

# **The evolution of public sector innovation as a transformative force**

**Dr. Urvashi Dhawan-Biswal**  
Senior Federal Public Servant

 @UrvashiBD

from an ...

## Econometrician / Researcher

*Developing data and evidence-base to support policy and program development using:*

Statistics Canada Surveys including:

- Longitudinal Surveys (NLSCY, YITS)
- International surveys (IALSS, PIAAC, PISA)
- Longitudinal Administrative Surveys (Tax Filers, Immigrant landing database)

Randomized Control Trials (RCTs)

Small area estimators

Simulation models

Research Partnerships with Academia and Think tanks

.... to a

## Public Sector Innovator

- |                |  |
|----------------|--|
| <b>2013-17</b> | Introduced, curated and scaled up behavioral Insights stream of work at Employment and Social Development Canada (ESDC)  |
| <b>2015-17</b> | Established Service Research function and introduced Machine Learning as a new research tool in ESDC   |
| <b>2015-18</b> | Established <b>ESDC Innovation Lab</b> and scaled it up – Design Thinking, Systemic Design and Behavioral Insights - <b>Experimentation</b> mindset and Diffusion                              |
| <b>2018-</b>   | Introducing and <b>embedding</b> Digital Design at Innovation to support Innovation Science and Economic Development (ISED) Digital Transformation Agenda, and Leading ISED Digital Innovation |

**We are on a journey towards **TRANSFORMING**  
how we work in government ....**

..to deliver better services to Canadians through  
**Policy, Program and Service Innovation**

by Placing **End User at the Center** of Decision-Making and Co-creating  
solutions *for*users *with* users - or in other words Co-Creation...

...using methods such as **Design Thinking, Behavioral Insights,**  
**Agile...**

# Driving force has been the Public Service Renewal Initiative since 2013 – from Blueprint 2020 to Beyond 2020

**A world-class public service equipped to serve Canada and Canadians now and into the future**

## Guided by four principles:

**An open and networked environment** that engages citizens and partners for the public good.

**A whole-of-government approach** that enhances service delivery and value for money.

**A modern workplace** that makes smart use of new technologies to improve networking, access to data and customer service.

**A capable, confident and high-performing workforce** that embraces new ways of working and mobilizes the diversity of talent to serve the country's evolving needs.



# Government of Canada Commitments 2018

***“Digital government”** presents an opportunity for a cultural and operational shift that is much more than the digitization of government services. It is about cultivating an environment that **prioritizes citizens** and promotes streamlined, secure service delivery supported by technology. It is about **reimagining the service relationship with citizens to remain relevant.***

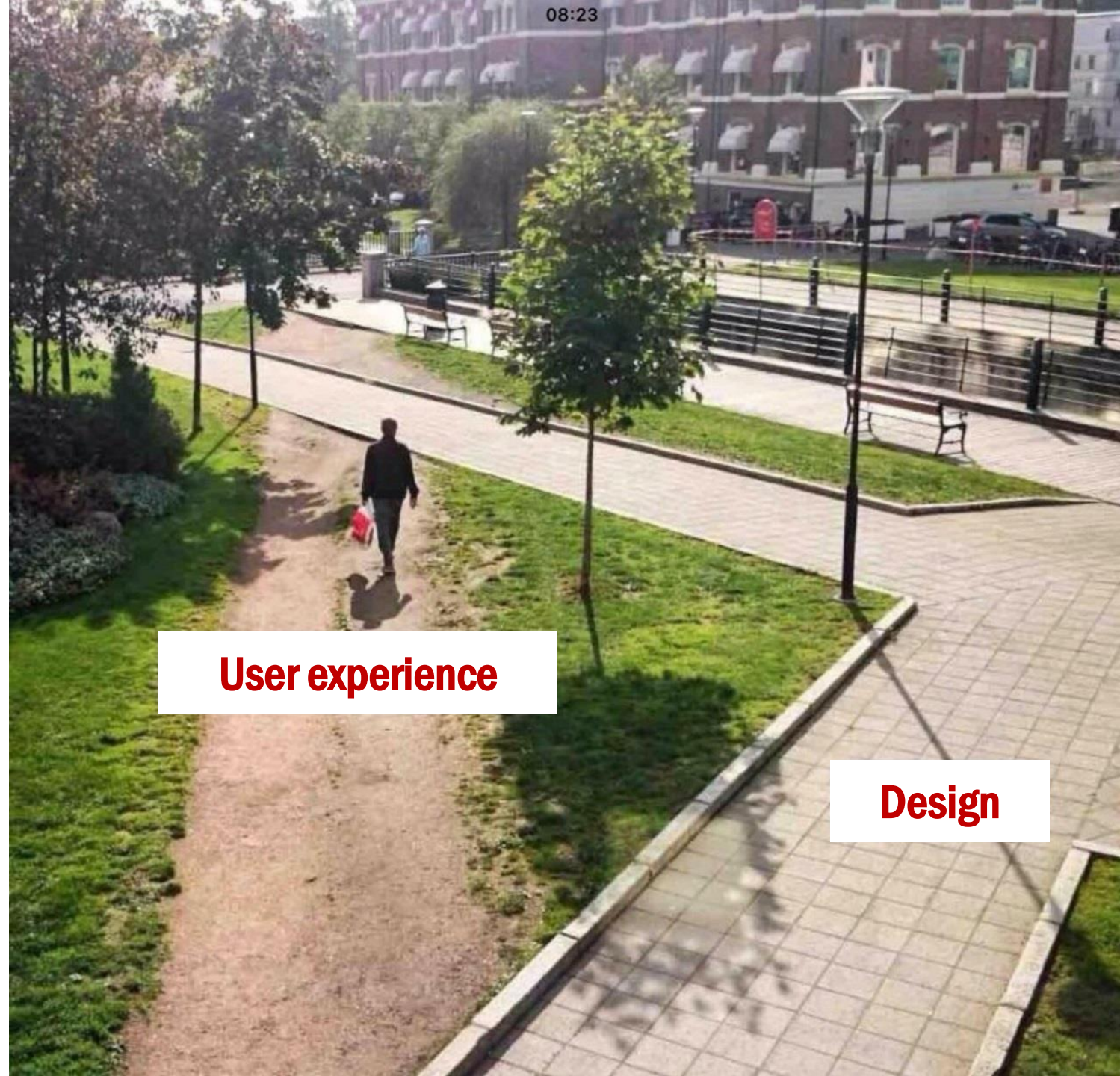
- Alex Benay, Chief Information Officer of GoC

