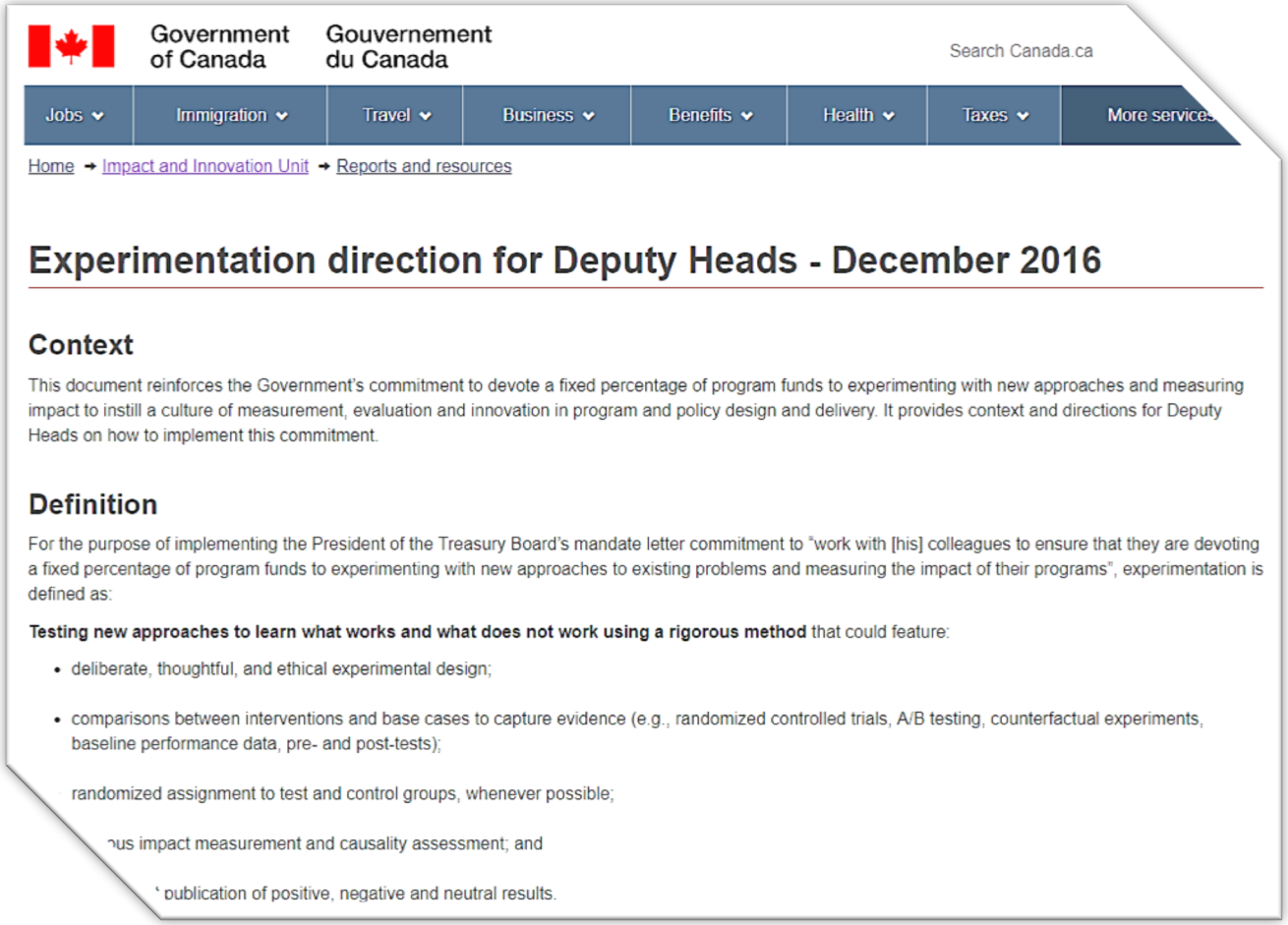
Treasury Board of Canada Secretariat | Secrétariat du Conseil du Trésor du Canada

Canada

Experimentation:
A toolkit to improve evidence-based decision-making

November 2019

WHAT IS MEANT BY "EXPERIMENTATION"?



