online: https://ciaj-icaj.ca/wp-content/uploads/page/2023/08/ciaj-athabasca_2023-report-on-canadian-judges-and-technology_en.pdf;
- Nathan Afilalo and Daniel Escott, "Transformation and Digitization: Are they looking in the right place?", Windsor YB Access Just [forthcoming];
- Nathan Afilalo, Daniel Escott and Archie Zariski, "Access to Digital Justice in Canada", Windsor YB Access Just [forthcoming];
- Nathan Afilalo, Daniel Escott and Archie Zariski, "Chapter 4: Canada" in Tania Sourdin & Brian Barry, eds, *Judges and Technology: A Comparative Analysis* (Oxford University Press) [forthcoming];

Comparator Sector: Healthcare

Change management in healthcare is essential for enabling organizations to adapt to new technologies, policies, and patient care models. The healthcare sector, being a complex adaptive system, constantly faces disruptive forces, necessitating well-planned changes that are executed systematically to improve efficiency, safety, and patient outcomes.

Kotter's "8-Step Process", a widely recognized model for change management, has been particularly influential in healthcare. The first step, "Creating Urgency," highlights the need for healthcare leaders to identify and communicate pressing opportunities that require immediate action to generate momentum for change.[6] In healthcare, this urgency might be driven by factors such as evolving technology or patient care protocols that, if not adopted, could lead to decreased quality of care or financial inefficiencies.

One critical aspect of managing change in healthcare is forming a "Guiding Coalition," which involves assembling a diverse, cross-functional team from various levels within the organization. This coalition is pivotal in driving change across hierarchical structures, fostering collaboration, and ensuring that various perspectives inform the strategic vision. Such coalitions have proven essential in integrating new technologies and streamlining processes, especially in settings like emergency departments where quick, coordinated action is necessary.[7] In addition to Kotter's model, Lewin's "Stage Theory", which involves "unfreezing," "changing," and "refreezing" behaviors, has been widely applied.[8] Lewin's theory emphasizes the need for organizations to break away from old habits and embrace new practices, which

[6] Kotter, John, *8 Steps to Accelerate Change in Your Organization*, eBook, 2024 update (Kotter Inc, 2024) at 10.
[7] Igoe, Katherine J, "Change Management: Why It's So Important, and So Challenging, in Health Care Environments" (2021), *Harvard T.H. Chan School of Public Health*, online: https://www.hsph.harvard.edu/ecpe/change-management-why-its-so-important-and-so-challenging-in-health-care-environments/; Kotter, *supra* note 6 at 13-14
[8] Burnes, Bernard, "The Origins of Lewin's Three Step Model of Change" (2019) 56:1 *J Applied Behavioral Science* 32 at 34-35; Lewin, Kurt, "Frontiers in Group Dynamics: Concept, Method and Reality in Social Science; Social Equilibria and Social Change" (1947) 1:1 *Human Relations*.

then must be solidified as the new norm. This is particularly relevant in healthcare, where longstanding routines often hinder the adoption of new technologies or practices, even when they are beneficial.[9]

Research has shown that the application of change management models like Kotter's and Lewin's in healthcare settings has led to tangible improvements. For instance, change management efforts have resulted in reduced hospital admission rates and length of stay for trauma patients, demonstrating how systematic approaches can lead to better resource allocation and patient care.[10]

However, implementing change in healthcare is fraught with challenges. The hierarchical and rigid nature of healthcare institutions can create resistance to change, especially when the urgency or benefits are not effectively communicated.[11] Furthermore, clinician burnout and change fatigue are significant obstacles, particularly when changes are not perceived as leading to immediate improvements in patient care. As a result, it is critical for healthcare leaders to balance the pace of change with the need to support and sustain their workforce throughout the process.[12]

Best Practices on Change Management for Courts

Modern change management in the practice and administration of law involves structured approaches and methodologies designed to facilitate the smooth and effective integration of new technologies and processes within legal institutions. In my view, given both the high-risk nature of the courts and the approaches observed in the healthcare sector, the best practices in change management for courts encompass several key elements: stakeholder engagement, user-centric design, risk management, holistic planning, and innovative governance. These principles ensure that technological implementations are both effective and sustainable while directly addressing the unique challenges of the legal landscape and working towards meaningful access to justice.

Stakeholder Engagement

In order to foster buy-in and reduce institutional resistance to change, it is crucial for leadership and change managers to engage with a wide range of stakeholders, including legal professionals, IT specialists, clients, and regulatory bodies, ensuring that diverse perspectives are considered. These consultations cannot be one-off discussions. Open lines of communication with stakeholders must be maintained to keep them informed and involved throughout the change process. Stakeholders' ability to provide regular updates through feedback loops provides leadership and change managers the ability to address concerns as they arise, adapt strategies based on live feedback, and increase likelihood of adoption based on stakeholders' participation or "perceived ownership" of the change process. Examples from other jurisdictions show that transparent and inclusive stakeholder engagement, such as the model of British Columbia's Civil Resolution Tribunal, has been critical in promoting acceptance.

