

The Government of Canada's Digital Standards form the foundation of the government's shift to becoming more agile, open, and user focused. The following guidelines were co-created with the public and key stakeholder groups:

This guidance is aspirational. The behavioral guidance outlined below promotes ways of working in alignment with the Digital Standards. It is not a list of behaviors that is expected to reflect how the government presently operates. Teams are not expected to strongly align with all subsequent guidance; however, teams are expected to assess themselves and each other against the below guidance and strive to better align themselves.

The guidance does not include implementation details, such as specific frameworks of methodologies, even if such details exist in current policy instruments. For specifics, please refer to existing policy instruments, such as the Policy on Service and Digital.

### **Definitions**

**Service:** provision of a specific final output that addresses one or more needs of an intended recipient and contributes to the achievement of an outcome.

**Team:** a group of people who work together daily over prolonged periods of time and have their work prioritized by the same person.

**Data Steward:** Data users who implement enterprise data governance and principles to control the use and maintenance of data assets.

### **Design with users in mind**

Research with users to understand their needs and the problems we want to solve. Conduct ongoing testing with users to guide design and development.

Services should be built to address the needs of users. In order to deliver value to users, one must understand and prioritize their needs. Everything is a hypothesis until tested with the users of services.

#### **Key aspects:**

- End-user feedback is used to establish the requirements of our service(s).
- There are processes or tools in place for user feedback, including anonymous user feedback, to be incorporated into the design of the service.
- User research is conducted prior to deciding upon a given implementation.
- The solution has been tested with a wide range of users including users with varying needs and representing diverse backgrounds.
- The solution considers user needs and feedback in defining key service metrics.
- Automation is used to anticipate and detect operational or quality-of-service issues in before prior to users' awareness.

### **Continuous improvement**

The solution is/was developed and continues being improved in response to user needs.

#### **Key aspects:**

- There are processes in place to prioritize and implement feedback from peers, stakeholders and end-users.
- When a new or updated feature is being created our team understands the minimum requirements for the system to be of value to users.
- Our team experiments with new approaches based on team reflections, lessons learnt, and user feedback.
- Our team collects metrics to improve upon which are used throughout the development and lifecycle of the solution.
- When resolving problems our team dedicates time to identify the root cause of the issue and address it.
- Our team is relentlessly inspecting, adapting, and automating their processes to increase the speed at which our team can deliver value to users.
- Our team has access to environments and resources to allow for rapid prototyping while initial requirements are being sought.
- Our team embraces learning about and using new digital skills, approaches, and tools to incorporate into our daily work.

### **Use open standards and solutions**

When possible, leverage open standards and embrace leading practices, including the use of open source software where appropriate. Design for services and platforms that are seamless for Canadians to use no matter what device or channel they are using.

### **Address security and privacy risks**

Take a balanced approach to managing risk by implementing appropriate privacy and security measures. Make security measures frictionless so that they do not place a burden on users.

Digital services are core to service delivery, and they must securely store and manage the information of Canadians to maintain trust in government services.

Security and privacy should be taken as a consideration from the onset of work for a given service, in alignment with Iterate and Improve. The implementation of security and privacy controls should be considered part of daily work. Similarly, processes should promote and monitor the continuous implementation of security and privacy controls throughout the lifecycle of a service.

#### **Key aspects:**

- Our team considers security and privacy throughout the solution design process.
- When implementing or enforcing security or privacy controls, our team takes into consideration how they would impact the quality or efficiency of the solution and how it will impact the end users of the service.
- Security measures are frictionless so that they do not place a burden on users.
- Our team has privacy and security knowledge and understanding as a competency within the team.
- The solution has implemented automated security checks and privacy protections include role-based access and audit functions against the service.

- There are procedures and processes in place to quickly respond to security or privacy breaches or incidents.

## **Accessibility**

Users with distinct needs should be engaged from the outset to ensure what is delivered will work for everyone.

Quality should be built in from the start, preventing the need to revisit previously implemented components due to issues, such as accessibility. The faster and earlier issues are found the less costly they are to fix.

Accessibility in Canada is about creating communities, workplaces and services that enable everyone to participate fully in society without barriers. The Government of Canada is committed to taking a proactive and systemic approach for identifying, removing and preventing barriers to accessibility without delay complementing the rights of persons with disabilities under the Canadian Human Rights Act. To meet these commitments, accessibility should be a consideration throughout the service development lifecycle. This requires that accessibility be monitored and built into our processes to continually promote alignment with accessibility standards. While iterating and improving frequently and designing with users, accessibility should be a key consideration, and become a source of work items throughout the service design lifecycle. When designing with users, efforts should be made to identify a wide variety of users with a wide variety of needs, to ensure accessibility standards are met or exceeded.