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

- Government of Canada Digital Standard #1



**The path  
planned is not  
always the path  
taken.**



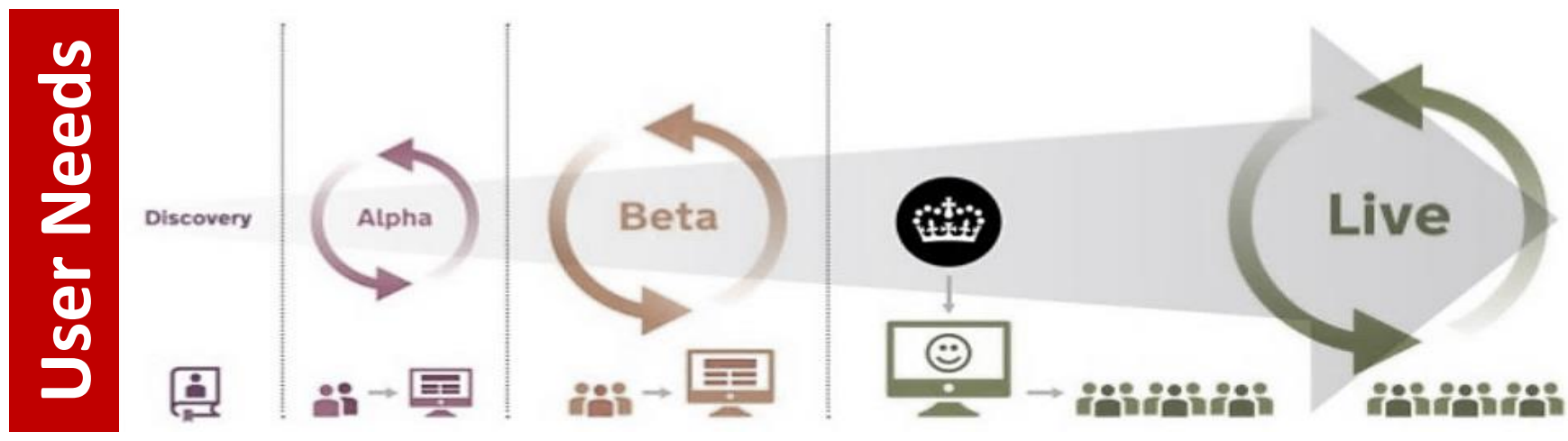
**User experience**

**Design**

## Traditional digital service design



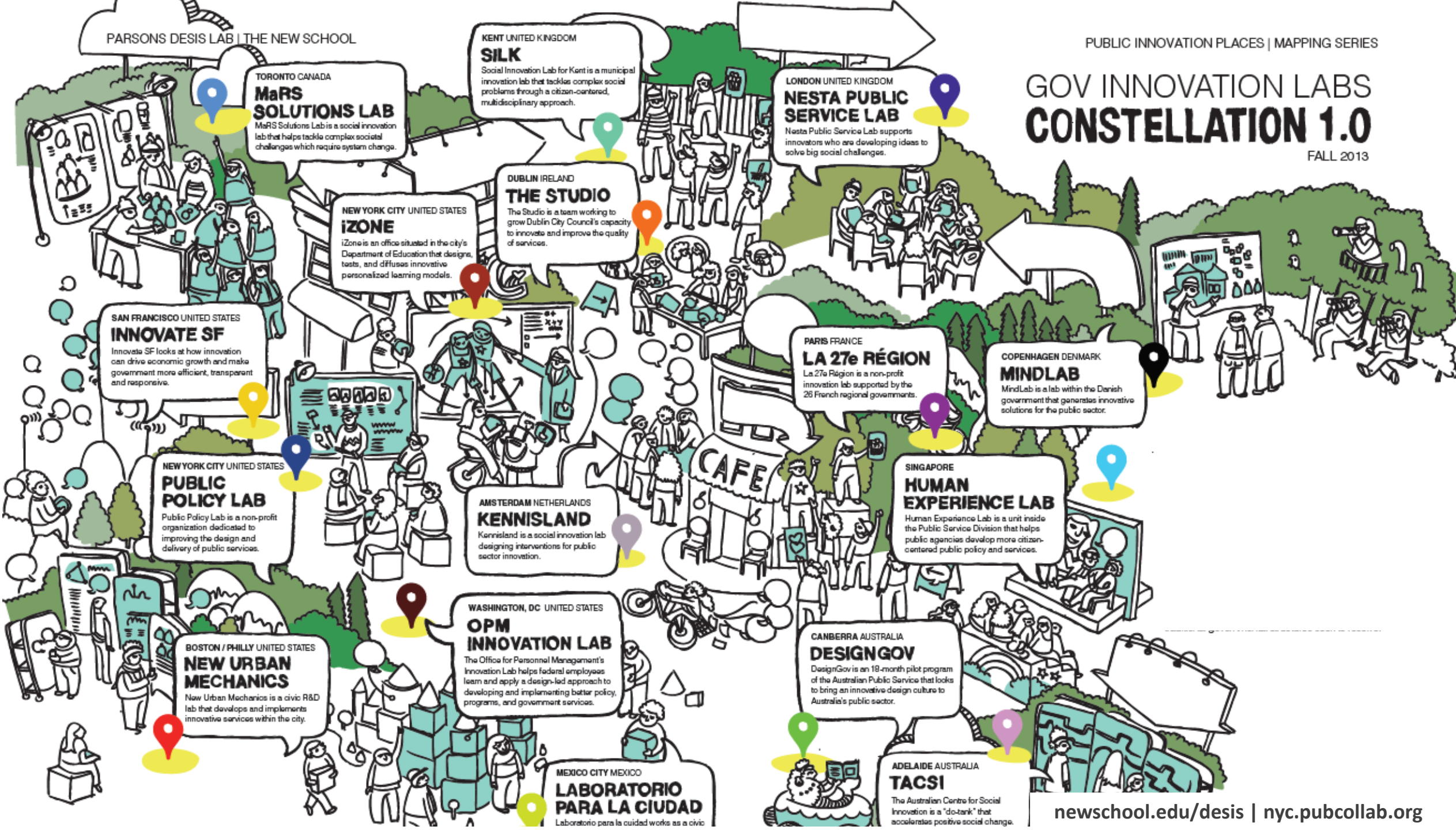
## Updated principle-based digital service design





# GOV INNOVATION LABS CONSTELLATION 1.0

FALL 2013



TORONTO CANADA

## MaRS SOLUTIONS LAB

MaRS Solutions Lab is a social innovation lab that helps tackle complex societal challenges which require system change.

KENT UNITED KINGDOM

## SILK

Social Innovation Lab for Kent is a municipal innovation lab that tackles complex social problems through a citizen-centered, multidisciplinary approach.

LONDON UNITED KINGDOM

## NESTA PUBLIC SERVICE LAB

Nesta Public Service Lab supports innovators who are developing ideas to solve big social challenges.

DUBLIN IRELAND

## THE STUDIO

The Studio is a team working to grow Dublin City Council's capacity to innovate and improve the quality of services.

NEW YORK CITY UNITED STATES

## IZONE

iZone is an office situated in the city's Department of Education that designs, tests, and diffuses innovative personalized learning models.

SAN FRANCISCO UNITED STATES

## INNOVATE SF

Innovate SF looks at how innovation can drive economic growth and make government more efficient, transparent and responsive.

NEW YORK CITY UNITED STATES

## PUBLIC POLICY LAB

Public Policy Lab is a non-profit organization dedicated to improving the design and delivery of public services.

BOSTON / PHILLY UNITED STATES

## NEW URBAN MECHANICS

New Urban Mechanics is a civic R&D lab that develops and implements innovative services within the city.

WASHINGTON, DC UNITED STATES

## OPM INNOVATION LAB

The Office for Personnel Management's Innovation Lab helps federal employees learn and apply a design-led approach to developing and implementing better policy, programs, and government services.

