

# RESPONSIBLE USE OF AI IN IMMIGRATION DECISION-MAKING

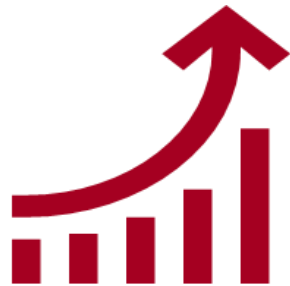
**Government of Canada Data  
Conference:** An Integrated Data  
Community for Building Back Better  
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# Drivers of change

Several factors are pushing IRCC to explore increased use of data and digital solutions in our immigration programming



**Growth in application  
volumes**



**Rising client  
expectations**



**Promise of innovative  
technologies**



## **OUR POLICY RESPONSE & PRIMARY USE CASE**

# Applying AI at IRCC: What we did

## Pilot Project

Automate a portion of the **visitor visa decision-making process**, focusing on online applications from China and India

- » Train a model on past decisions to recognize **factors at play in decision-making**
- » Automatically **triage** incoming applications
- » Isolate **most straightforward** applications and auto-approve



Auto-approve for **eligibility** only



Officers review for **admissibility**



**No automated refusals**



## Policy Guidance

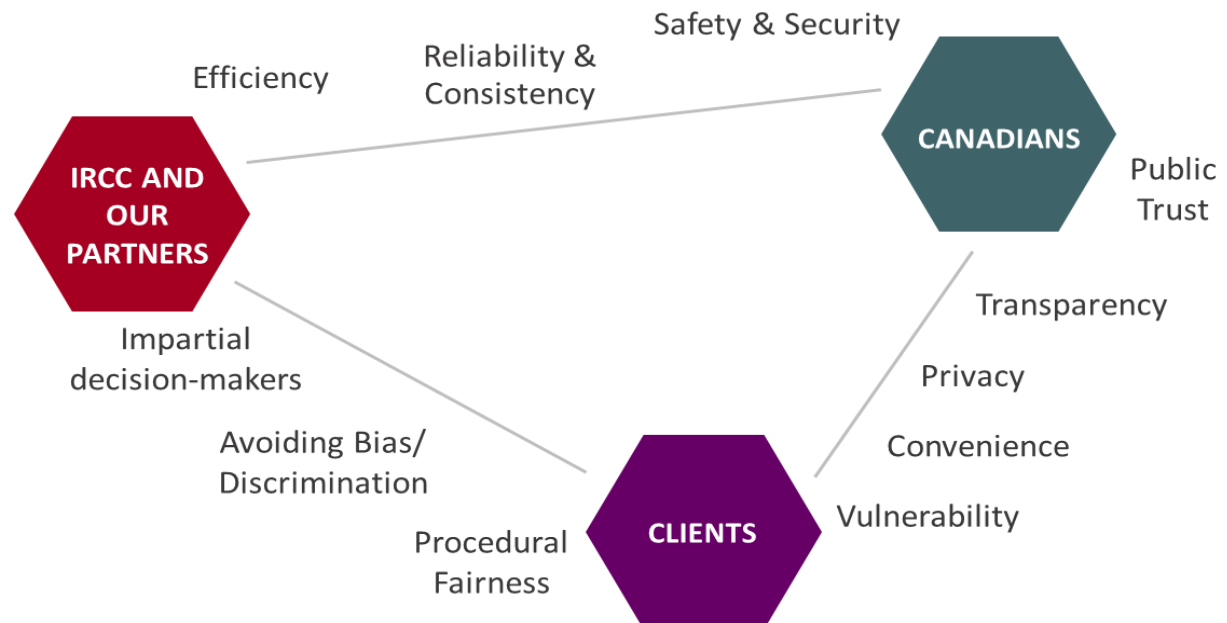
In tandem, **developed the *Policy Playbook On Automated Decision Support*** to govern this project and future work

1. **Guiding principles** (see annex) regarding:
  - » Responsible design
  - » Data management
  - » Privacy protection
  - » The role of human decision-makers
  - » Transparency and explainability
  - » Procedural fairness
  - » Accountability
2. **Automator's handbook** to help guide innovators through process of developing an automated decision system

# What we considered

*IRCC has invested considerable time and effort in orienting itself to make use of data and digital solutions, such as AI, in an ethical way*

- » While AI and automation are relatively new, they are **not being introduced in a vacuum**
  - » There is an existing ecosystem of policy constraints and legal authorities to ensure responsible use of these tools (e.g. Charter of Rights and Freedoms, Privacy Act, etc.); however, there is an important role for policy guidance
- » As the TBS Directive is very broad by nature, **IRCC set out to establish our own principles**
  - » Aligned with government-wide guidance, while considering issues in our own context:



# Looking inward

*To successfully implement policy guidance, it is important to situate it within policy, operational and decision-making structures*

- » **Governance** that **drives innovation**, while still **exercising caution**
- » **Multidisciplinary teams** that bring together diverse skills and considerations
  - » Cross-functional groups—data governance, privacy, legal, policy—all working **together from the outset**
- » **Strategic functions** that enhance an organization's use of Big Data and AI
  - ↔ **Horizontal** - to *facilitate* responsible use of AI across an organization
  - ↕ **Vertical** - to *define* the vision and goals of specific programs

# Looking outward

- » Automation and AI are relatively new for IRCC, and **we benefit from engaging outside of our organization...**

- ...to coordinate with international partners**

- Presentations and outreach have allowed us to connect with governments who are experimenting with similar use cases and facing similar challenges.

- ...to demonstrate transparency**

- We know from experience that IRCC benefits immensely from proactive communication about its use of new technologies.

- ...to spot the issues**

- There are pockets of expertise in digital government and the responsible use of technologies within public, private and research sectors.

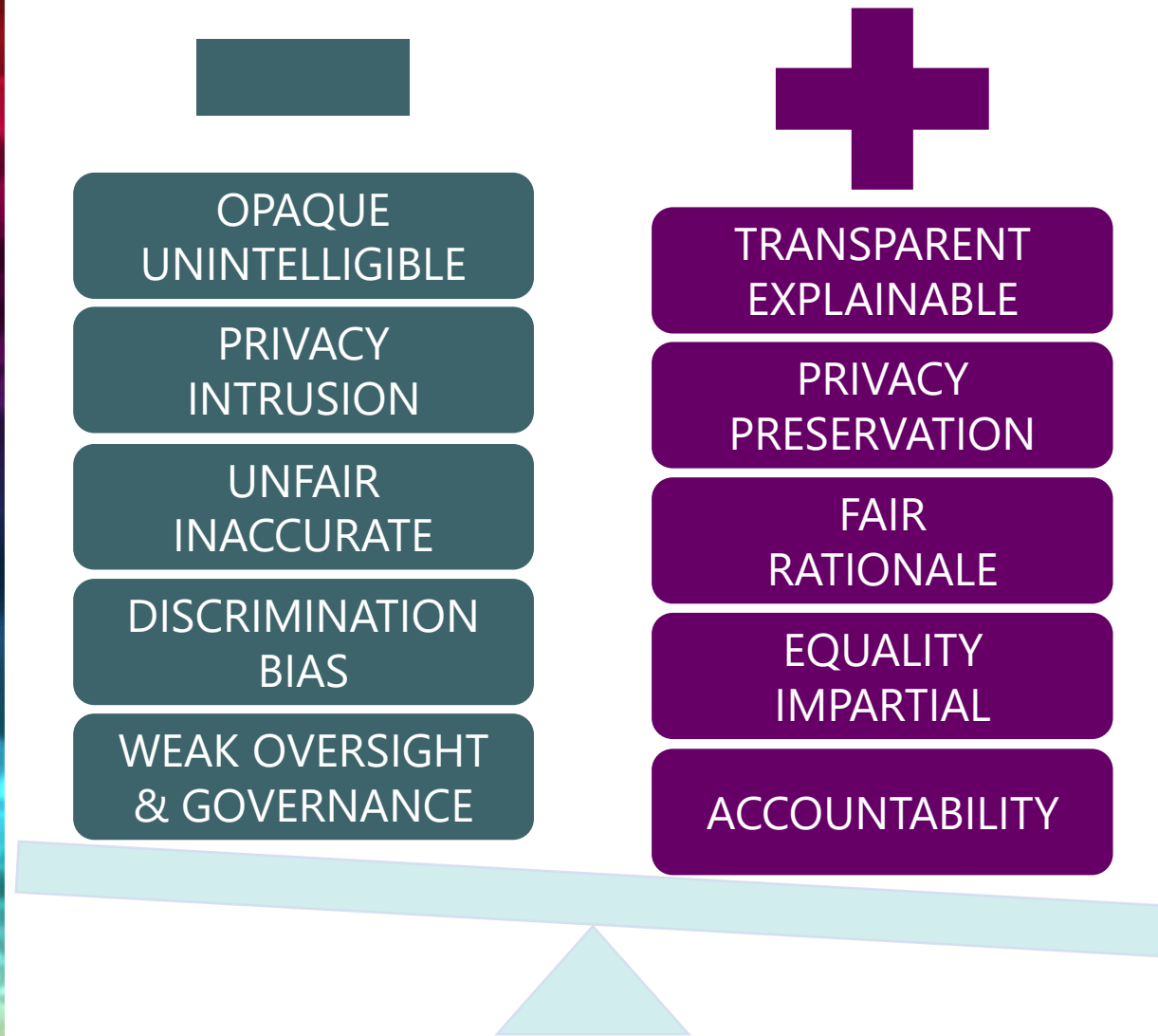
*Connecting with the broader GoC community, academics, legal community, and international bodies allows IRCC to explore the issues and learn from others*