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[9] Harrison, Reema et al, "Where Do Models for Change Management, Improvement and Implementation Meet? A Systematic Review of the Applications of Change Management Models in Healthcare" (2021) 13 *J Health Leadership* 85 at 88, 90, 100.
[10] Harrison et al, *supra* note 9 at 86, 88.
[11] Kotter, *supra* note 6 at 8, 13, 15, 32-33; Igoe, *supra* note 7.
[12] Igoe, *supra* note 7; Burnes, *supra* note 8 at 37; Harrison et al, *supra* note 9 at 86.

User-Centric Design

User-centric design is a process design methodology that maintains the perspective that no process or change should be designed from the designer's perspective; the only perspective that adds value during the design process is the user of the process being designed. Both procedural and technological solutions must be designed with the end-user in mind, ensuring that tools are intuitive, easy to use, and practically address the problems the end-user needed addressed. This minimizes the risks of unnecessary disruption and resource waste. User-centric design can also be augmented by process-centred training and support, ensuring that parties who administer or facilitate the process or technology being designed are best able to efficiently engage with users and accomplish change goals.

Risk Management

Any choice to make change involves risk, and every choice to not make change involves risk. When considering design and implementation of new processes or technologies, responsible leadership and change managers should identify potential risks. For technology specifically, these risks always include data privacy, cybersecurity, and compliance. Strategies to mitigate these risks must be developed, but these strategies must optimize changes to maximize potential benefits (both tangible and intangible) while minimizing risk exposure. Drawing on Scassa's work on Canada's Directive on Automated Decision-Making, courts must adopt clear risk mitigation strategies, such as robust privacy protocols and regular audits, to ensure compliance with legal standards and safeguard against potential abuses.[13]

Holistic Planning

While adhering to best practices, any change must be a response to an identified problem. Enforcing change for its own sake runs the risk of decreasing buy-in while diminishing future opportunities to invoke change for positive goals. Change goals must be identified as resolving problems from users or process participants. By framing changes as solutions to problems, it becomes easier to establish specific and measurable goals for change management. This approach also increases the likelihood of stakeholder buy-in, as stakeholders will believe they have something to gain from implementing the change. As Hagan emphasizes in her study on AI and access to justice, AI should be seen as a tool for improving system efficiency without sacrificing fairness.[14]

Innovative Governance

The time for "management by committee" lapsed when the lifecycle for technologies was longer than a budget cycle. If leadership and change managers desire any hope of keeping up with user expectations and external realities they have no control over, governance structures must be adopted which both authorize and encourage ideation, iteration, and innovation. At first glance this appears at odds with the best practice of stakeholder engagement. A responsible innovative governance model should enable leadership and change managers to identify problems, come up with and try solutions, and either implement those changes or return to trying other solutions. At the same time, a responsible innovative governance model (through clear and constant lines of communication) should provide stakeholders with visibility both of identified problems and potential solutions so they can provide accurate and

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[13] Scassa, Teresa, "Administrative Law and the Governance of Automated Decision-Making: A Critical Look at Canada's Directive on Automated Decision-Making" (2021) 54:1 UBC L Rev.

[14] Hagan, Margaret, "Opportunities & Risks for AI, Legal Help, and Access to Justice" (28 June 2023), *Legal Design and Innovation*, Medium, online: https://medium.com/legal-design-and-innovation/opportunities-risks-for-ai-legal-help-and-access-to-justice-9c2faf8be393.

insightful feedback throughout the innovation process, not before nor after the process. Aubert et al.'s "cyberjustice architecture" suggests that governance structures should align with IT tools to ensure that the judiciary's goals are met efficiently.

Practical AI Implementation Walkthrough

While adhering to the best practices outlined above, the following steps are a practical walkthrough of the approach a high-risk institution should follow in order to explore, test, and implement AI tools in a responsible and secure manner. In summary, the steps are:

1. Identification and Ideation: bring in required expertise, collaborate to identify institutional pain points, and come up with potential solutions to address identified pain points;
2. Feasibility Study and Risk Assessment: analyze the technical and legal implications of using AI tools to address identified pain points, including accurate estimates for cost and timelines;
3. Policy Development and Risk Mitigation: empower an expert or team to develop and implement policies on the ethical use of AI, risk management, data governance, cybersecurity, accountability, and operational governance;
4. Pilot Process Design, Implementation, and Evaluation
5. Targeted Implementation
6. Evaluation, Governance, and Iteration

Step 1: Identification and Ideation

Any responsible change management, especially something as radical and resource-intensive as implementing AI tools, must serve a purpose. The first step in this process requires a realistic and thorough review of problems you are facing. Identify pain points and potential opportunities for efficiencies or benefits by assessing, mapping, and understanding current processes. Beyond a simple workflow, the best "bang for your buck" in change management will come from addressing the biggest problem first. While a simple process review may generate a list of problems, it is only possible to understand the breadth of those problems by compiling understandings of resource utilization, cost over time, and process bottlenecks for every step in each process under review. The most effective implementations will address the biggest and most impactful pain points, such as case management, e-filing, and document automation. This phase should involve mapping workflows, understanding resource allocations, and identifying bottlenecks.

After pain points and potential opportunities have been identified, establishing a clear goal becomes easy: address the biggest and most valuable problem. Create a vision or strategic objective for your change, then assemble a team of relevant experts whose role it is to carry out the change.