MEXICO CITY MEXICO

## LABORATORIO PARA LA CIUDAD

Laboratorio para la ciudad works as a civic

PARIS FRANCE

## LA 27e RÉGION

La 27e Région is a non-profit innovation lab supported by the 28 French regional governments.

COPENHAGEN DENMARK

## MINDLAB

MindLab is a lab within the Danish government that generates innovative solutions for the public sector.

SINGAPORE

## HUMAN EXPERIENCE LAB

Human Experience Lab is a unit inside the Public Service Division that helps public agencies develop more citizen-centered public policy and services.

CANBERRA AUSTRALIA

## DESIGNGOV

DesignGov is an 18-month pilot program of the Australian Public Service that looks to bring an innovative design culture to Australia's public sector.

ADELAIDE AUSTRALIA

## TACSI

The Australian Centre for Social Innovation is a "do-tank" that accelerates positive social change.



# **Public Sector Innovation Labs as **Culture Change Agents** (#psilabs)**

- Safe space to ‘try doing things differently’ – de-risking through experimentation
  - Learn from what works and what does not
  - Share lessons learned
- Intentional Physical spaces to encourage collaboration and ‘outside-the-box’ thinking
- Dynamic learning organization with focus on its ‘value-add’ and layering of hierarchical reporting

ESDC Innovation lab 2015; PCO Innovation Hub 2014 (now Impact and Innovation Unit); ISED Service Lab 2015 (now Digital Innovation Lab); Bank of Canada 2018 and many other innovation initiatives



# ESDC Innovation Lab: A **Human-Centered** Design Lab



## People-Centered

- Starting from what people (users, clients, customers, stakeholders, *Canadians*) need
- Empathy and understanding of motivations and feelings is key
- Multi-disciplinary perspectives are key



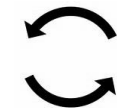
## Hands-on

- Its about experimenting, testing, making ideas tangible, trying things out
- Trial and error is key, learn as you go



## Highly Creative

- Looking at situations differently and coming up with new solutions that go beyond improvements
- Understanding at all aspects of a problem using collaboration, design thinking and behavioural insights



## Iterative

- Human-centered design does not follow a straight line, it is about understanding, creating, trying, learning and repeating the cycle



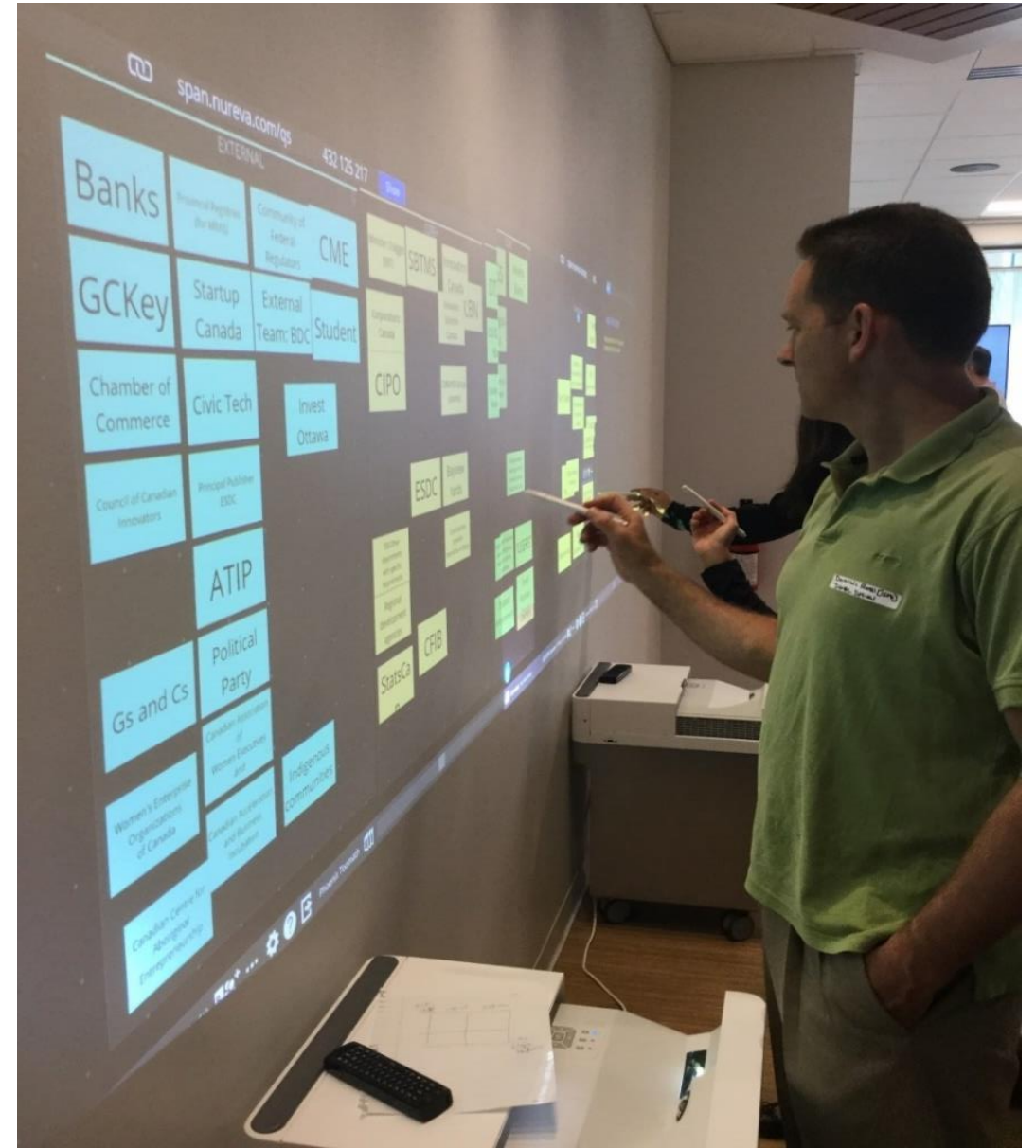
**Employment and Social  
Development Canada**





# Digital Design Sessions

## Innovation Science and Economic Development (ISED)





**So what do we do in a Lab to be Client-Centric – it is all about **RESEARCH****

**User Research**

**Behavioral Insights**

**User Experience**

**User Interface**

**Service Blueprint**

**Design Thinking**

**Persona**

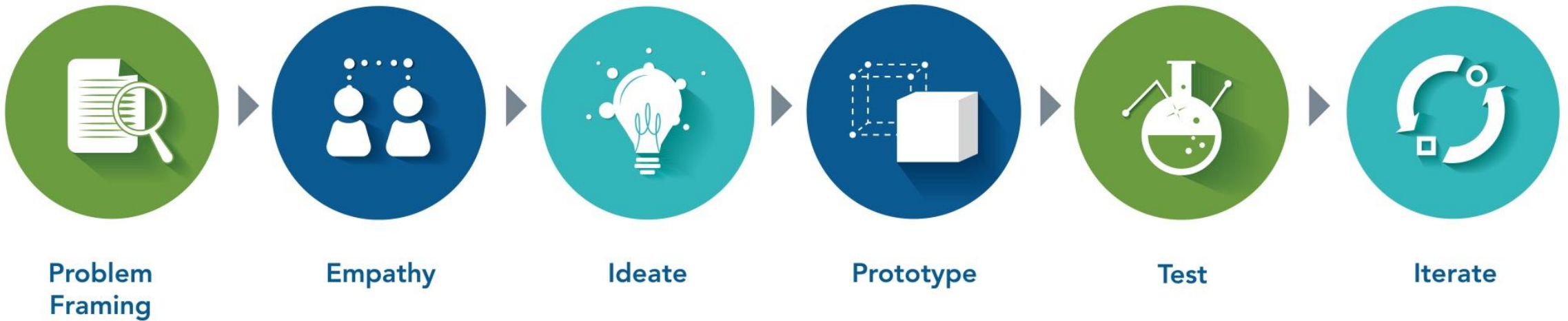
**Human Centered Design**

**Journey Map**



# Design Thinking

The Lab Methodology



First Major Project

# CANADA PENSION PLAN

How to make  
online access  
for CPP the  
preferred channel  
for Cdn Seniors?

