

Algorithmic Impact Assessment Results

Version: 0.9.1

Project Details

1. Name of Respondent

Various Stakeholders at IRCC

2. Job Title

Operations Sector

3. Department

Citizenship and Immigration (Department of)

4. Branch

Integrity Risk Management

5. Project Title

Integrity trends analysis tool

6. Project Phase

Implementation

[Points: 0]

7. Please provide a project description:

The integrity trends analysis tool analyzes large volumes of data and extracts various risk and fraud patterns within applications containing adverse characteristics, such as inadmissibility findings (e.g. criminality and misrepresentation) and other administrative or enforcement actions related to the Immigration and Refugee Protection Act (IRPA) and Regulations (IRPR). Risk Assessment Units are aware that an application has been flagged by the tool and decide when to initiate verification activities. However, processing officers remain unaware.

Processing officers review applications and make final decisions consistent with procedural fairness and in accordance with the requirement of the IRPA/IRPR. If verification activities are performed, processing officers only see verification results and may consider the results when making final decisions. Examples of verification activities include authenticating proof of funds from a bank or verifying a letter of acceptance from a Designated Learning Institution. Consequently, a processing officer may request a verification activity, or it may be initiated independently by a Risk Assessment Unit, if a fraud trend is identified.

Currently, Risk Assessment Units would conduct a random sample of applications to assess the potential program risks. The Risk Assessment Units may use various techniques including telephone calls, site visits or in-person interviews as a means to validate the risks. The results of the verification activity are shared with processing officers whether or not adverse information was found. This tool is designed to assist Risk Assessment Units in prioritizing applications for verification activity by automating the detection of risk patterns associated with adverse outcomes from historical data and flagging new applications that match these patterns.

The tool's patterns are not visible to processing officers; instead, they receive only the results of the verification activities performed by Risk Assessment Units, which may have been initiated with or without the tool. As such, the tool does not automate nor does it recommend final decisions on applications.

The integrity trends analysis tool will be implemented in a phased approach starting with the temporary resident programs: students, electronic travel authorization, visitors and workers. Continuous evaluation will be conducted to provide continued assurance of the tool's performance and responsible use.

Business Driver / Positive Impact

8. What is motivating your team to introduce automation into this decision-making process? (Check all that apply)

Use innovative approaches

The system is performing tasks that humans could not accomplish in a reasonable period of time

Improve overall quality of decisions

Existing backlog of work or cases

About The System

9. Please check which of the following capabilities apply to your system.

Risk assessment: Analyzing very large data sets to identify patterns and recommend courses of action and in some cases trigger specific actions

Content generation: Analyzing large data sets to categorize, process, triage, personalize, and serve specific content for specific contexts

Section 1: Impact Level : 2

Current Score: 30

Raw Impact Score: 30

Mitigation Score: 34

Section 2: Requirements Specific to Impact Level 2

Peer Review

At least one of:

- Qualified expert from a federal, provincial, territorial or municipal government institution.
- Qualified members of faculty of a post-secondary institution.
- Qualified researchers from a relevant non-governmental organization.
- Contracted third-party vendor with a related specialization.
- Publishing specifications of the Automated Decision System in a peer-reviewed journal.
- A data and automation advisory board specified by Treasury Board Secretariat.

Notice

Plain language notice posted through all service delivery channels in use (Internet, in person, mail or telephone).

Human-in-the-loop for decisions

Decisions may be rendered without direct human involvement.

Explanation Requirement

In addition to any applicable legal requirement, ensuring that a meaningful explanation is provided with any decision that resulted in the denial of a benefit, a service, or other regulatory action.

Training

Documentation on the design and functionality of the system.

Contingency Planning

None

Approval for the system to operate

None

Other Requirements

The Directive on Automated Decision-Making also includes other requirements that must be met for all impact levels.

[Link to the Directive on Automated Decision-Making](#)

Contact your institution's ATIP office to discuss the requirement for a Privacy Impact Assessment as per the Directive on Privacy Impact Assessment.

Section 3: Questions and Answers

Section 3.1: Impact Questions and Answers

Risk Profile

1. Is the project within an area of intense public scrutiny (e.g. because of privacy concerns) and/or frequent litigation?