Government of Canada | Gouvernement du Canada

Search Canada.ca

Jobs | Immigration | Travel | Business | Benefits | Health | Taxes | More services

Home → Impact and Innovation Unit → Reports and resources

Experimentation direction for Deputy Heads - December 2016

Context

This document reinforces the Government's commitment to devote a fixed percentage of program funds to experimenting with new approaches and measuring impact to instill a culture of measurement, evaluation and innovation in program and policy design and delivery. It provides context and directions for Deputy Heads on how to implement this commitment.

Definition

For the purpose of implementing the President of the Treasury Board's mandate letter commitment to "work with [his] colleagues to ensure that they are devoting a fixed percentage of program funds to experimenting with new approaches to existing problems and measuring the impact of their programs", experimentation is defined as:

Testing new approaches to learn what works and what does not work using a rigorous method that could feature:

- deliberate, thoughtful, and ethical experimental design;
- comparisons between interventions and base cases to capture evidence (e.g., randomized controlled trials, A/B testing, counterfactual experiments, baseline performance data, pre- and post-tests);

randomized assignment to test and control groups, whenever possible;

ous impact measurement and causality assessment; and

publication of positive, negative and neutral results.

> "Testing new approaches to learn what works and what does not work using a rigorous method"

"Other experiments that do not meet such requirements should not necessarily be ruled out, but rather every effort should be made to establish as rigorous as possible baseline information and impact assessment strategies"

"Experimenting with new approaches may also mean testing an existing intervention in a new context or application."

https://www.canada.ca/en/innovation-hub/services/reports-resources/experimentation-direction-deputy-heads.html

WHY EXPERIMENT?

Deliver public value

Canadians expect that their governments will be **efficient, effective and responsive,** making decisions based on sound evidence to ensure we obtain good value for money.

Find out what works

By implementing rigorous methodologies, experimentation is key in establishing sound and reliable evidence to test program effectiveness. This limits the risk of implementing ineffective new ideas, provides a way to test innovations, and provides confidence in existing programs.

Experimental government

Becoming more experimental as a government is a cross-cutting commitment. It's about getting better at getting better and implementing a cycle of continuous improvement.

EXAMPLES OF EXPERIMENTS

There are many instances where the Government of Canada generates good program and policy evidence to improve programs:

Immigration, Refugees and Citizenship Canada uses comparative analysis (trials) to improve client experiences. In 2017, the department tested new call centre protocols and messaging to decrease anxiety for the spousal sponsorship process, leading to a 30% reduction in same-day repeat calls. Implemented across all business lines, this has resulted in a more than two fold increase in unsolicited positive client feedback.

When we add rigour to our decisions, we constantly get better at what we do.
How do we make this the norm, and not just an exception?

EXAMPLES OF EXPERIMENTS

There are many instances where the Government of Canada generates good program and policy evidence to improve programs:

CRA designed a policy it thought would incentivize more people to pay their taxes. Instead of rolling it out across the department, the CRA tested it using a rigorously designed trial, which cost roughly $20,000. The trial showed the intervention did not meet the expected outcomes, so the CRA did not use it again. This valuable information prevented a much costlier roll out that would have been ineffective.

When we add rigour and testing to our decisions, we can decrease risk for new or untested ideas, creating large potential cost-savings for Canadians.

EXAMPLES OF EXPERIMENTS

There are many instances where the Government of Canada generates good program and policy evidence to improve programs:

Anonymized Recruitment Pilot Project was a 2017 pilot project run by The Public Service Commission (PSC) in collaboration with TBS. With a goal of improving diversity in public service hiring, the objective of the experiment was to determine whether concealing candidate personal information impacted reviewers decision to choose candidates, when compared to the current method.

The pilot used an experimental methodology to test the hypothesis, focused on the results of 53 reviewers reviewing 2,226 candidates (randomized into using NBR and not using it). The initial results showed no significant effect in terms of visible minorities being chosen, but the method significantly reduces the rate of being screened-in for all other candidates.

This test was not a failure, but part of the normal and valuable process of knowing what works.