# Anecdote Circles with Frontline Staff

Project: E-Service for CPP

“

When online information is too complex or overwhelming, clients very quickly turn to other channels to get answers in order to avoid the frustration of being confused or not being able to find clear answers.

“

People are frustrated because they cannot complete the application online.

“

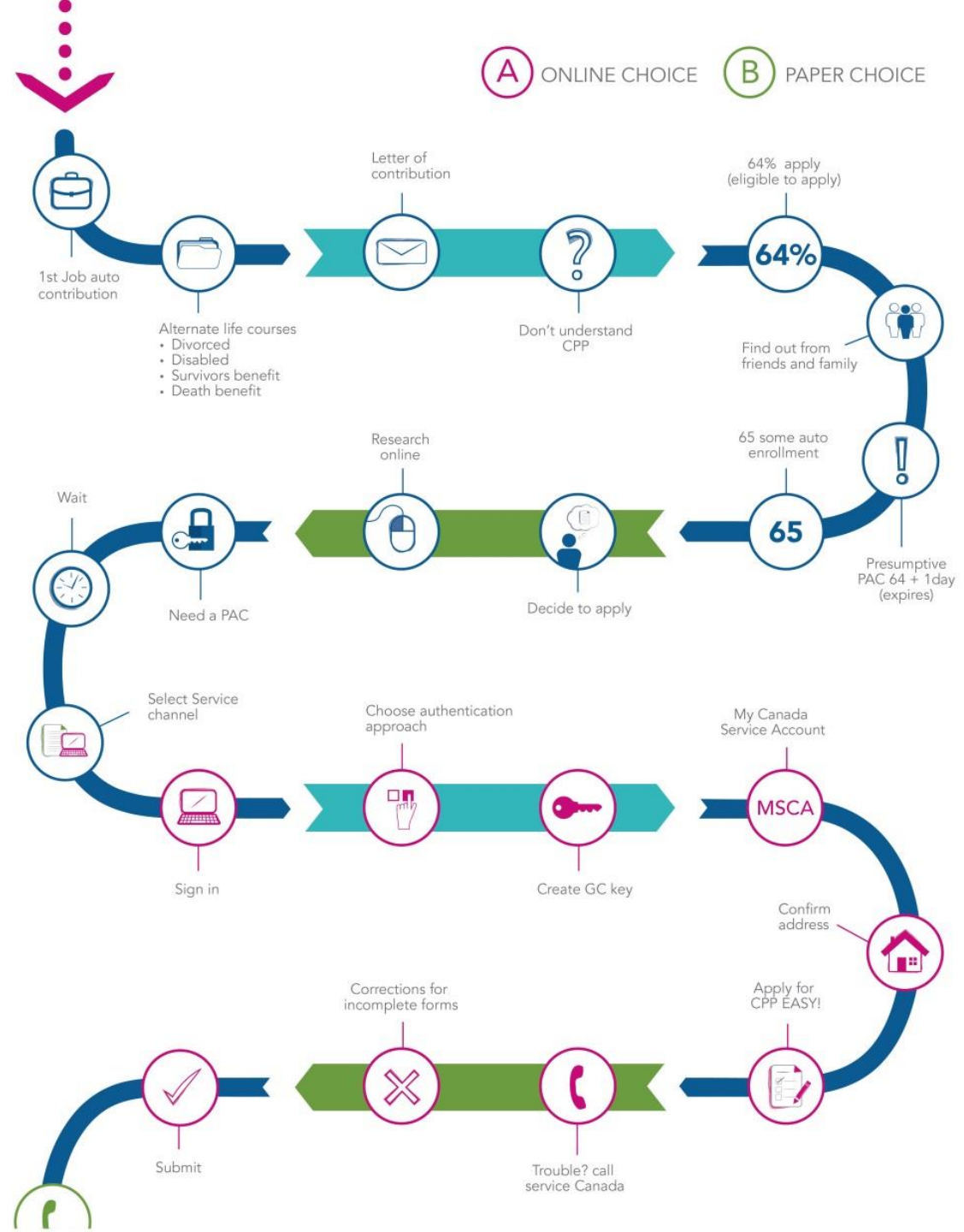
Clients often prefer interacting with Service Canada personnel because they want to make sure that they have the time and necessary information to complete their application correctly.





# Client Interviews & Journey Mapping

Project: E-Service for CPP



# Insights and Solution Opportunities

Project: E-Service for CPP

## IDEAS

### INSIGHTS

USABILITY DRIVES  
EFFICIENCY - FOR EVERYONE

EVERYBODY GOES  
TO GOOGLE FIRST

THE ONLINE APPLICATION  
IS TOO EASY

IT TAKES MORE KNOWLEDGE  
TO DO IT ONLINE

ONLINE SERVICES FACE  
UNIQUE CHALLENGES WITH  
PHASED IMPLEMENTATION

CANADIANS ARE  
OPTIMIZING THEIR BENEFITS,  
NOT MAXIMIZING THEM

### OPPORTUNITIES

PUT USABILITY FRONT  
AND CENTRE

STREAMLINE THE PROCESS

SIMPLIFY BUT NOT  
NECESSARILY SIMPLE

TAILOR INFORMATION  
TO THE USER

ADOPT AN AGILE APPROACH

SUPPORT CONFIDENT  
DECISION MAKING

- Simplify the information architecture for the site
- Strategic use icons, buttons, and variable text size
- Progress bars and feedback signals, and estimates
- Integrate plain language
- Invest in testing capacity and streamline approval process
- Opt for easily understood name (e.g. username)
- Include "other" as gender option in application
- Invest in search engine optimization
- Promote the online application on ESDC websites
- Clients can create their own security question
- Clarify that SecureKey is faster than GCKey
- Chat option to provide assistance throughout portal
- Introduce an enterprise wide access code
- Mechanisms to deliver secure access codes electronically
- Streamline information and web architecture**
- Add useful friction in the right places**
- An interactive tool tailored to clients information**
- Fast-track complementary benefits**
- Develop scenarios and stories people can relate to
- Easier use of the retirement calculator outside MSCA
- Enhance the retirement calculator
- Consent option online for professionals and family help
- Informational pamphlets to educate Canadians
- Videos to support self-service
- Interactive tool that can replicate the in-person prompts
- Integration of more departmental programs within MSCA
- Policy options for supporting vulnerable Canadians
- Prototype program mechanisms that support clients
- Develop a risk-based lens to online project management
- Explore a flexible and responsive approach to online PM
- Make a complete suite of benefits available within the App
- Reconsider the language of "standard age"
- Interactive tool to help clients identify their considerations
- Use scenarios to illustrate impact on primary considerations