Step 2: Feasibility Study and Risk Assessment

After you have identified pain points and potential opportunities and created an idea of your change, your new team of experts should conduct a feasibility study and risk assessment for your change. In the context of AI, this would include analyzing both the technical and legal implications of AI applications, identifying suitable commercially-available or bespoke AI technologies and vendors, and providing accurate estimates for costs and timelines for design, testing, and implementation.

The Australian judiciary's exploration of AI-driven decision-making highlights the importance of understanding both the capabilities and limitations of AI tools before implementation.[15] In addition, risk assessments should address issues such as data security, the potential for algorithmic bias, and compliance with legal standards.

Step 3: Policy Development and Risk Mitigation

Understanding that courts play a central role in our constitutional democracy, it is crucial that the use of AI be done responsibly, uniformly, and reasonably. With an understanding of what changes are possible from the feasibility study and risk assessment, your working group of experts should engage with stakeholders to create ethical policies on AI usage, risk management, data governance, cybersecurity, accountability, and operational governance. This is doubly important with the understanding that there are no model policies in Canada on risk management, data privacy, cybersecurity, accountability, or governance, and currently the Federal Court's *Interim Principles and Guidelines on the Court's Use of Artificial Intelligence* is seen internationally as a model policy for court use of AI.[16] However, resting on these laurels would be a mistake, as the evolving nature of AI and its demands on both procedural fairness and judicial independence necessitate constant supervision and revision.

Step 4: Pilot Process Design, Implementation, and Evaluation

With the required policies in place, a full understanding of the risks involved, and a feasibility study completed, leadership and change managers will be able to make informed and evidence-based decisions on pilot projects. Success criteria and key performance indicators (KPIs) should be defined early and revisited often. Select options identified in the feasibility study that best meet your change goals with the resource constraints you have, procure secure versions of these tools, and conduct testing with informed users in a controlled environment. Using your KPIs as a benchmark for comparison, leadership and change managers will then be able to determine which solutions are most viable or identify areas in the pilot process that require improvement. Necessary adjustments can be made at this stage, and the best solution is chosen. An example is the Civil Electronic Information System (CEIS) used in British Columbia**,** which streamlined case management by providing automated tools to track and manage legal processes.[17]

Given the lengthy and multifaceted nature of pilot testing, below I discuss each sub-step in the pilot process:

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[15] Bell, Felicity, Lyria Bennett Moses, Michael Legg, Jake Silove & Monika Zalnieriute, *AI Decision-Making and the Courts: A Guide for Judges, Tribunal Members and Court Administrators* (Sydney: Australasian Institute of Judicial Administration, 2022), online: https://aija.org.au/publications/ai-decision-making-and-the-courts-a-guide-for-judges-tribunal-members-and-court-administrators/.

[16] See for example UNESCO, *Draft Guidelines for the Use of AI Systems in Courts and Tribunals*, CI/DIT/2024/GL/01 (2024), online: https://unesdoc.unesco.org/ark:/48223/pf0000390781; Canadian Human Rights Commission, *Submission to the UN OHCHR on the Application of Digital Technologies in the Administration of Justice* (March 2024), online: https://www.ohchr.org/sites/default/files/documents/issues/digitalage/cfis/application-digital-tech-admin-justice/subm-application-digital-technologies-nhri-canadian-hr-commission.docx.

[17] Lupo, Giampiero and Jane Bailey, "Designing and Implementing e-Justice Systems: Some Lessons Learned from EU and Canadian Examples", 2014 3:2 Laws at 371.

1. Select a Set of AI Tools for Testing

After completing a thorough assessment of your institution's needs and identifying potential AI tools to address those pain points, the next step is to collaborate with both internal teams and AI tool vendors. This collaboration is essential to carefully select the specific AI tools that will have the greatest impact.

Engage with internal stakeholders – such as legal professionals, IT staff, and administrators – to ensure that their insights and concerns are integrated into the decision-making process. These stakeholders can help prioritize which pain points are the most critical to address and what operational realities must be considered. Simultaneously, work closely with AI tool vendors to understand the full capabilities, limitations, and cost structures of their solutions. Vendors can provide detailed demonstrations, customization options, and information about ongoing support and maintenance.

The goal of this step is to select a set of AI tools that optimize to most meaningfully address your key pain points while ensuring that resources (both human and technological) and financial investments are used as efficiently as possible. Prioritize tools that demonstrate scalability, ease of integration with existing systems, and a strong return on investment without overextending your budget or resources.

2. Create a Reasonable Plan and Budget for Testing in a Secure Digital Environment

Once you have identified appropriate AI tools, the next step is to plan the pilot's execution. This phase should include detailed budgeting and resource allocation. Experience from other institutions that have already adopted similar technologies can be instructive.

Plan your pilot in a controlled, secure digital environment. This involves ensuring cybersecurity measures, such as encryption and data privacy protocols, are in place before any testing begins. Work with IT professionals and legal experts to establish a secure sandbox environment where AI tools can be tested without risking the integrity of sensitive data.

Budgeting should account for the cost of procurement, implementation, training, and ongoing maintenance. Using scalable solutions, such as cloud-based AI services, can help to optimize costs, allowing for gradual expansion as the tools prove their effectiveness.

3. Have a Trusted Group of Users Test AI Tools

It is vital to ensure that the testing phase includes a group of trusted users. This group should consist of individuals who regularly interact with the pain points identified earlier, such as law clerks, judges, and court registry staff. These users should be trained in using the AI tools and provide real-time feedback throughout the testing process.