## **A FOCUS ON SOME LEGAL ISSUES**



# Key Ethical Considerations



## *Some Key Drivers:*

- » Trust is key
- » Lack of transparency fuelling misperception of ethical issues
- » Choice of technology
- » Implementation choices

# Mapping ethics to principles in legal frameworks

## **ADMINISTRATIVE LAW**

- » procedural fairness (knowing the case to be met, opportunity to respond)
- » unbiased decision-maker
- » intelligible, justified decisions

## **PRIVACY LAW**

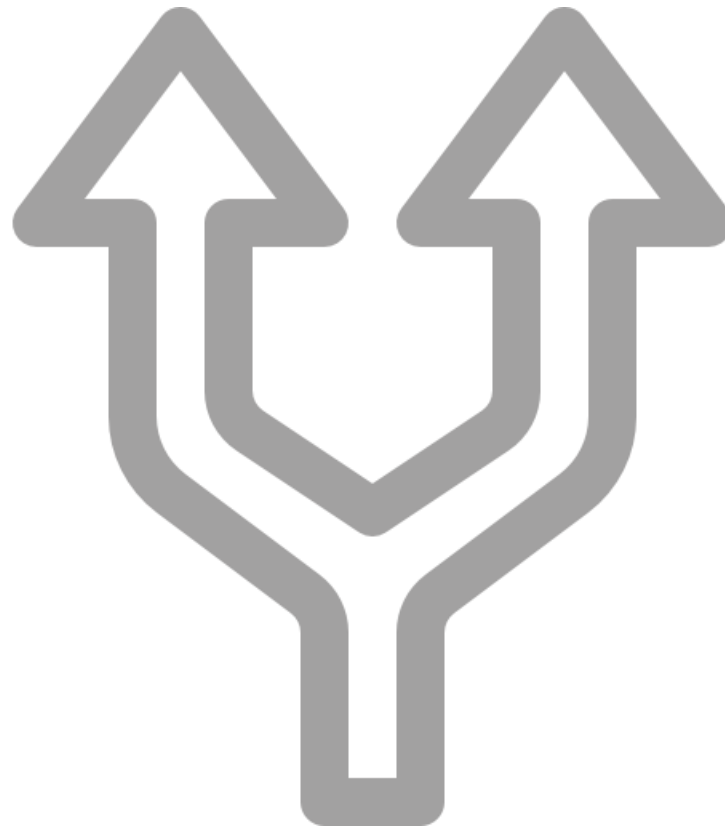
- » minimal collection, use and disclosure
- » notice to the individual