NEW - Third Major Project

# CANADA LEARNING BOND

## Context

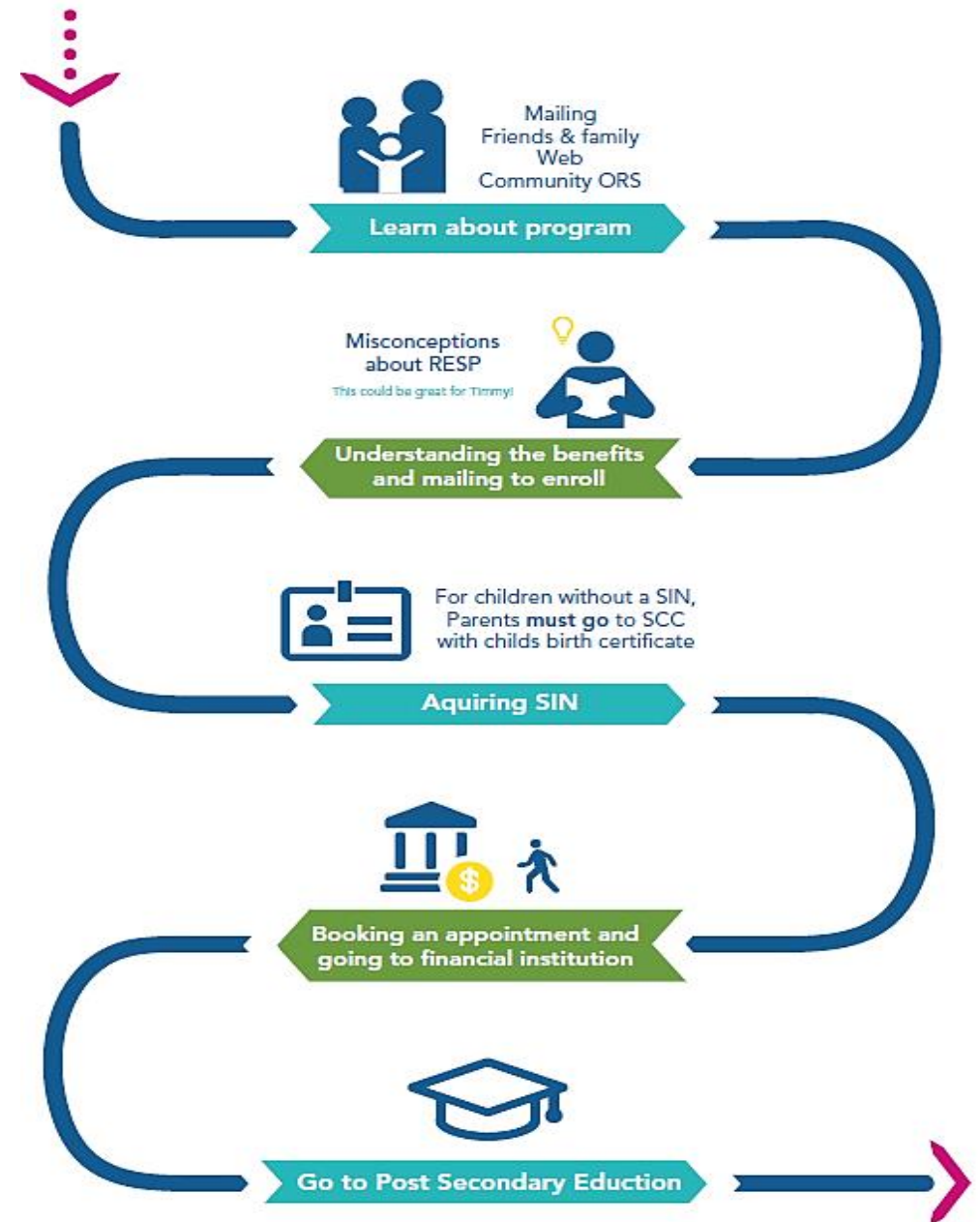
- Program is designed to provide an amount of savings to low-income Canadians to help them save for their children's post-secondary education through Registered Education Savings Plans (RESPs).
- Among other initiatives, **letters promoting the CLB are sent out quarterly** to primary caregivers whose children have become newly eligible for the program.

## Issue

- Low take-up rate
- Effectiveness of quarterly mailouts

# Client Journey Map

In the context of the CLB, it is important to note that there are many steps a family must take between receiving our mailing and successfully receiving a CLB payment into an RESP. This trial only sought to increase the number of families who decide to act on the letter.






# Standard Letter

The standard letter was well-designed as it has evolved over time, and is now consistent with a number of **behavioural science principles**:

- is short and concise
- personalized with the child's name
- communicates the benefits of the program
- presents the information in a structured manner (e.g., details steps to be taken)

Additional materials such as brochures, vouchers and pamphlets have been part of previous mailings though their impact was not measured rigorously.

 Government of Canada  
Gouvernement du Canada

First name Last name  
Address Line 1  
Address Line 2  
City, Province Postal Code

**The Government of Canada is pleased to inform you that [Child's first name] is eligible to receive a Canada Learning Bond of at least \$500!**


The Canada Learning Bond can help you start saving now for your child's education after high school. The Government of Canada will deposit at least \$500 directly into your child's education savings account, also known as a Registered Education Savings Plan (RESP).


Families who receive the National Child Benefit and who have a child born in 2004 or after are eligible for the Canada Learning Bond from the Government of Canada.

**How do I open an RESP and receive the Canada Learning Bond?**  
It's quite simple! Follow these steps to receive money for your child's education after high school:  
**Step 1:** Get a Social Insurance Number (SIN) for you and your child.  
Go to [Canada.ca](https://Canada.ca) to find out how.  
**Step 2:** Make an appointment with a participating financial institution of your choice. Please bring this letter and SIN numbers for you and your child.  
**Step 3:** Open an RESP and apply for the Canada Learning Bond.




**You don't have to put any of your own money into the RESP to receive the Canada Learning Bond!**  
Your child could also get an additional \$100 each year up to age 15, to a maximum of \$2,000, as long as you continue to receive the National Child Benefit.

Page 1 of 2




 Government of Canada  
Gouvernement du Canada


**Are there other education savings incentives available?**  
Yes! Based on your net family income and your annual contribution limit, the Government of Canada can also add 20% to 40% to your child's RESP with the Canada Education Savings Grant.  
The Canada Learning Bond and the Canada Education Savings Grant can help your child pay for full-time or part-time studies in an apprenticeship program, trade school, CEGEP, college or university.

**Where can I get more information?**  
 Click [www.canada.ca/education-savings](https://www.canada.ca/education-savings)  
 Call 1-800-O-Canada (1-800-622-6232)  
TTY 1-800-926-9105  
 Visit a Service Canada Centre near you

Page 2 of 2



# Revised Letter

 Government of Canada  
Gouvernement du Canada

First Name Last Name  
Address Line 1  
Address Line 2  
City, Province Postal Code

**Take Advantage of Government Money for Your Child's Education!**

The Government of Canada wants to help you save money for [Child's first name]'s education after high school by giving you at least \$500 through the Canada Learning Bond.