KEY INITIATIVES OF THE TREASURY BOARD SECRETARIAT

Practicing Experimentation

Supporting department-led experiments and ensuring that lessons learned from the process inform future decision-making

How we do this:

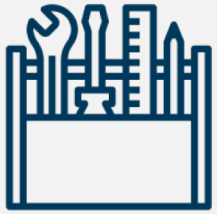
Experimentation Works (EW) - Supporting 4 experiments in 3 partner organizations (HC, NRCan and PCH)

Changing the Mechanics

Sustainably changing incentives, rulesets, and behaviours towards an experimental culture.

How we do this:

Leveraging Departmental Plans and MAF – Incorporating experimentation into existing tools and levers, as well as developing new ones, to better track and incentivize experimentation



Building Capacity

Building (and always vetting) the right tools, guidance, and support to allow experimentation to thrive

How we do this:

GCpedia Experimentation Portal – Featuring experimentation methods, FAQs, curated case studies & more!

Connecting the Community

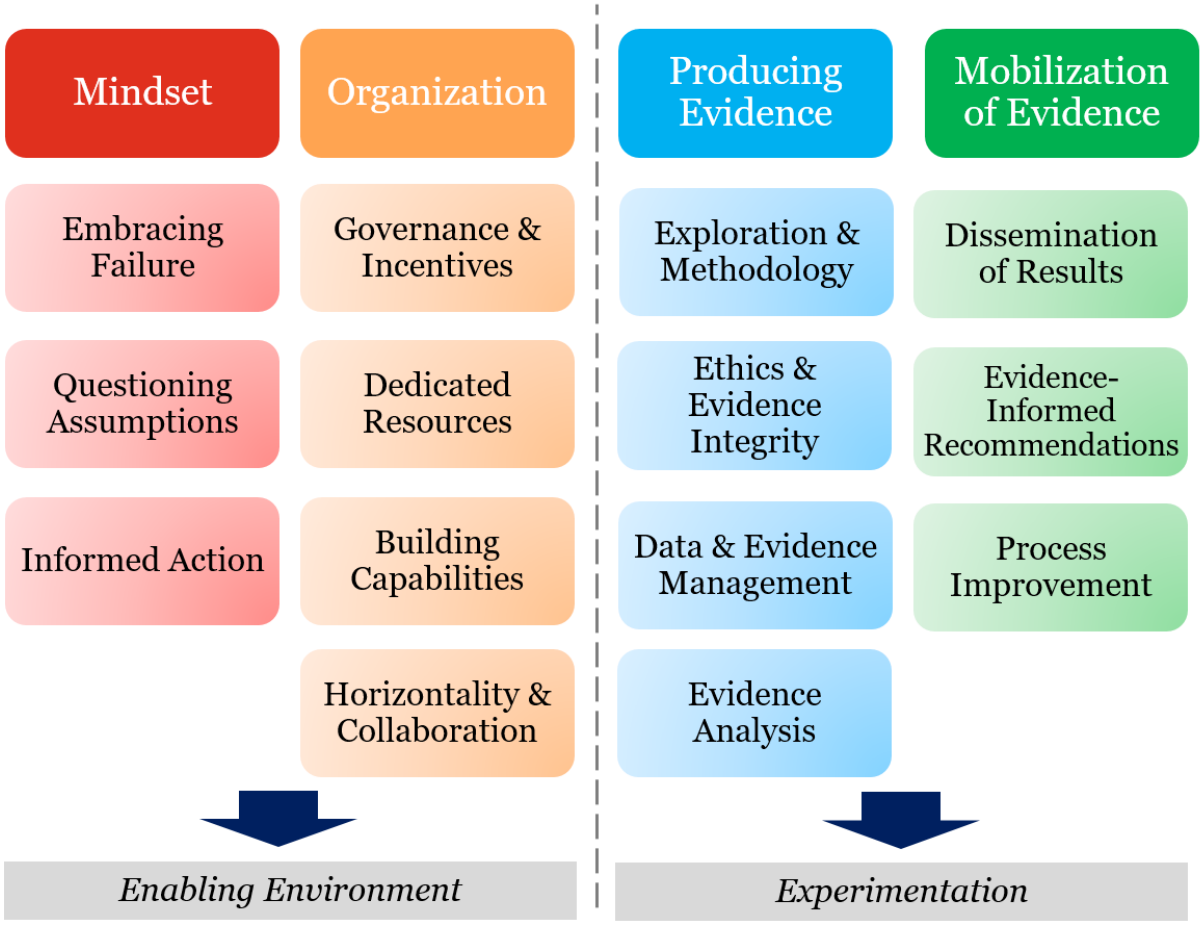
Building networks and partnerships, assuming a leadership role to ensure continued progress domestically and abroad