Yes [Points: +3]

2. Are clients in this line of business particularly vulnerable?

No [Points: +0]

3. Are stakes of the decisions very high?

No [Points: +0]

4. Will this project have major impacts on staff, either in terms of their numbers or their roles?
No [Points: +0]

Project Authority

5. Will you require new policy authority for this project?
No [Points: +0]

About the Algorithm

6. The algorithm used will be a (trade) secret
No [Points: +0]

7. The algorithmic process will be difficult to interpret or to explain
No [Points: +0]

About the Decision

8. Does the decision pertain to any of the categories below (check all that apply):
Access and mobility (security clearances, border crossings) [Points: +1]
Other (please specify) [Points: +1]

9. Please describe
Immigration Services

Impact Assessment

10. Will the system only be used to assist a decision-maker?
No [Points: +0]

11. Will the system be replacing a decision that would otherwise be made by a human?
No [Points: +0]

12. Will the system be replacing human decisions that require judgement or discretion?
No [Points: +0]

13. Is the system used by a different part of the organization than the ones who developed it?
Yes [Points: +4]

14. Are the impacts resulting from the decision reversible?
Likely reversible [Points: +2]

15. How long will impacts from the decision last?
Some impacts may last a matter of months, but some lingering impacts may last longer [Points: +2]

16. Please describe why the impacts resulting from the decision are as per selected option above.

The integrity trends analysis tool does not make or recommend application decisions. Instead, it is intended to assist Risk Assessment Units in determining when verification activities, such as authenticating proof of funds from a bank or verifying a letter of acceptance from a designated learning institution, are advisable based on historical data and the particular

characteristics of an application. In the normal course, verification activities are regularly conducted during processing and may be triggered by a processing officer or Risk Assessment Unit using qualitative risk indicators to determine that a verification activity is needed. The tool equips Risk Assessment Units with analytical data to augment qualitative risk analysis. Depending on the volume of applications and the complexity of the verification that is required, verification activities may result in minor delays before processing officers can make a decision. However, unless the verification activity returns an adverse result, the applicant should not experience any other processing delays. An adverse verification result may lead to additional documents being requested from the applicant as part of procedural fairness.

17. The impacts that the decision will have on the rights or freedoms of individuals will likely be:
Little to no impact [Points: +1]

18. Please describe why the impacts resulting from the decision are (as per selected option above).

The integrity trends analysis tool does not make or recommend decisions on applications. This tool generates a weekly report that is an information source Risk Assessment Units may consult in determining that a verification activity may need to be conducted. The verification results are made available to processing officers, i.e. decision-makers, who may then use the results when rendering a final decision. Processing officers will continue to follow existing steps and guidelines to ensure procedural fairness is maintained.

19. The impacts that the decision will have on the health and well-being of individuals will likely be:
Little to no impact [Points: +1]

20. Please describe why the impacts resulting from the decision are (as per selected option above)

The integrity trends analysis tool is an information source that may be used to identify potential risk and fraud trends in applications. Risk Assessment Units assess the need for a verification activity. If adverse information is discovered, the results of the verification activity may be used by the processing officer in rendering their decision. While an applicants' health and well-being may be affected by the decision rendered on their temporary resident application, it is not a direct result of the tool.

21. The impacts that the decision will have on the economic interests of individuals will likely be:
Moderate impact [Points: +2]

22. Please describe why the impacts resulting from the decision are (as per selected option above)

The integrity trends analysis tool is an information source that may be used to identify potential risk and fraud trends in applications. Risk Assessment Units assess the need for a verification activity. If adverse information is discovered, the results of the verification activity may be used by the processing officer in rendering their decision. The largest economic impact on an individual would likely be if the intended visit was for education or a job opportunity and verification activity revealed adverse information, and the processing officer

cited this in a refusal. Other applications would be minimally affected.

23. The impacts that the decision will have on the ongoing sustainability of an environmental ecosystem, will likely be:

Little to no impact

[Points: +1]

24. Please describe why the impacts resulting from the decision are (as per selected option above)

The system is expected to have little to no impact on the environment as it will solely be used as an information source to help identify potential risk and fraud trends in temporary resident applications.

About the Data - A. Data Source

25. Will the Automated Decision System use personal information as input data?

Yes

[Points: +4]

26. Have you verified that the use of personal information is limited to only what is directly related to delivering a program or service?

Yes

[Points: +0]

27. Is the personal information of individuals being used in a decision-making process that directly affects those individuals?

Yes

[Points: +2]

28. Have you verified if the system is using personal information in a way that is consistent with: (a) the current Personal Information Banks (PIBs) and Privacy Impact Assessments (PIAs) of your programs or (b) planned or implemented modifications to the PIBs or PIAs that take new uses and processes into account?