Depending on your family income, the Government could add \$100 each year, up to a maximum of \$2,000. This money can be used to pay for tuition, books, and other living expenses related to your child's post-secondary education.

This program is offered by the Government to make education after high-school more affordable for families. You don't have to contribute any of your own money to receive the Canada Learning Bond. All you have to do is apply.

**Nudge**

**The application is easy. Just follow these simple steps:**

To get the Canada Learning Bond, you have to open a Registered Education Savings Plan (RESP) for your child. An RESP is a special savings account for setting money aside for your child's education. This is the account the Government uses to deposit the Canada Learning Bond.


**Step 1: Make sure you have a Social Insurance Number (SIN) for yourself and your child.**  
Find out how to get one at [www.servicecanada.gc.ca](http://www.servicecanada.gc.ca)

**Step 2: Set up an appointment with any financial institution that offers RESPs and the Canada Learning Bond. For example, your bank or credit union.**  
You should only need one short appointment to open an RESP. Bring the SINs for you and your child to your appointment.

**Step 3: At your appointment, ask the person who is opening the RESP to apply for the Canada Learning Bond for you.**  
Your RESP provider will inform the Government of your application for the Canada Learning Bond. You do not need to send anything to the Government.

**Step 4: The Government will deposit at least \$500 into your child's RESP.**  
You do not need to put any money into the RESP to receive the Canada Learning Bond.

More information about the Canada Learning Bond is on page 2 of this letter.

 Government of Canada  
Gouvernement du Canada

**Additional Information on the Canada Learning Bond:**

- How much money can my child get from the Canada Learning Bond?**

When you open an RESP and apply for the Canada Learning Bond, the Government will deposit \$500 into the account. Depending on your income, the Government will put an additional \$100 into the RESP for every eligible year until your child turns 15. That's up to a maximum of \$2,000 for your child's post-secondary education!
- What is post-secondary education?**

Post-secondary education includes studies in an apprenticeship program, trade school, CEGEP, college or university. The Canada Learning Bond and any other savings in an RESP can be used for expenses related to full-time or part-time studies at any of these post-secondary institutions.
- The Canada Learning Bond is retroactive**

This means that the Government will still give your child money for each year he or she qualified for the Canada Learning Bond in the past. Children can be eligible some years and not others depending on your net family income.




For example, if your child is now 6 years old and was eligible in the past for 3 of those years, the Government will deposit a Canada Learning Bond payment of \$700 after you open an RESP. Plus, your child could receive another \$100 per year if eligible in the future.

\$500 for the first year
+ \$100 for the second year
+ \$100 for the third year
= \$700 first payment
- The Canada Learning Bond will not affect your other benefits**

The Canada Learning Bond will not affect other benefits such as social assistance. You will still continue to receive your other benefits.
- Are there other education savings incentives available?**

Yes! The Government of Canada also offers the Canada Education Savings Grant. Depending on your income and how much you save, the Government will match your savings by 20% to 40%, to help your child's RESP grow faster.

If you have any questions or need more information, you can contact us here:

 Click [www.canada.ca/education-savings](http://www.canada.ca/education-savings)  
 Call 1-800-O-Canada (1-800-622-6232)  
TTY 1-800-926-9105  
 Visit a Service Canada Centre near you

# Nudges

## Social Norm:

Tendency to do or believe things because others believe or do the same.

**[X] children in [province] are already receiving the Canada Learning Bond.**

## Testimonial:

People have a tendency to be influenced by a message's source, not just its content (known as the “messenger effect”).

***“I’m so happy I was able to get this for my sons. Even if I don’t have much extra money right now, this is one way I can help prepare for their future.” – Maria, mother of two***

Message on envelope:

***Important Information Inside***

## Personalization:

Reinforces the ‘social’ aspect of nudge by establishing a closer relationship between Governments and citizens.

**Dear [PCG first name], The Government wants to help you save money for [child’s first name]’s education after high school...**

## Infographic Insert:

Illustration to help the reader visualize complex information and interactions.

**SAVE FOR THEIR FUTURE** 

*Get Money for your Child's Education*

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The Canada Learning Bond **Get up to \$2,000** without having to put in any of your own money!  
for your child's Registered Education Savings Plan

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The Canada Learning Bond will not affect benefits, like social assistance.

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 The sooner you start saving, the more **money** your child will have for the future.

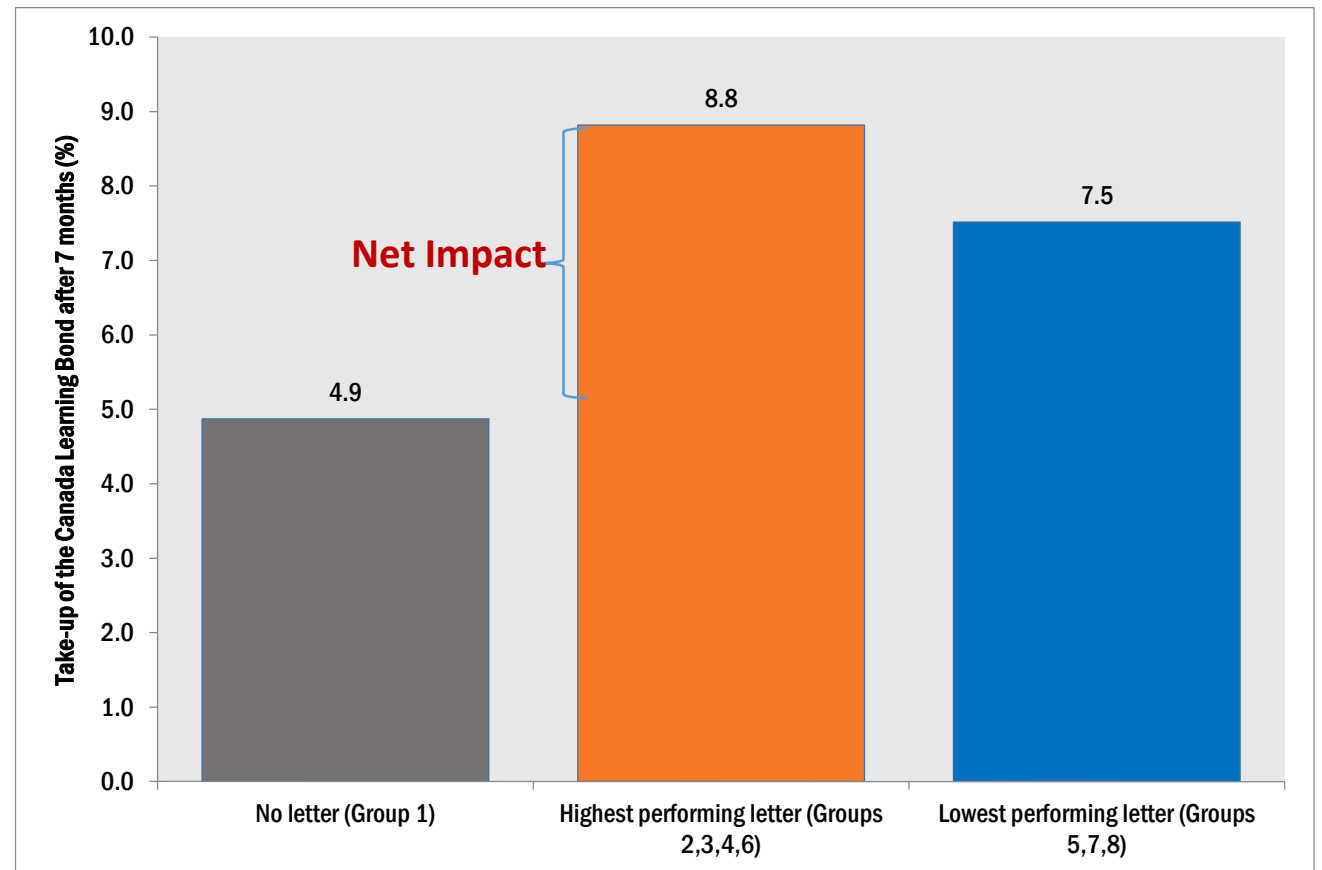
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*For more information, visit*  
[Canada.ca/education-savings](https://Canada.ca/education-savings)