How we do this:

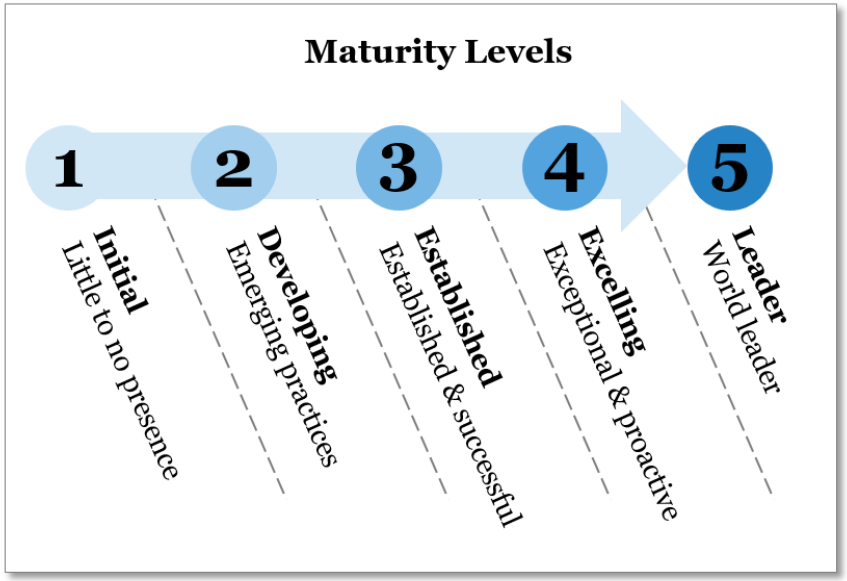
Partnership Building – (Canada) ADM Committee on Experimentation, Open Office Hours, Learning Events, EW (OGD) Provincial outreach in Ontario and Saskatchewan (Others) Academia, Global Experimentation Teams, Nesta, Demos Helsinki

ASSESSING EXPERIMENTATION MATURITY

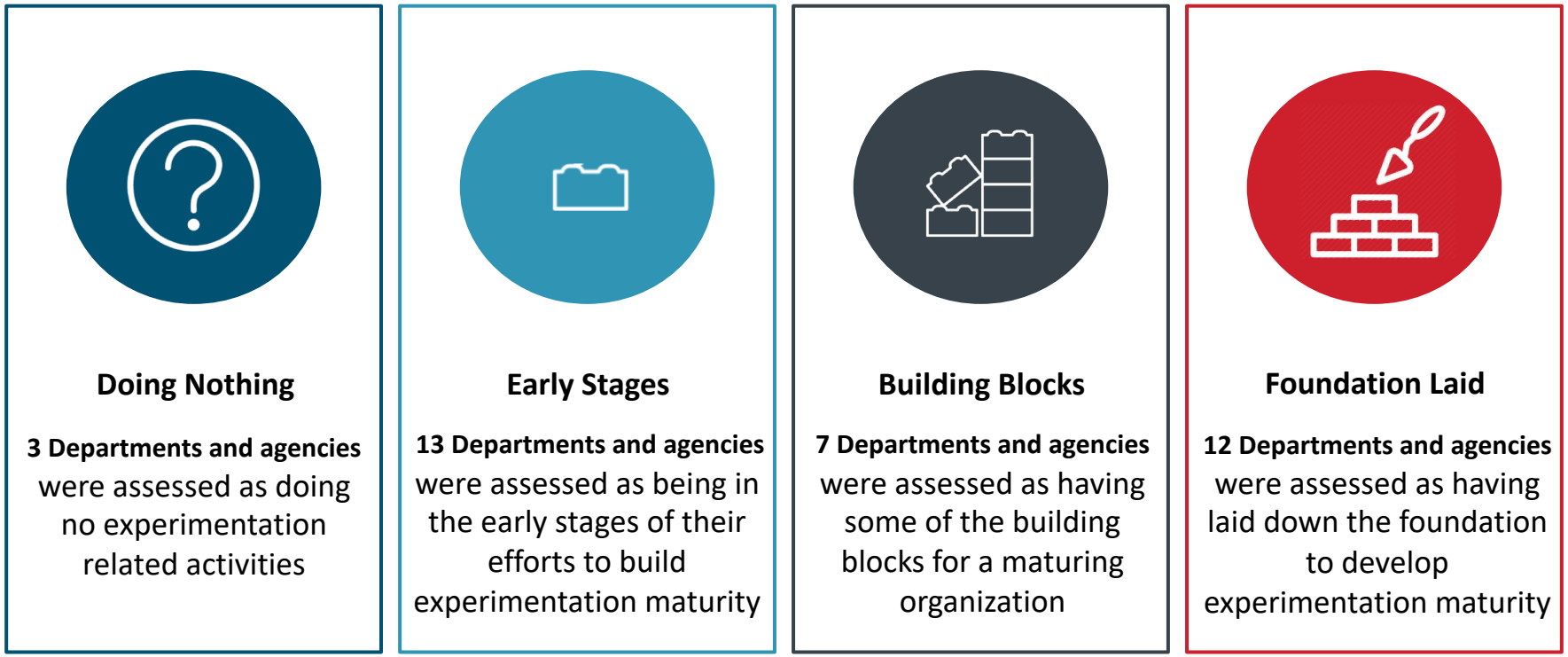
Draft Experimentation Maturity Model Framework



