The OECD Council adopted on 15 July 2014 the Recommendation on Digital Government Strategies. The Recommendation provides a set of 12 principles structured around 3 pillars. The OECD Secretariat is developing a Digital Government Policy Toolkit to support OECD member countries and non-member adhering countries with the implementation of the Recommendation. This practice was submitted by the government of Canada to be considered as a good practice in the implementation of one or more of the principles contained in the Recommendation.

**Description of the practice:**

**Organisation:** Information Management and Open Government, Treasury Board of Canada Secretariat

**Name of the practice:** Canada’s Open Government Portal and the Canadian Open Data Experience (CODE)

**Principles implemented:** Principle 3 – Create a data-driven culture in the public sector

**Description:** Canada’s Open Government Portal provides access to government data and information and demonstrates Canada’s international commitment to transparency and open government. The site contains targeted search capabilities and datasets compiled by over 43 departments and agencies, covering a broad range of topics, from housing, to health and environmental data. Users can explore local census or crime statistics, immigration and air quality data, coast-to-coast-to-coast mapping data, and much more.

As one of its key open data initiatives in 2014, the Government of Canada supported Canadian Open Data Experience (CODE) as a founding partner. CODE – Canada’s first national open data hackathon - gave Canadian post-secondary students, entrepreneurs and innovators the experience required to turn federal government data from Canada’s Open Government Portal into user-friendly applications for the benefit of Canadians. CODE 2015 was the second annual edition in the CODE event series. CODE is an example of how the Government of Canada is promoting and supporting open data.

Canada’s Open Government Portal is a whole-of-government solution that provides OG services to Government departments and agencies. While the Portal is managed by the Open Government Secretariat it is the responsibility of departments and agencies to provide open data and information resources to the portal. It is their responsibility to develop a comprehensive governance process to
evaluate, approve, and publish these resources. This process includes a review of privacy, security, accessibility, and compliance with official language standards. A communication from the Information Management Senior Official within each organization is required prior to TBS publishing any resources. Content on the portal is developed and published by TBS.

CODE is supported by the Government of Canada and hosted by XMG Studio Inc. In the lead up to the event, weekly meetings occur with the private sector partner and interdepartmental working group meetings take place on a regular basis.

Results

The Open Government Portal has resulted in:

- More than 200,000 datasets from 43 federal departments and agencies are currently available via open.canada.ca under a common Open Government Licence – and new datasets are being released on a regular basis.
- Innovative solutions have been implemented to meet the needs of open data users and Canadians at large, including comprehensive open data search and download capabilities, as well as a host of additional transparency related services.
- Cutting edge tools, social media, and Web 2.0 features assure the rich responsiveness of the site (e.g. blogs, “Request a Dataset”, ability of users to rate and share datasets, etc.). Users of open data services can share ideas and participate in online conversations, and actively help the government identify and prioritize the release of high-value open datasets.
- A “Developers’ Corner” provides both novice and expert open data users and developers with access to specific technical information and “how-tos” to assist them in analyzing data or creating user-friendly applications.

CODE has resulted in:

- Greater awareness about the Open Government Portal and proofs-of-concept for the value of open data. For many developers, CODE is the first step to learning about federal datasets and how to navigate the portal, which makes it easy to incorporate into future projects. For the Government of Canada, the focused weekend of attention provides immense insight into how open data enthusiasts use both the portal and the datasets.

Development

Design: Open Government Portal – 2010/Fall; CODE – 2013/Fall

The process in designing the portal involved a number of steps including:

- Internal consultation on top objectives of the portal was completed. This included a comprehensive review of other Open portals nationally and internationally.
- Wireframes were developed and tested internally.
User experience testing was completed for some of the featured components.
- User testing, based on analytics and other activities is regularly used to maintain portal functionality and content.
- A major review and revision of the portal was performed in November 2014 to align better with Canada’s unified web presence, Canada.ca.

The process for designing CODE included:

- Engaging with federal departments and agencies to ensure their engagement, to ensure the release of high-value datasets to be accessed by participants of CODE, and to secure expert dataset support during the event itself.
- Developing a Strategic Activities Program proposal with XMG and two partner departments outlining goals, budgets, roles and responsibilities.
- Creating communications and outreach plans and sharing with departmental communications network.
- CODE was designed based on best practices from other national and international hackathons. Several conversations with stakeholders in Canada and abroad helped determine the approach of the competition.

The second CODE was adjusted based on lessons learned from CODE 2014. Including support that the Government of Canada provided at the Hubs across the country.