# How effective are mailings at increasing the take-up of the CLB?

## Results (7 months after the mailing trial):

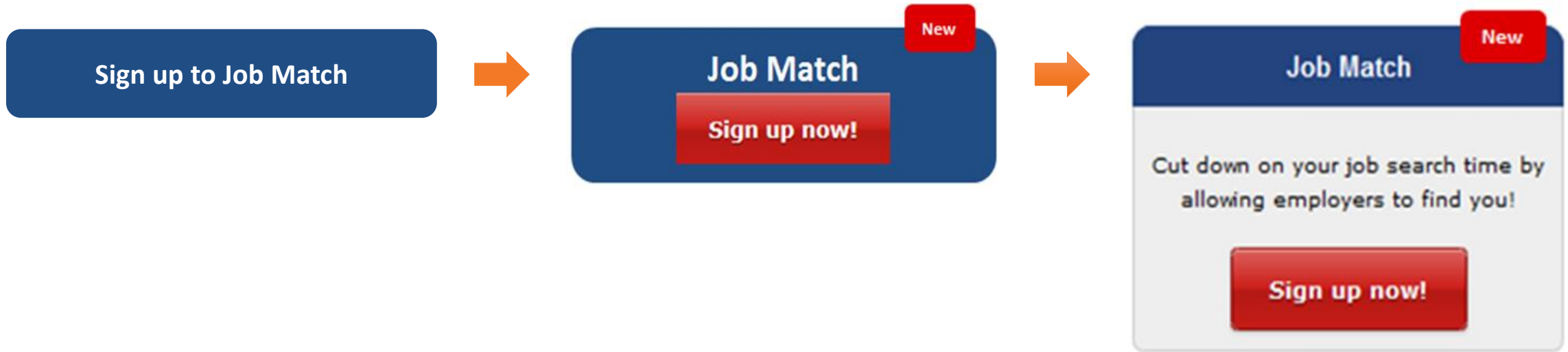
- The mailings are an effective means of increasing take-up of the bond. The highest performing letters (Groups 2,3,4,6) provided an 80% relative increase (4 percentage points) in take-up over the natural take-up (no letter).
- In **absence of any mailing**, approximately 5 out of 100 PCGs sign up for the CLB.
- The RCT allows us to determine the **Net Impact** of the mailings. The highest performing letter resulted in *additional* 4 out of 100 PCGs signing up for the CLB.





**Any guesses what happens **next?****

# Job Postings Trial (longest running ESDC trial)



Increased click rate by **67%**

Increased click rate by an additional **32%**  
(i.e., 120% improvement)

Lowest  
performing



Highest  
performing

# Digital Transformation at ISED

- Equip ISED employees first with right **digital tools**
- Follow a structured process – **Digital Playbook**
- Center of excellence for **Digital + Data Platform**
- **Partnerships** with other governments and international
- **Leading Digital Identity for Business for Government of Canada (GC)**
- Digital Design and Digital **Innovation Lab**

# DIGITAL OFFICE AT ISED

## Digital Lounge

- A kiosk-style “digital lounge” for you to visit and get tech support, or to see demos of new and cool ‘digital office’ features;



- On-the-spot IT support to get you help right away, and on with your day;
- Real-time status tracking of your IT ticket on the ISED web;
- Digital office untethers you, giving you the freedom to work anywhere;
- Continuous user training for you and all your workers; and,
- Regular feedback to solve Business Units’ needs.

## Skype for Business

- Messaging, meetings, and screen-sharing with up to 250 people, even if they’re not on Skype;
- Group audio and video meetings on any of your office devices;
- Provides a connection among you and all employees from anywhere; and,
- Helps to cut down on non-essential business travel through videoconference.

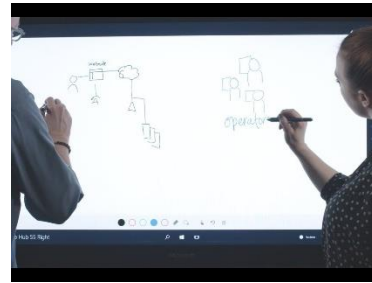
### Boardroom scheduling panels



- Used for interactive and instant boardroom management; and,
- You can book meetings or see the room schedule.

## Surface Hubs & The Digital Whiteboard

- Use the touchscreen and write on it – then share it instantly;
- Share in the office or as-you-go;



- Connect with your team through the built-in video camera via Skype;
- Connect locally, nationally, or internationally with simple-to-use video meetings;
- Everyone you invite sees what you write – worldwide;
- Save notes across all your office devices (phone, tablet and laptop) instantly; and,
- A whiteboard and personal organizer in one allows you to share and communicate with others internally and externally.

## Portable Devices, Office 365 & Remote Access Services

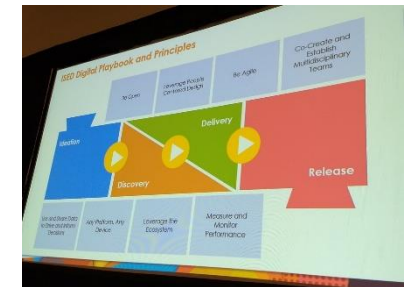
- Access your email, files, and schedule from anywhere;
- Based on your business requirements, you can use a phone, tablet, or laptop;
- Office 365 allows you to instant message, cloud storage, and video and voice conferencing;



- Now anywhere can be your office - improve your work experience by untethering from your desk; and,
- Stay up-to-date and in touch with your colleagues through a wireless connection to work.