The diagram to the left presents the experimentation maturity model framework, including proposed attributes and related sub-attributes. An organization's maturity in each attribute can be evaluated on a scale from 1 to 5 as illustrated in the box below.



MAF RESULTS - DEPARTMENTAL MATURITY



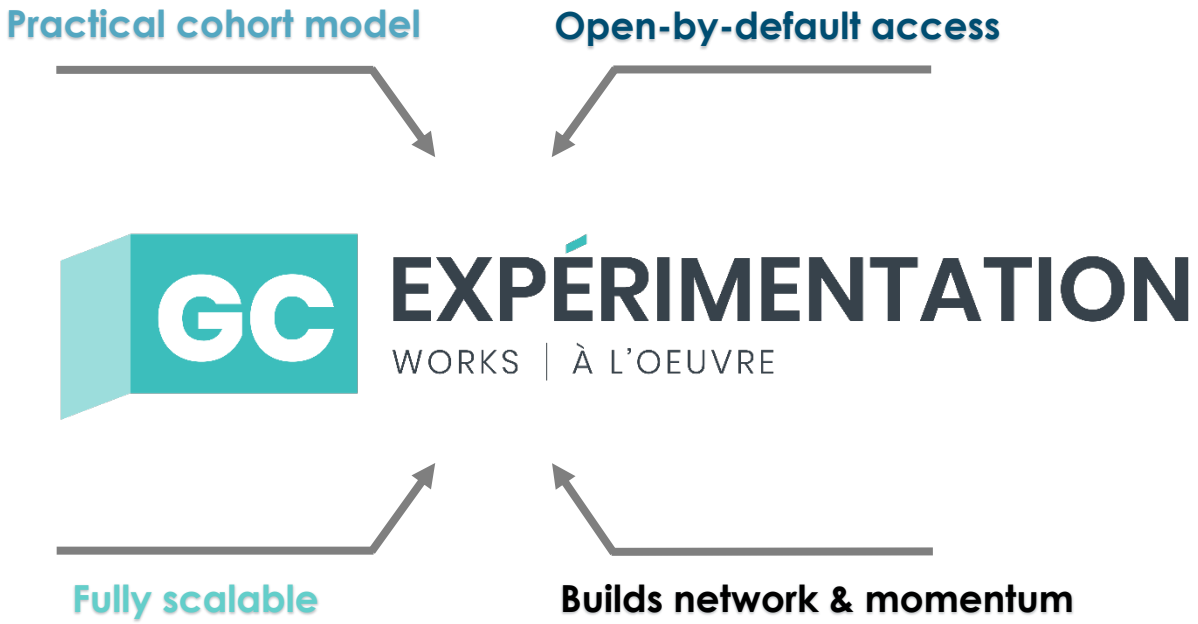
Note: These are the results of a baseline assessment of 35 large departments and agencies in the Government of Canada

BUILDING CAPACITY FOR EXPERIMENTATION: EXPERIMENTATION WORKS

To practice rather than dictate, we have launched the first cohort of Experimentation Works (EW) initiative as a means of experiencing what it takes **to live out this commitment.**

EW features small-scale experiments in the Government of Canada through a unique learning-by-doing model.