The selection of users should also reflect the diversity of roles and technical literacy within the organization. User-centric design principles emphasize the importance of aligning the tools with user needs. Testing with a varied group ensures the AI tools are practical, accessible, and effective across different levels of the institution.

4. Experts Evaluate Pilot Results

Following the testing period, gather data from your trusted user group. Utilize the KPIs defined earlier, such as time saved, reduction in administrative errors, and improvements in user satisfaction. Experts in AI, legal processes, and data analysis should evaluate the results based on the KPIs and their own fields of expertise. This evaluation process should be structured around best practices for change management in high-risk sectors like justice and healthcare.

Regularly reviewing the results against your established KPIs will help identify which AI tools are most effective. Risk management is also crucial here, ensuring that the deployment of these tools does not inadvertently introduce new challenges, such as bias or privacy concerns.

5. Decide Which Tool or Set of Tools Should be Deployed at Scale

After analyzing the results of the pilot testing, decide which AI tools are most effective and ready for larger-scale deployment. Ensure that the chosen tools are integrated with existing systems and infrastructures, such as case management platforms or digital filing systems. Viewing these decisions through the lens of system architecture ensures that the tools align with the broader goals of the legal system.

Before deployment at scale, ensure that all necessary personnel are trained and that support systems (such as user manuals and tech support) are in place to handle any issues. Implement a feedback loop that allows for continuous improvement and iteration as the AI tools are used more widely.

Step 5: Targeted Implementation

After completion of the pilot process, the chosen solution should be implemented in a manner that best addresses the problem originally identified as the root of the change goal. A successful pilot project can be expanded to ensure integration with existing processes and infrastructure after relevant staff have been appropriately trained and infrastructural capacity has been established. Every step of this process should be documented into user manuals and support materials. High turnover is a strong opponent to change management, and the risk of losing institutional knowledge due to lost personnel is a risk that should be mitigated. Mechanisms should be set up for the continuous monitoring, evaluation, and iterative improvement of the changed process or technology. Separate from institutional monitoring and evaluation, a constant feedback loop should be built-in to the user experience, allowing leadership and change managers to assess not only KPIs but also user feedback and their experiences.

Step 6 and Ongoing: Evaluation, Governance, and Iteration

Following the initial roll-out of changes at-scale, regular audits and compliance checks should be conducted by qualified experts. Part of this ongoing post-change stage is regularly reviewing and updating applicable policies and governance models related to the change. Performance should be monitored continuously and regularly reported to stakeholders, providing data and analysis to assess impact and ongoing project viability, as well as potential further opportunities for change. Open lines of communication should be maintained to ensure transparency and ongoing buy-in with stakeholders, which also plays a role in staying informed about new developments in laws, regulations, and technological advancements. Based on evaluation, feedback, and external information, policies and changes should continue to be adapted as necessary. It is essential that policies and uses pertaining to AI tools are continuously updated and adapted to new legal standards and technologies to remain effective and relevant.

Options for High-Risk Institutions

Based on the above, I have prepared an initial discussion of options for high-risk institutions like courts and tribunals. I preface this discussion with the reality that any material discussion of individual tools like ChatGPT, Claude, Microsoft Copilot, Google Gemini, Thomson Reuters Cocounsel, LexisNexis + AI, or similar tools cannot be done responsibly without having demonstrations and discussions with the

organizations responsible for each tool. Due to the rapid and ever-changing nature of the AI sector, and the marked complexity of implementing technologies within large institutions, discussions and assessments of specific factors like functionality, accuracy, training, system and security requirements, or cost cannot be held without direct and ongoing conversations with their respective organizations to ensure these discussions are accurate and helpful.

Categorization by Use-Case

The public discourse on AI tools is flooded with several terms and categorizations, often technical, which are difficult for non-specialists to follow and discuss. For the purposes of an institution like a court or tribunal, I suggest using a uniform method of categorizing and discussing AI tools according to their use-case. This means that, regardless of the model used, system functionality, or other technicalities, all discussions related to any AI tool or set of tools remain focused on how those tools are being (or intend to be) used. I have dissected four different categories of use cases relevant to legal institutions: public-facing tools, task automation, research & review, and drafting & editing.

Public-Facing Tools

Public-facing AI tools are designed to improve access to justice by offering the public efficient, user-friendly ways to interact with an institution's systems. These AI tools can provide a range of services, such as answering common questions, assisting with document filing, or guiding users through legal processes. By leveraging a multilingual Large Language Model and machine learning, these tools enable institutions to automate routine interactions, allowing staff to focus on more complex tasks while delivering immediate assistance to the public.

For example, a "court information chatbot" could be used to provide users with real-time guidance on court procedures, file status, and filing requirements. Available 24/7 through a court's website or app, this chatbot could reduces the burden on the registry and enhances accessibility, especially for self-represented litigants. By understanding plain language inquiries, and being able to accurately respond to those inquiries while still using plain language, the chatbot could deliver accurate, context-specific information and helps users navigate the court system without needing direct human interaction.

Public-facing AI tools like this enhance the efficiency and transparency of legal processes. They can also improve access to justice for vulnerable populations by providing clear, easy-to-understand legal information. Security and privacy concerns can be addressed through encryption and strict data protection measures. As these tools continue to evolve, they will likely expand their capabilities to offer even more sophisticated assistance, such as predictive analytics for case outcomes, further helping users understand and navigate their legal options.