## **HUMAN RIGHTS LAW**

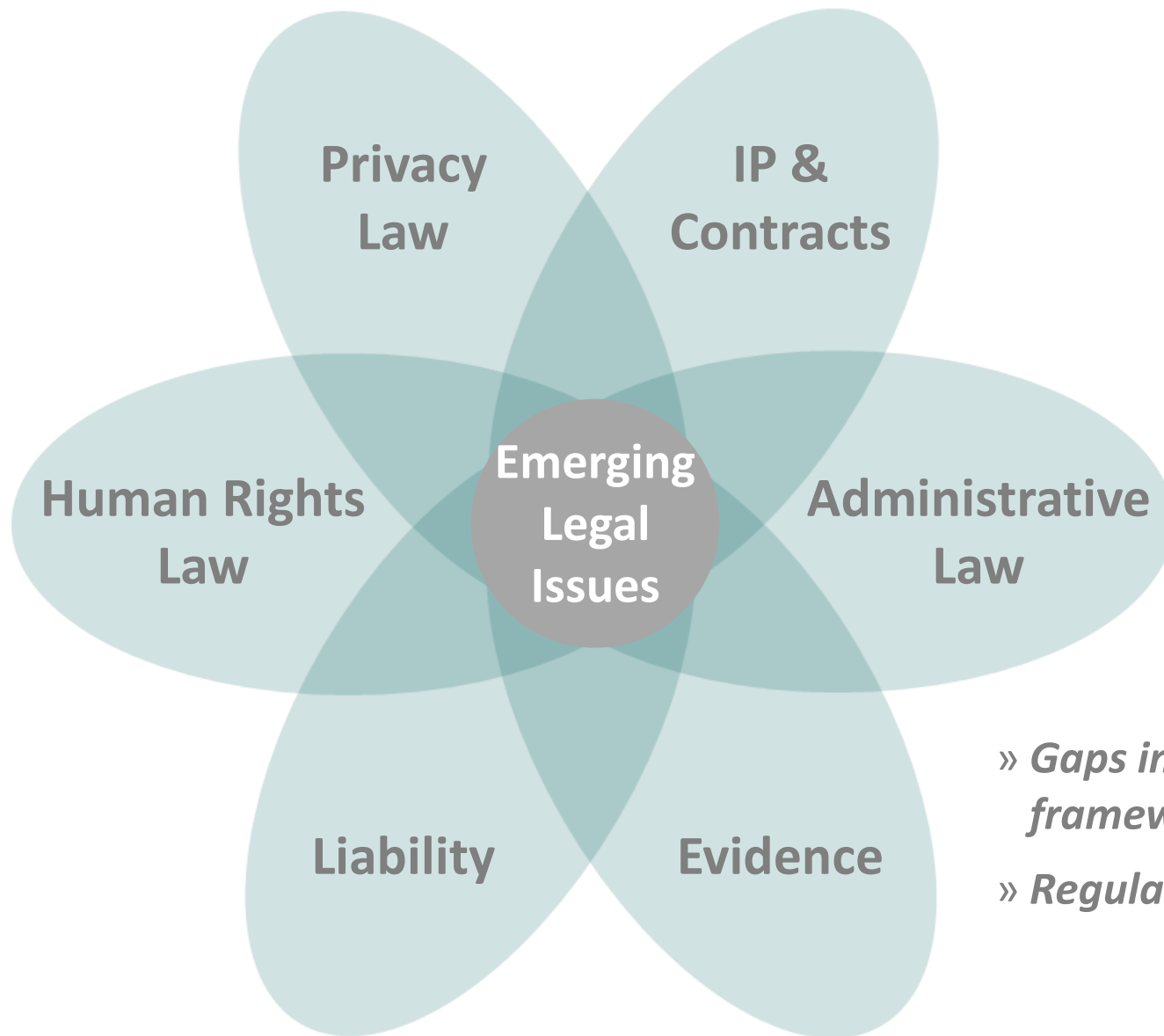
- » Charter equality protections

# What is the threshold?

*Do **legal** and **ethical** considerations  
point to different conclusions?*



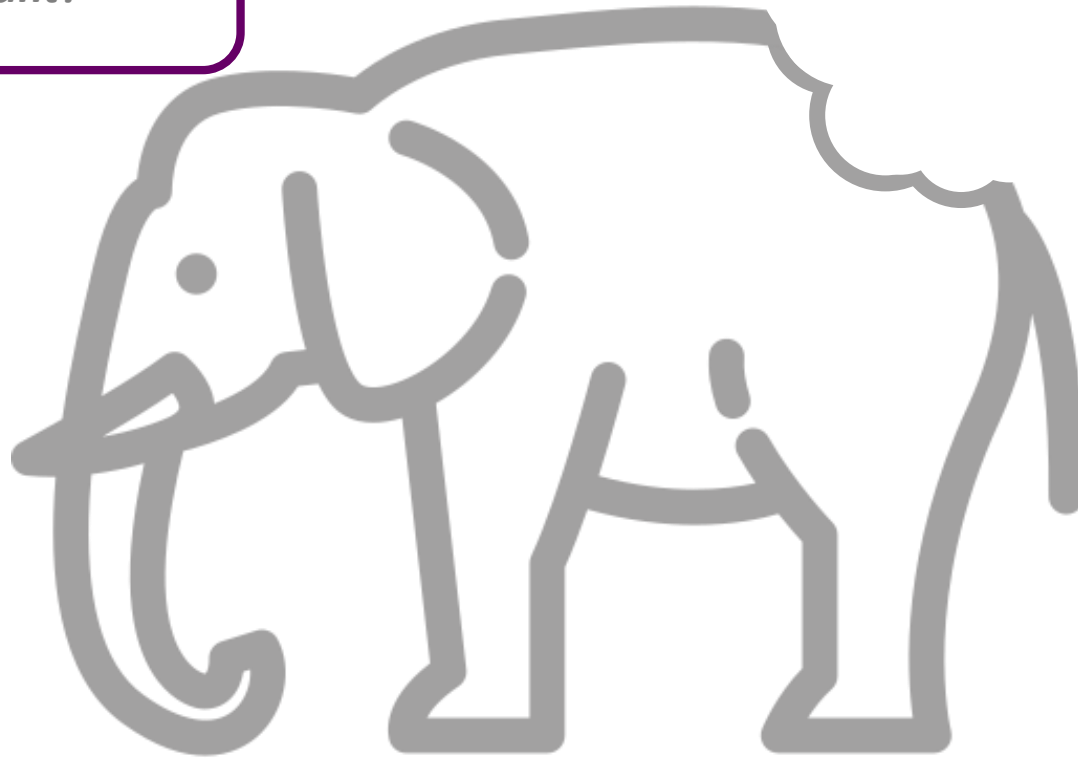
# Adequacy of existing legal frameworks and protections