- Build public servants' **capacity** in experimentation by showcasing **3-5 small-scale experiments.**
- Documenting and sharing experimentation **development, deployment, results, and initial impacts (if any)**.
- Focus on a **variety of methodologies and policy areas** (policy design, delivery, and back office experimentation).



The EW cohort builds skills and resources for experimentation across the Government of Canada

EW (COHORT 1) AT A GLANCE

DEPARTMENTS

3 departments ran 4 experiments with the support of 5 other departments, totalling 8 participating departments.

LEARNING EVENTS

11 learning events were delivered, with a cohort satisfaction rate of 85%.

BLOG POSTS

More than 20 blog posts were published in the open covering the experimentation journey.

COHORT MEMBERS

EW1 was composed of 37 public servants who either ran experiments or provided support.

OUTCOMES:

4 experiments run in the open.
100+ professional connections formed.
5 national and international acknowledgements and awards.

EW (COHORT 1) – THE EXPERIMENTS

Multiculturalism Initiative (Canadian Heritage)

What is the user experience of youth participating in a new micro-grant initiative to promote multiculturalism?

PROGRAM DESIGN

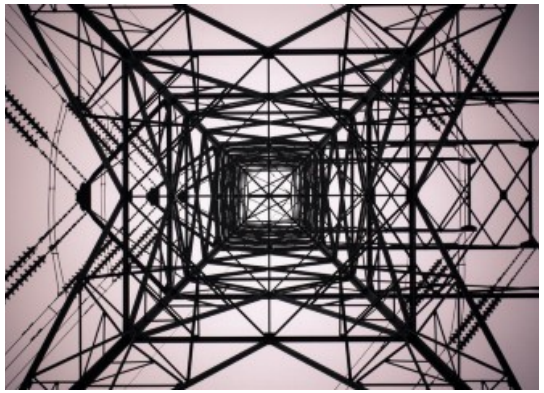
Before / After Design

Consumer Incident Reporting (Health Canada)

Does improved user experience increase the number of product safety issues reported to Health Canada?

CONTENT DESIGN

A / B Testing

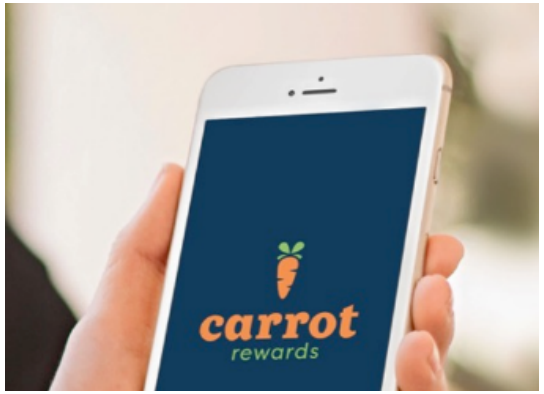


EnerGuide Labelling (Natural Resources Canada)

Which EnerGuide label designs are the most effective in conveying information about energy efficiency to home owners?

VISUAL DESIGN

Randomized Control



Energy Efficient Homes (Natural Resources Canada)

How effective are different messages at nudging home owners to complete a home energy evaluation?

MESSAGE DESIGN

Behavioural Insights

LAUNCHING EW COHORT 2 (2019-21)

Objective

Continue to build capacity while improving EW based on lived experience, lessons learned and in recognition of growing maturity in the federal experimentation space.