Task Automation

Task automation AI tools could revolutionize the efficiency and accuracy of routine administrative functions within an institution's systems. These tools have the potential to automate repetitive processes, allowing staff and legal professionals to dedicate more time to complex, higher-value tasks. The possibilities for task automation in courts may include enhancing the operations of a court registry, administering case management conference calls, streamlining file management systems, and providing multilingual translation services.

In an administrative group like a court registry, AI tools could automate the intake and processing of filings, reducing manual errors and speeding up case registration. These systems might also be able to

automatically send reminders and updates to parties, improving communication and ensuring deadlines are met. Other tools like an asynchronous and permissioned online portal could be integrated with these tools so that judges, other decision-makers, staff, and parties all have a live view of the status and relevant documents for each proceeding they are involved with.

AI tools might be employed to handle case management conference calls, potentially automating the scheduling and coordination of virtual meetings between parties. Furthermore, AI tools could be used during these calls for real-time transcription, generating accurate records without the need for human transcription services, and drafting minutes of each call that are sent to participants afterwards.

File management systems powered by an AI tool that is trained on relevant rules, procedures, and file management standards could enable institutions to track and organize documents more effectively by automatically categorizing and tagging files upon receipt. This automation could reduce the risk of misplaced documents and facilitate quicker access to important information, thereby speeding up legal proceedings. Additional functionality can be built into these systems, such as automatic Optical Character Recognition, image recognition, and hyperlinking to publicly-available resources like CanLII.

The use of multilingual translation tools could significantly enhance the accessibility of dispute resolution services for non-English speaking litigants. These AI tools can provide real-time translation of legal documents and even live translation during proceedings, making dispute resolution processes more inclusive and equitable. These systems already exist commercially and have been used for real-time translation of both documents and speech, even on video or audio calls.

Research & Review

Legal research and document review AI tools could significantly enhance the ability of judges, other decision-makers, support staff, and administrative groups to efficiently manage the ever-growing volume of legal proceedings without sacrificing work quality. These tools have the potential to streamline how legal research is conducted and evidence is reviewed by providing powerful automation and intelligent analysis, reducing time spent on routine tasks, and allowing legal professionals to focus on more critical aspects of their work.

For judges, other decision-makers, and law clerks, AI-powered legal research tools could streamline the process of identifying relevant case law, statutes, and legal precedents. AI tools can quickly analyze large volumes of text, highlighting pertinent information, summarizing key points, and even suggesting relevant cases or documents. This could help make more informed decisions with greater efficiency, particularly in complex or time-sensitive cases.

Support staff like law clerks could benefit from AI tools that automate and expedite the research and review processes. These tools could assist in sifting through extensive legal databases to find relevant case law, producing summaries and helping to organize legal arguments. AI might also aid law clerks in their legwork to support judges and other decision-makers by assisting in reviewing and summarizing parties' arguments or evidence, providing suggestions for organization or formatting, and flagging relevant concerns that arise from the file's contents. These supports would free staff to focus on supporting their judges and other decision-makers while refining legal reasoning and ensuring accuracy.

For administrative groups like a court registry, AI tools could likewise streamline the review and organization of evidence, categorizing documents, standardizing formatting and web accessibility, and

flagging inconsistencies or patterns in materials. This could greatly reduce the time spent manually reviewing documents, allowing assistants to concentrate on supporting their judges while ensuring that judges and other decision-makers have easy access to the most pertinent information.

Drafting & Editing

AI tools that support drafting and editing at courts could play a transformative role in streamlining the writing and editing processes, offering judges, other decision-makers, support staff, and administrative groups a faster, more efficient way to manage the drafting of opinions, orders, and legal documents. These tools have the potential to enhance the quality and consistency of legal writing, while reducing the time and effort required to produce and refine these critical documents.

For judges and other decision-makers, AI-driven drafting tools could assist in creating initial drafts or templates of opinions based on their own precedents and retrieving relevant case law, statutes, and legal standards, and incorporating them into a cohesive narrative. These tools could offer variations in wording and phrasing as a sounding board without supplanting human reasoning, allowing judges and other decision-makers to focus more on legal reasoning and the substance of the decision rather than the mechanics of writing. Judges and other decision-makers could also benefit from AI's ability to automatically cross-reference evidence and legal citations, ensuring accuracy and compliance with formatting standards.

Support staff like law clerks could find AI drafting and editing tools invaluable in their role supporting judges. These tools could help law clerks quickly generate drafts of documents by analyzing precedents from previous law clerks and case materials from their judges, and offering structured outlines. AI might also assist with the editing process, flagging relevant inconsistencies that simple editing tools miss (i.e. context-specific acronyms or defined terms), suggesting improvements in clarity and style, and ensuring that all legal citations are correct and up to date. By automating these aspects of drafting, law clerks could dedicate more time to refining legal analysis and assisting with the strategic elements of a case.

Within an administrative group like a court registry, AI tools could assist in the generation and standardization of court orders, procedural documents, and templates used across the institution. AI tools could automate the population of legal documents with case-specific details (such as creating documents populated by information from an accessible e-filing system), ensuring consistency and reducing the potential for human error. For routine documents that require little customization, AI could even generate final drafts for review instead of requiring staff to begin the drafting process themselves, streamlining the administrative burden and improving overall efficiency.