- » *Gaps in existing legal frameworks?*
- » *Regulation of AI?*

# Engaging in the AI project lifecycle

*How do you eat an elephant?*



*One bite at a time.*

# Engaging in the AI project lifecycle\*

## ACTION



### Diagnostics

#### Legal Diagnostic

For design and development  
Flag potential legal implications for further review (all areas of law)

#### Data Management Diagnostic

Collection, use, disclosure, retention, security, Privacy Impact Assessment

#### Data Strategy

Data scrub, Industry standards



### Model Design

#### Model Development and Testing

Scrub model and rules for:  
Bias

Discrimination  
Legislative Requirements  
Relevance

Intelligible decision

Implications of role of system and human (human-in-the-loop)

Review of data flows for privacy compliance



### Golden Box

#### System/Model Records

Development and deployment

#### Model Operation/Output Records

#### IP Management

IP used  
IP created  
Source code



### Client Facing

#### Information to Clients

Privacy notices/PIB updates  
Web notices  
Additional information

Communications products

Decision notes

Decision letters



### Maintenance

#### Ongoing Operation and Changes

Review for bias, discrimination, and other legal implications

Monitoring, testing, quality assurance

Design changes

Data management/retention

Legal consultation (ongoing)

\* Non Exhaustive. Please also see *TBS Directive on Automated Decision-Making* for any additional requirements.

# Where do we go from here?



*Ethical innovation through informed and diligent development*



# THANK YOU

Questions or comments?

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# ANNEX: Guiding Principles

Guiding principles will give IRCC a coherent basis for strategic choices about whether and how to make use of new tools and techniques.



1. The use of new tools should deliver a clear public benefit. IRCC should use automated decision support wherever it can do so responsibly, effectively and efficiently – in that order.

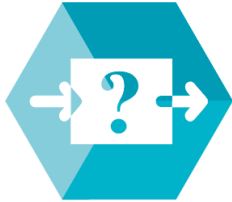


2. Administrative decisions are about people, and they are made by people, even when we use AI. Humans, not computer systems, are accountable for decisions.



3. Because IRCC's decisions have significant impacts on the lives of clients and Canadians, the Department should prioritize approaches that carry the least risk.

## ANNEX: Guiding Principles



4. “Black box” algorithms can be useful, but cannot be the sole determinant of final decisions on client applications.



5. IRCC must recognize the limitations of data-driven technologies and take all reasonable steps to minimize unintended bias.



6. Officers should be informed, not led to conclusions.

## ANNEX: Guiding Principles



7. Humans and algorithmic systems play complementary roles. IRCC should continually strive to optimize these roles and find the right balance, in order to get the best out of each.



8. On top of respecting Canada's current privacy protection framework, IRCC should continually adopt emerging privacy-related best practices in a rapidly evolving field.



9. IRCC should subject all systems to ongoing oversight, to ensure they are technically sound, consistent with legal and policy authorities, fair and functioning as intended.

## ANNEX: Guiding Principles



- 10.** IRCC must always be able to provide a meaningful explanation of decisions made on client applications.



- 11.** IRCC must balance transparency with the need to protect the safety and security of Canadians.



- 12.** Clients will continue to have access to the same recourse mechanisms, and IRCC's use of automated systems should not diminish a person's ability to pursue these avenues.