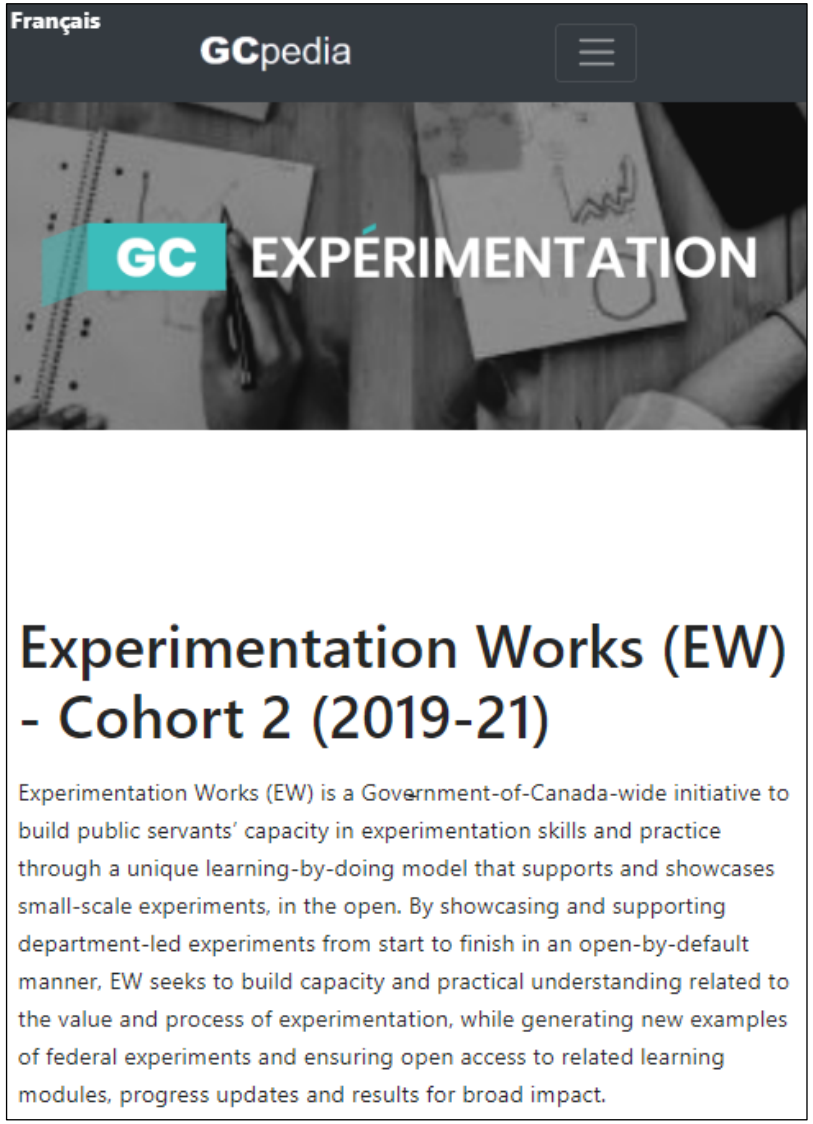
Expanded features of EW2:

1. Launch GoC-wide call for proposals leveraging brand awareness and proven success of model.

2. Develop more robust training material and offer it across the GOC while also providing tailored support to departments based on varying levels of capacity.

3. Broader scope for partnerships including increased number of GOC partners and external partners.

4. More time to experiment based on lessons learned from EW1.



EW (COHORT 2) AT A GLANCE

Outreach & Call-Out Phase

Call for proposals with selection criteria will be launched across the GOC in Fall 2019.

Project Selection

Final projects will be assessed based on a variety of factors including feasibility, level of support and diversity.

Design & Run Experiments (1 year)

Ongoing documentation and support for experimentation

Project teams will be matched with experts in early 2020 and benefit from ongoing training and support as they design and run their experiments.