Examples of AI in Other Jurisdictions

United States: AI systems, such as COMPAS, are used in criminal sentencing and bail decisions to predict the likelihood of reoffending. These systems analyze large datasets to produce risk assessments but have faced criticism due to concerns over algorithmic bias and lack of transparency.[18]

[18] Brennan, Tim, William Dieterich & Beate Ehret, "Evaluating the Predictive Validity of the COMPAS Risk and Needs Assessment System" (2009) 36:1 *Crim Just & Behav* 21.

Mexico: The Expertius system supports judicial decision-making by advising members of courts dealing with family-related proceedings on eligibility determinations, such as pension claims. This system helps streamline decision-making in simpler administrative contexts.[19]

Brazil: Brazil has adopted AI in over half of its courts, including the Supreme Court and Superior Court of Justice. AI tools assist with judicial decision-making, speeding up processes that would typically take much longer to complete manually.[20]

Australia: AI tools are used in transcription services, such as Auscript, which provides real-time transcription services for court proceedings. Additionally, AI is being explored for more complex tasks, including the triaging and allocation of cases.[21]

United Kingdom: Work has been done towards creating an entirely online court for certain summary offences. AI systems may handle guilty pleas and pre-determined penalties without magistrate involvement.[22]

China: China's "Smart Courts" and "Internet Courts" are highly advanced in utilizing AI for case management, judicial analytics, and legal research. Non-human "judges", powered by artificial intelligence, handle a wide range of disputes, from intellectual property to e-commerce.[23]

Potential First Steps for Courts and Tribunals

Based on international examples, best practices and my own research findings, I have identified as an example four potential applications of AI tools and related systems that Canadian courts and tribunals could investigate that would have a significant and positive impact:

1. **Public-Facing AI Tools**: Chatbots and AI-driven e-filing systems can enhance access to justice by helping self-represented litigants navigate court procedures. For example, a public chatbot on a court's website that has been trained on relevant legislative and regulatory schemes, the contents of a court's website, practice guidelines and directives, and notices to the profession and public would be able to answer any public question on court procedure or relevant information in plain language, substantially improving access to justice and removing the burden from the registry to answer similar questions as they come up from the public.

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[19] Davide Carniero et al., 'Online Dispute Resolution: An Artificial Intelligence Perspective' (2014) 41(2) Artificial Intelligence Review 211, 227-228 as cited in Sourdin, Tania, *Judges, Technology and Artificial Intelligence: The Artificial Judge* (Cheltenham, UK: Edward Elgar Publishing, 2021) at 70.

[20] Cappelli, Claudia, and Isabela Soares Lima, "Artificial Intelligence, the Brazilian Judiciary, and Some Conundrums" (2023), *Chaire Digital, Governance and Sovereignty*, Sciences Po, online: https://www.sciencespo.fr/public/chaire-numerique/en/2023/03/03/article-artificial-intelligence-the-brazilian-judiciary-and-some-conundrums/; see also *Conselho Nacional de Justiça, Resolução No 332, de 21 de Agosto de 2020: Ética, Transparência e Governança na Produção e Uso de Inteligência Artificial no Poder Judiciário* (2020).

[21] Bell et al, *supra* note 15.

[22] National Audit Office, *Early Progress in Transforming Courts and Tribunals*, by the Comptroller and Auditor General (HC 1001, Session 2017–2019, 9 May 2018), online: https://www.nao.org.uk/wp-content/uploads/2018/05/Early-progess-in-transforming-courts-and-tribunals.pdf.

[23] Wang, Nyu & Michael Yuan Tian, "'Intelligent Justice': Human-Centered Considerations in China's Legal AI Transformation" (2023) 3:349 AI & Ethics 349; see also G'sell, Florence, "AI Judges" in Larry A DiMatteo, Cristina Poncibo & Michal Cannarsa, eds, *The Cambridge Handbook of Artificial Intelligence: Global Perspectives on Law and Ethics* (Cambridge: Cambridge University Press, 2022).

2. **AI-Assisted Research and Review**: Tools that can streamline the review, summarization, and research that goes into supporting judges and other decision-makers during the pre-hearing stage can significantly impact the effect that support staff like law clerks and judicial assistants can have on workload management and overall institutional efficiency, while also allowing those staff, judges, and other decision-makers to focus on more high-level tasks. For example, a tool that can automatically generate case memos for cases as you read them would dramatically improve research efficiency, while a tool that can review and summarize information from large files or a large volume of files would in reviewing evidence.

3. **Process Automation**: Automated document management and case tracking systems can streamline the administration of justice, reducing delays and administrative overhead. For example, an automated file processing system that has been trained on relevant legislative and regulatory schemes, procedural rules, practice guidelines and directives, and notices to the profession and public would be able to manage file creation and sorting, set filing deadlines and create bring-forward dates, and send automated reminders relevant to each file without registry intervention.

4. **Asynchronous case management tools**: Instead of the constant need for check-ins with parties subject to case management, a system or combination of tools could be used to provide institution staff and parties to proceedings with a live view of the status and documents of their file. Off-the-shelf tools like “Zoom AI Companion” or “Otter.AI” can also provide immediate transcripts and call summaries of case management conferences, ensuring the registry is only doing work that adds value to proceedings instead of “busy work”.