## Digital Display Screens

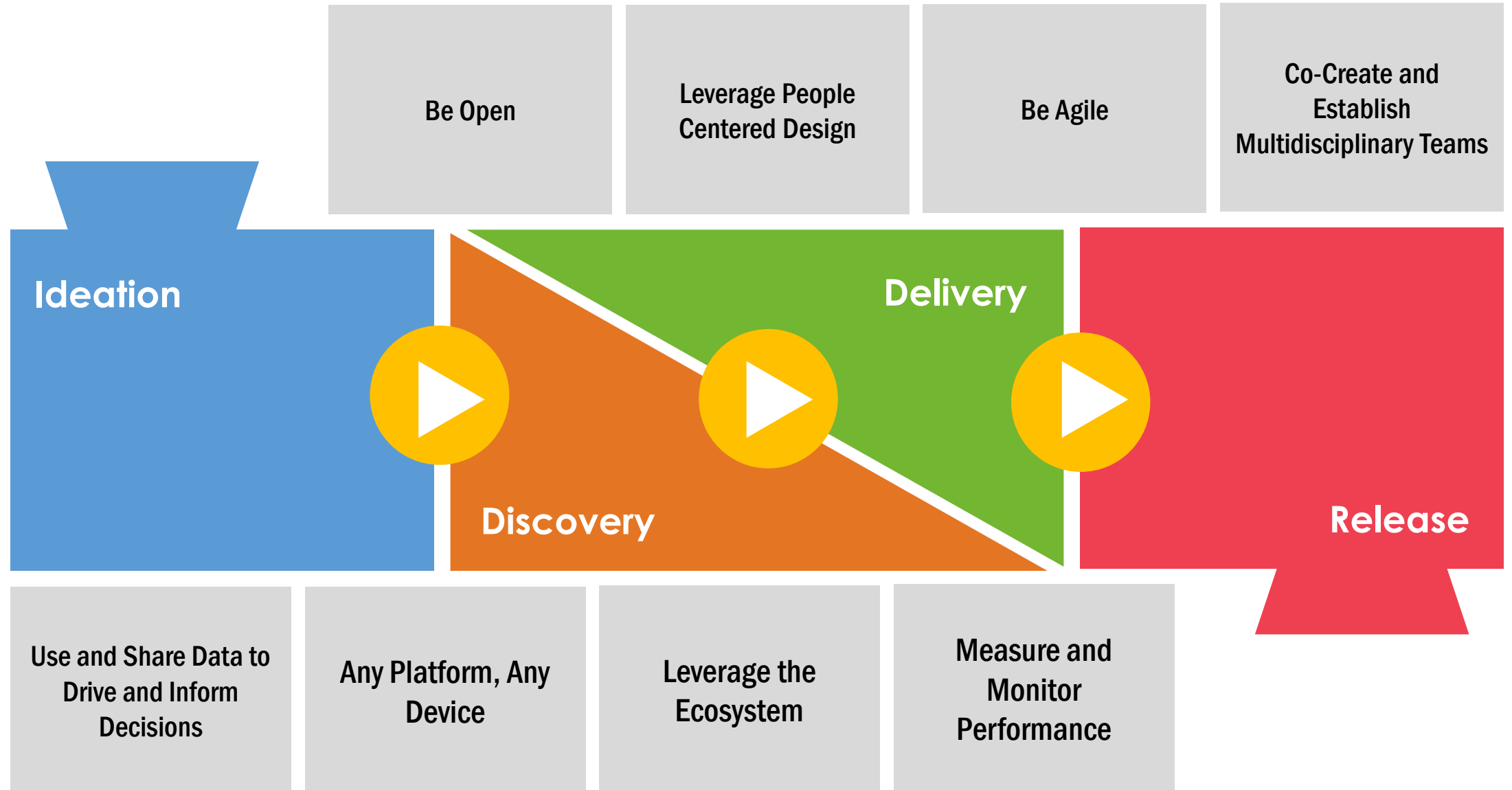
- Ability to post real-time content and communications;
- Digital Displays welcome both visitors and employees with immediate information, news, and updates;



- Enables employees to be aware and informed via instant streaming of Departmental and GC news; and,
- Located within ISED’s internal lobby space on each floor.



# ISED Digital Playbook and Principles



# Glimpses of Ideation and Discovery work

To understand the small business' attitudes, beliefs, and motivations towards government services, we reviewed existing research from following sources:

- Canadian Small Business Survey
- CFIB Reports
- ISED Annual Survey

**Small businesses spend disproportionately greater amounts of time and money to comply with government regulations than larger businesses.**

As an evolving draft, the purpose of this Discovery Report is to capture the insights gathered by engaging small businesses and other stakeholders.

So far, the Discovery team's overall planned engagement included:

- **Intercepts at Bayview Yards** (Interviewed 9 SMEs from diverse tech start-up industries including real estate app and product design)
- **Anecdote Circle (Facilitated Storytelling) with ISED Call Centre Staff** (Interviewed 3 call center staff on client interactions and pain points)
- **Job Shadowing at ISED Call Centre** (Observed 4 client calls)
- **Interviews with the Canadian Federation of Independent Businesses (CFIB)** (Interviewed 2 business counsellor coordinators on client interactions and pain points)
- **'Youth Can Do It' Program Participants** (Interviewed 2 small business owners from the retail and health technologies industries)
- **Personal Networks** (Interviewed 3 small business owners from the construction, IT consulting, and manufacturing industries)

# **Innovation, whether digital or not, is all about mindsets and culture change and not about technology**

## **Policy, Program and Service delivery Innovation**

- Innovation Labs – collaboration, tools, technology
- Service Transformation Initiatives (ESDC, ISED, Transport, IRCC ..) and Canadian Digital Service (CDS)
- Challenges – Innovative Solutions Canada (ISC), Impact challenges (PCO)

## **People**

- HR innovations – Talent Cloud, Free Agent Program, GC entrepreneur
- Beyond 2020 Public Sector Workforce Renewal
- Digital Academy – Canada School of Public Service

## **Processes/Tools**

- Policy and Procurement Innovation – Digital Policy (TBS), Procurement (PSPC)
- GC Tools – GC Collab
- Digital Office (ISED)

# Key Resources / Links

Government of Canada Talent Management	Programs	International
<a href="#">Talent Cloud   Applicant: Home</a>  <a href="#">About Blueprint 2020 - Canada.ca</a>  <a href="#">Government of Canada launches Digital Academy - Canada.ca</a>  <a href="https://www.oecd.org/gov/innovative-government/Canada-case-study-UAE-report-2018.pdf">https://www.oecd.org/gov/innovative-government/Canada-case-study-UAE-report-2018.pdf</a>	<a href="#">Home - Innovative Solutions Canada</a>  <a href="#">Impact and Innovation Unit - Canada.ca</a>  <a href="#">Home - Canadian Digital Service</a>  <a href="#">Open Government</a>  <a href="#">Innovation Canada</a>  <a href="#">Behavioural Insights and Public Policy Lessons from Around the World ... - OECD - Google Books</a>	<a href="#">Observatory of Public Sector Innovation Observatory of Public Sector Innovation</a>  <a href="#">Nesta   The Innovation Foundation</a>  <a href="#">IDEO is a global design and innovation company.   ideo.com</a>  <a href="#">Behavioural Insights Team - GOV.UK</a>  <a href="#">Behavioural insights - OECD</a>
<a href="#">Bayview Yards – Your Ottawa Innovation Hub</a> <a href="#">Communitech</a> <a href="#">IBM and Nova Scotia Partner to Open Public Sector Innovation Garage – Techvibes</a> <a href="#">Volta - Canada's East Coast Innovation Hub</a>		



# **Thank You**

**Dr. Urvashi Dhawan-Biswal**  
**urvashi.dhawan-biswal@canada.ca**

 **@UrvashiBD**