Results & Wrap-Up

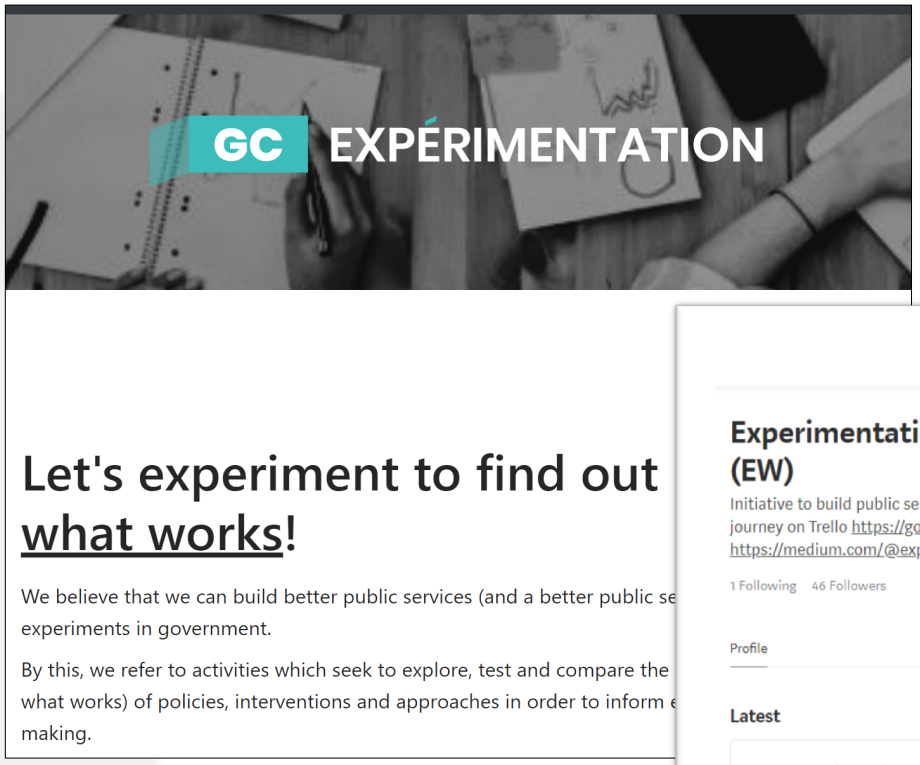
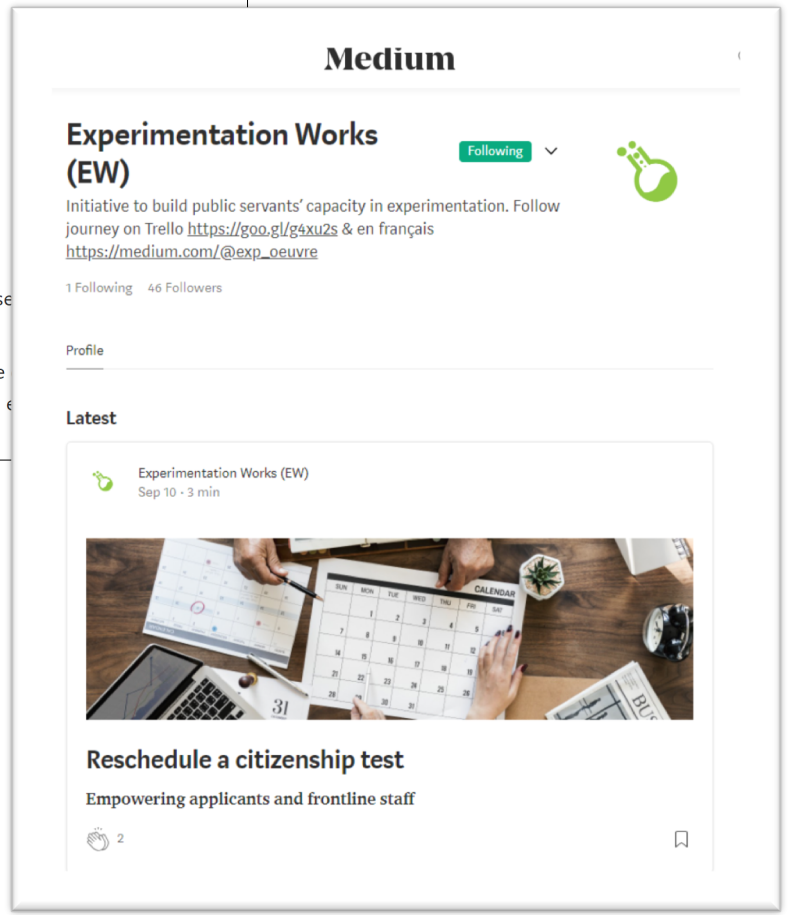
Spring 2021 will feature final project-level and EW-wide reporting and wrap-up.

GET IN TOUCH

Contact Us

Generic Experimentation Email
zzexper@tbs-sct.gc.ca

Resources

GCPedia Page:
http://www.gcpedia.gc.ca/wiki/Experimentation

Experimentation Works Blogs:
https://medium.com/@exp_works