Recommendations: Next Steps

To effectively integrate AI tools into an institution like a court or tribunal, a strategic and structured approach is essential. This report highlights several best practices, including stakeholder engagement, user-centric design, risk management, and innovative governance. Based on these findings and lessons, including those from other jurisdictions, the following recommendations outline the next steps that institutions should take to ensure successful implementation of AI technologies.

1. **Retain an AI / Legal Technology Expert to Simultaneously Engage with Stakeholders and AI Companies**: Institutions should retain a dedicated AI / legal technology expert to lead the process of AI integration by simultaneously engaging with both internal stakeholders and AI vendors. This expert would work closely with judges, law clerks, registry staff, and other court personnel to identify the court’s operational pain points while also engaging with AI companies to explore tools and technologies that can address these challenges.

   By doing these tasks in parallel, the expert can ensure that the solutions being considered are directly aligned with the institution’s specific needs, context, and constraints. This simultaneous approach would allow the expert to thoroughly contextualize the institution’s challenges within the broader AI ecosystem, ensuring that the institution selects the most effective and scalable tools at various price points. The complexity and coordination required for these tasks necessitate a dedicated expert who can manage this comprehensive process without detracting

from the institution's ongoing operations.

2. **Develop Effective Policies and Models for Cybersecurity, Data Governance, Ethical Use of AI, and Institutional Governance**: As AI tools are introduced into the institution's operations, it is essential to develop and implement robust policies that ensure the safe, ethical, and effective use of these technologies. Institutions should prioritize the creation of policies and models that address cybersecurity, data governance, ethical use of AI tools, and institutional governance. These policies should be informed by the institution's commitment to uphold principles like judicial independence and procedural fairness, while also aligning with broader legal and regulatory standards.

    a. **Cybersecurity**: AI tools present new vulnerabilities, particularly related to data breaches and unauthorized access. It is crucial that the institution implements advanced cybersecurity measures to protect sensitive legal data and maintain the integrity of its systems. These measures should include encryption protocols, regular security audits, and response plans for potential cyber threats.

    b. **Data Governance**: With the integration of AI tools, institutions should ensure that data is handled in a manner that complies with both legal standards and privacy regulations. Effective data governance policies will ensure that data collection, storage, and processing are conducted transparently and securely, safeguarding users' information and maintaining public trust.

    c. **Ethical Use of AI Tools**: Institutions should develop policies that guarantee AI tools are used responsibly and equitably. These policies should address concerns such as algorithmic bias, decision-making transparency, and procedural fairness. By establishing ethical guidelines for the use of AI tools, institutions can ensure that these technologies support rather than undermine the principles of justice and fairness.

    d. **Operational Governance**: The governance structure surrounding AI integration must be innovative, flexible, and aligned with the institution's long-term goals. It should empower leadership to make decisions about AI adoption while maintaining accountability and oversight. Operational governance models should include mechanisms for continuous evaluation and adaptation of AI tools to ensure they remain effective and compliant with evolving legal standards.

    By addressing these critical areas, institutions could create a solid foundation for the responsible use of AI tools, ensuring that they enhance operations without compromising legal integrity or public trust.

3. **Pilot AI Tools to Address Identified Pain Points**: It is recommended that institutions consider piloting AI tools through a structured process that begins with selecting solutions aimed at specific pain points, such as case management, document automation, and legal research. This can be achieved through engagement with both internal stakeholders, like decision-makers and

administrative groups, and AI vendors to ensure that the tools align with the court's unique needs. Once the appropriate tools are identified, testing could take place within a secure environment, with robust cybersecurity protections in place to safeguard institutional data.

During the pilot phase, a selected group of trained users – comprising administrative groups, judges and other decision-makers, and support staff – should test the tools in real-world scenarios, offering feedback on their functionality and effectiveness. KPIs should be established to measure success in areas such as time saved, reduction of errors, and improvements in workflow. After the testing phase, the results would be evaluated by experts to determine which tools are suitable for broader deployment. A targeted rollout of the most effective tools can then follow, supported by necessary training and infrastructure, while also emphasizing continuous monitoring and ongoing improvement to adapt to the institution's evolving needs.

4. **Fostering a Culture of Innovation**: To foster a culture of innovation, institutions should focus on creating a modern governance model, adopting a lean operating structure, and prioritizing efficient and accessible processes. A modern governance model could empower leadership and change managers to make decisions and experiment with new technologies while ensuring accountability and maintaining transparency through continuous stakeholder engagement. This model can allow for faster decision-making and adaptability, breaking away from traditional "management by committee" approaches that often stall innovation.

   A lean operating structure can also support innovation by reducing unnecessary bureaucracy and enabling more agile responses to emerging challenges. By streamlining processes and cutting down on inefficiencies, an institution can focus its resources on delivering value through improved services and solutions. Coupled with a focus on efficiency and accessibility, this approach encourages the adoption of AI and other technologies that directly enhance operations and access to justice. These practices reflect the best recommendations in the report, which emphasize the importance of aligning governance structures with innovations to drive continuous improvement while safeguarding principles like judicial independence and procedural fairness.