### **Key aspects:**

- Starting at the outset, our team's service and platform design continually considers the lowest levels of digital skill, confidence and access.
- Our team understands how to make their services or products accessible.
- Our team considers accessibility throughout the service design process.
- Research and testing are conducted to ensure our service is accessible to people of all abilities no matter how, where, or when they access the service.
- Our team conducts ongoing user research with users with low level digital literacy, people with disability, and people from different cultural and linguistic backgrounds.
- Our team implements automated accessibility checks for our services.

## **Be good data stewards**

Collect data from users only once and reuse wherever possible. Ensure that data is collected and held in a secure way so that it can easily be reused by others to provide services.

Good data stewardship is required to ensure data is clean, reusable, and managed responsibly to be leveraged for data driven decision making and promote reuse of information rather than duplication of efforts.

This involves managing data and information responsibly and securely, which supports the sharing and reuse of data throughout the Government of Canada and through promoting its use through innovative new solutions within the private sector. In alignment with working in the open by default, data and

information should be published to be readable, by humans or by machines by publishing well organized data in machine readable formats. In alignment with iterating and improving frequently, efforts should be made to continually improve the quality of the data, and the quality of the processes used to manage and publish said data. Further, by working in the open by default and properly managing data and information sources, issues such as duplication of data and information and rework can be mitigated, while promoting the creation of innovative solutions which are able to leverage information collected and published by the government.

**Key aspects:**

- Our team strives to leverage data to continuously improve decision-making, operations, or service delivery.
- Our team identifies what data is needed to support decision-making, operations, or service delivery and reuses existing data as appropriate before acquiring new data.
- Our team strives to identify and remove barriers to data sharing and release.
- Our team ensures that users of our services can make corrections to their personal information.
- Our team publishes data in plain language and machine-readable formats.
- Our team has clearly defined roles, responsibilities, and accountabilities for data and information management and use.
- Our team captures appropriate metadata to provide context for the information and data we create and capture, thereby enabling its discovery and reuse by others.
- Our team has processes in place to regularly assess, maintain, and improve data quality.
- Our service has in place processes for ensuring proper management of information and data prior to being collected, used, disclosed, retained, disposed of, or declassified.
- Our team ensures that information and data of business value are saved in systems where it can be properly managed.
- Our team has processes in place for determining the classification of data and information.
- Our team is aware of which information and data has business value and prioritizes its management.

**Design ethical services**

Comply with ethical guidelines in the design and use of systems which automate decision making (such as the use of artificial intelligence).

Designing ethical systems means that systems created by the government ensures that everyone receives equitable treatment.

Solutions must address potential biases of computational decisions. The responsible use of automated-decision systems includes being open about their use and being able to explain how decisions are made. Through monitoring, one must ensure that services are not enforcing biases, whether conscious or unconscious.

**Key aspects:**

- Our team continually seeks out indicators of bias and ensures their services are not reinforcing unintended biases.
- Our team continually seeks out evidence of unintended consequences to the user in service design and delivery and works to mitigate these consequences for the user.
- When automated decision-making is being leveraged by our team, possible biases in the data and algorithms are acknowledged, accounted for, and mitigated.
- Our team designs services which address cultural, linguistic, geographical, disability, technological, socioeconomic, or other access barriers to uptake.
- Our team has considered the impacts of decisions on the users and negative outcomes are reduced, when encountered.
- Our team uses data in a manner consistent with the purpose of its collection.

**Collaborate widely**

Create multidisciplinary teams with the range of skills needed to deliver a common goal.

**Key aspects:**

- Our team is multidisciplinary, having all the skills and capabilities required to fully deliver our service/solution to users.
- Our team is active in communities of practice, events, or groups that pertain to the areas of expertise of team members.
- Our team has identified, and collaborates with, other teams, in or outside of our organization, including other levels of government, other governments, the public, or private sector organizations, who have done, or are doing, similar work.
- Our team documents any APIs for our service using modern and common protocols and standards and provides examples to others regarding their use.
- Our team uses data from performance monitoring tools to inform business decisions.