**Testing:** Open Government Portal – 2011/Winter; CODE – 2013/Fall

Analytics, internal and external consultations, and various user experience tools have been utilized to design and build the Open Government portal.

Testing the design of CODE was done through consulting with other government organizations that have held hackathons, which is an established event model.

**Implementation:** Open Government Portal – 2011/March; CODE – 2014 & 2015/February

The Open Government Portal utilizes CKAN, an open data management and registration system as well as Drupal for its front end presentation layer. Both are open source platforms with a robust community to build and maintain different elements. CKAN is used by several other countries. Code from other countries has been used and repurposed for Canada’s portal. Canada significantly contributes to the development of Drupal through the Web Experience Toolkit (https://github.com/wet-boew), a framework for accessible web pages.

CODE is implemented in a collaborative manner with representatives from TBS, the private sector delivery partner, and key partner departments. In addition, Canada's President of the Treasury Board, the political lead on Canada's open government program, including open data, was instrumental in promoting CODE. The President made roadshow stops across Canada which resulted in increased awareness and local and national press coverage.
The CODE website, hosted by the private sector partner, is the main tool and a hub where participants gather to learn, connect and create and a strong online community is built. The Government of Canada supplemented and cross-promoted the event on open.canada.ca and provided context and resources specific to the federal datasets and portal. In-person Hubs allowed participants to meet, collaborate, and build a community over the 48-hour event. In 2015, ten hubs brought together hundreds of participants for the competition. Others participated virtually, allowing participation across Canada.

Blogs, news releases, interviews, and social media were also used to help implement CODE by facilitating the recruitment of participants, partners and others in the entrepreneurial, academic and investment community.

Resources:

Canada’s Open Government Portal is primarily developed through a service contract with Statistics Canada with an average annual cost of $800,000. The strategic development, management, stakeholder engagement, and maintenance of the portal are done by three full time employees in TBS.

Resources have varied over the last two CODE events, with a budget averaging $375,000 and approximately one full-time staff member plus distributed support from partners across the Government of Canada.

Diffusion and scaling: Both initiatives are ongoing

A number of federal level working groups have been established to support and disseminate information related to the portal such as an Open Government Technical Working Group, an Open Government Tools and Resources Working Group, and an Open Government Working Group. There is also a high-level Open Government Steering Committee made up of senior officials from across the government.

CODE is one of the methods used to transfer knowledge and create awareness of the federal open data available on the Open Government Portal and to further engage open data enthusiasts, students, developers, graphic designers, entrepreneurs, innovators and anyone interested at trying their hand at coding to use federal open data to better serve the needs of Canadians.

Through the Open Government Portal, the GC provides tools and best practices for other organizations to leverage.

The Open Government Portal is the central location for all of the Government of Canada data. Departments and agencies are continually adding new datasets. To date there are over 200,000 federal datasets available. The Portal is also responsible for other the delivery and management of whole-of-government services including the consolidation and dissemination of all proactive disclosure information.
Governments of all levels have been holding open data competitions to drive private sector innovation through the use of government data. Within Canada at the federal level, a number of departments and agencies are demonstrating their interest in hosting hackathons and where possible TBS looks to engage with them to take part in CODE or will provide guidance based on lessons learned on the CODE experience.

**Partnerships:** Private sector, Civil Society Organizations, Academics and Research Bodies, Public Sector Organizations

The Government of Canada partnered with XMG and benefited from their expertise which led to record participation rates.

Collaborating with federal departments and agencies led to an increase in high value datasets, the creation of a Government of Canada Expert Centre (where open data experts were on hand at the event to provide knowledgeable support), inspirational app ideas, and ensured the stability of the Open Government Portal over the hackathon weekend.

In addition, participants were encouraged to mash-up federal datasets with those from other levels of government (the use of multiple datasets and sources are considered in the judging process). As such, provinces, territories and municipalities also collaborated to ensure high value datasets were available on the open.canada.ca portal.

Other civil society and academic organizations supported CODE by hosting Partner Hubs, promoting the event, or building learning sessions into CODE events.

**Lessons learned**

A few lessons learned through CODE experiences are as follows:

- Determine clear goals and expectations
- Engage with participants throughout the competition
- Enable participants to connect with each other
- Designate a point of contact as the public face of the competition
- Include public voting
- Offer appropriate incentives
- Implement a targeted marketing campaign
- Engage a dedicated resource

**Conditions required:**

Political-level understanding and buy-in to the benefits of open data to creating a data driven culture are essential.