5. **Training and Capacity Building**: Effectively training staff and building capacity in AI tools is crucial for the successful integration of these technologies into institutions. To ensure that institutions are equipped to handle AI innovations, a structured and comprehensive training program is necessary. This program should be grounded in best practices that prioritize hands-on learning, continuous education, and cross-functional collaboration.

   Tailored training programs should be developed for all relevant personnel, including judges and other decision-makers, support staff, registry staff, and IT specialists. These programs should focus on the specific needs and tasks of each group, ensuring that they are trained to use AI tools in a way that enhances their work rather than complicates it. For example, judges may require training on AI-assisted legal research tools, while registry staff might focus on document automation and case management systems. Hands-on workshops that simulate real-world scenarios can allow staff to practice using these tools in controlled environments, ensuring that

they feel confident in applying them to their daily tasks.

Ongoing education and support must be provided to keep staff up to date with the evolving landscape of AI technologies. AI tools are continuously advancing, and staff must stay current on new features, capabilities, and best practices. Regular refresher courses, webinars, and workshops will ensure that knowledge is consistently reinforced, while also helping staff adapt to updates and changes in AI systems. Furthermore, peer-to-peer learning initiatives, such as mentorship programs where more experienced staff assist their colleagues, can foster collaboration and enhance overall capacity within the court.

Capacity building should include the development of comprehensive support materials such as user manuals, quick-reference guides, and online resources that staff can access when needed. These materials should be easily understandable and tailored to the court's specific AI tools. Additionally, a dedicated support team – comprising both internal experts and external consultants – can be established to assist with troubleshooting and to provide ongoing guidance as new issues or questions arise.

Institutions should focus on cross-functional collaboration to build capacity across different departments. Encouraging communication and collaboration between users like judges and other decision-makers, law clerks, IT staff, and registry personnel will ensure that AI tools are effectively integrated into the institution's operations. By working together to identify challenges, share knowledge, and solve problems, institutions can create a culture of continuous improvement that supports both the successful implementation of AI tools and the long-term capacity of its staff to use them effectively.

Incorporating these best practices into a comprehensive training and capacity-building plan will ensure that staff are well-prepared to leverage AI tools in ways that improve efficiency, accuracy, and access to justice, while maintaining confidence in the new technologies.

6. **Long-Term Planning for Innovation**: Long-term planning for innovation is essential for ensuring that the institution's processes and uses of technology, including AI tools, are continuously optimized to achieve the institution's goals in the most resource-efficient manner. This approach requires a forward-looking strategy that integrates the above-noted best practices and the other recommendations above into a cohesive framework for sustainable growth and improvement.

   Institutions should begin by embedding innovation into its core operations, ensuring that all future developments in technology and processes are aligned with its mission to improve access to justice, efficiency, and transparency. This involves continuously evaluating court workflows and resource utilization, identifying opportunities for optimization, and ensuring that new technologies are introduced in a way that enhances rather than disrupts existing operations. A governance model that supports iterative development and adaptation will enable institutions to remain flexible in its approach, allowing for the gradual integration of new AI tools and other innovations as they emerge.

To accomplish this, institutions must focus on holistic planning that incorporates best practices like stakeholder engagement, user-centric design, risk management, and innovative governance. Regular assessments of both current and future needs will ensure that institutions remain proactive in identifying innovative solutions that address specific pain points while maintaining a lean operating structure. For instance, automated case management and document handling systems should be continuously monitored and improved to ensure that they are delivering measurable results with minimal additional resource allocation.

Additionally, decision-making should be evidence-based and data-driven. This decision-making model must be a central component of long-term and strategic planning. By collecting and analyzing data on the performance and impact of innovations like new procedures or AI tools, institutions can make informed decisions about scaling successful pilots, refining existing systems, and exploring new opportunities for improvement. Establishing a feedback loop with court staff and users will be crucial to maintaining this adaptive approach, ensuring that any changes are responsive to real-world needs and experiences.

Long-term planning must also prioritize continuous training and capacity building, ensuring that the institution's staff is always prepared to adapt to new technologies and innovations. By maintaining a commitment to ongoing education, an institution can ensure that its personnel are not only capable of using AI tools effectively but are also empowered to contribute to the innovation process by identifying further areas for improvement and helping to refine existing systems.

Finally, institutions should aim to optimize resource usage by adopting technologies and processes that are both scalable and cost-effective. This means selecting innovations that can be expanded gradually as needs grow, without requiring unnecessary significant upfront investments or creating undue operational burdens. This helps ensure that the institution's innovations are sustainable and valuable, optimizing its ability to meet goals while conserving resources.

Conclusion

This report highlights the importance of strategic, well-structured change management approaches to integrating AI tools at high-risk institutions like Canadian courts and tribunals. By adhering to best practices such as stakeholder engagement, user-centric design, risk management, holistic planning, and innovative governance, institutions can effectively modernize processes to improve access to justice, efficiency, and transparency. These recommendations offer a clear roadmap for piloting, implementing, and scaling AI tools while maintaining a focus on ethical use, data governance, and cybersecurity.

Should courts or tribunals wish to proceed with the recommendations proposed in this report, I would be honoured to offer my expertise and support to help realize these changes. The ultimate goal remains to empower institutions to make informed, impactful decisions that enhance operations and serve the public interest by improving meaningful access to justice.

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