Yes

[Points: +0]

29. What is the highest security classification of the input data used by the system? (Select one)

Protected B / Protected C

[Points: +3]

30. Who controls the data?

Federal government

[Points: +1]

31. Will the system use data from multiple different sources?

No

[Points: +0]

32. Will the system require input data from an Internet- or telephony-connected device? (e.g. Internet of Things, sensor)

No

[Points: +0]

33. Will the system interface with other IT systems?

No

[Points: +0]

34. Who collected the data used for training the system?

Your institution

[Points: +1]

35. Who collected the input data used by the system?

Your institution

[Points: +1]

About the Data - B. Type of Data

36. Will the system require the analysis of unstructured data to render a recommendation or a decision?

No

[Points: 0]

Section 3.2: Mitigation Questions and Answers

Consultations

1. Internal Stakeholders (Strategic policy and planning, Data Governance, Program Policy, etc.)

Yes

[Points: +1]

2. Which Internal Stakeholders have you engaged?

Strategic Policy and Planning

Data Governance

Program Policy

Legal Services

Access to Information and Privacy Office

Communications

Other (describe)

3. Please describe

Integrated Processing Network

4. External Stakeholders (Civil Society, Academia, Industry, etc.)

Yes

[Points: +1]

5. Which External Stakeholders have you engaged?

Other (describe)

6. Please describe

External review by Statistics Canada

De-Risking and Mitigation Measures - Data Quality

7. Do you have documented processes in place to test datasets against biases and other unexpected outcomes? This could include experience in applying frameworks, methods, guidelines or other assessment tools.

Yes

[Points: +2]

8. Is this information publicly available?

No

[Points: +0]

9. Have you developed a process to document how data quality issues were resolved during the design process?

No

[Points: +0]

10. Is this information publicly available?

No

[Points: +0]

11. Have you undertaken a Gender Based Analysis Plus of the data?

Yes

[Points: +1]

12. Is this information publicly available?

No [Points: +0]

13. Have you assigned accountability in your institution for the design, development, maintenance, and improvement of the system?

Yes [Points: +2]

14. Do you have a documented process to manage the risk that outdated or unreliable data is used to make an automated decision?

Yes [Points: +2]

15. Is this information publicly available?

No [Points: +0]

16. Is the data used for this system posted on the Open Government Portal?

No [Points: +0]

De-Risking and Mitigation Measures - Procedural Fairness

17. Does the audit trail identify the authority or delegated authority identified in legislation?

Yes [Points: +1]

18. Does the system provide an audit trail that records all the recommendations or decisions made by the system?

Yes [Points: +2]

19. Are all key decision points identifiable in the audit trail?

Yes [Points: +2]

20. Are all key decision points within the automated system's logic linked to the relevant legislation, policy or procedures?

Yes [Points: +1]

21. Do you maintain a current and up to date log detailing all of the changes made to the model and the system?

Yes [Points: +2]

22. Does the system's audit trail indicate all of the decision points made by the system?

Yes [Points: +1]

23. Can the audit trail generated by the system be used to help generate a notification of the decision (including a statement of reasons or other notifications) where required?

Yes [Points: +1]

24. Does the audit trail identify precisely which version of the system was used for each decision it supports?

Yes [Points: +2]

25. Does the audit trail show who an authorized decision-maker is?

Yes [Points: +1]

26. Is the system able to produce reasons for its decisions or recommendations when required?
Yes [Points: +2]
27. Is there a process in place to grant, monitor, and revoke access permission to the system?
Yes [Points: +1]
28. Is there a mechanism to capture feedback by users of the system?
Yes [Points: +1]
29. Is there a recourse process established for clients that wish to challenge the decision?
Yes [Points: +2]
30. Does the system enable human override of system decisions?
Yes [Points: +2]
31. Is there a process in place to log the instances when overrides were performed?
Yes [Points: +1]
32. Does the system's audit trail include change control processes to record modifications to the system's operation or performance?
Yes [Points: +2]
33. Have you prepared a concept case to the Government of Canada Enterprise Architecture Review Board?
No [Points: +0]

De-Risking and Mitigation Measures - Privacy

34. If your system involves the use of personal information, have you undertaken a Privacy Impact Assessment, or updated an existing one?
No [Points: +0]
35. Have you designed and built security and privacy into your systems from the concept stage of the project?
Yes [Points: +1]
36. Is the information used within a closed system (i.e. no connections to the Internet, Intranet or any other system)?
No [Points: +0]
37. If the sharing of personal information is involved, has an agreement or arrangement with appropriate safeguards been established?
No [Points: +0]