

Workforce Development in Canada:

Talent, Skills, and Building a More Resilient Digital Economy

Perfectionnement de la main-d'œuvre au Canada :

talents, compétences et renforcement
d'une économie numérique plus résiliente

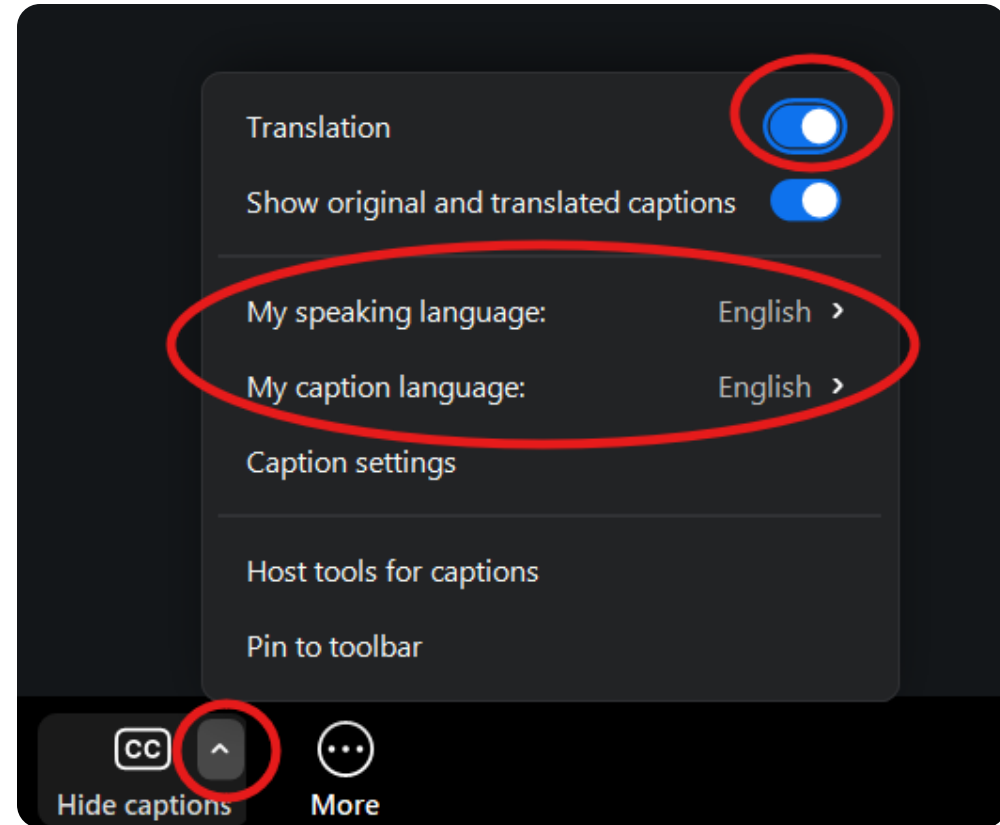
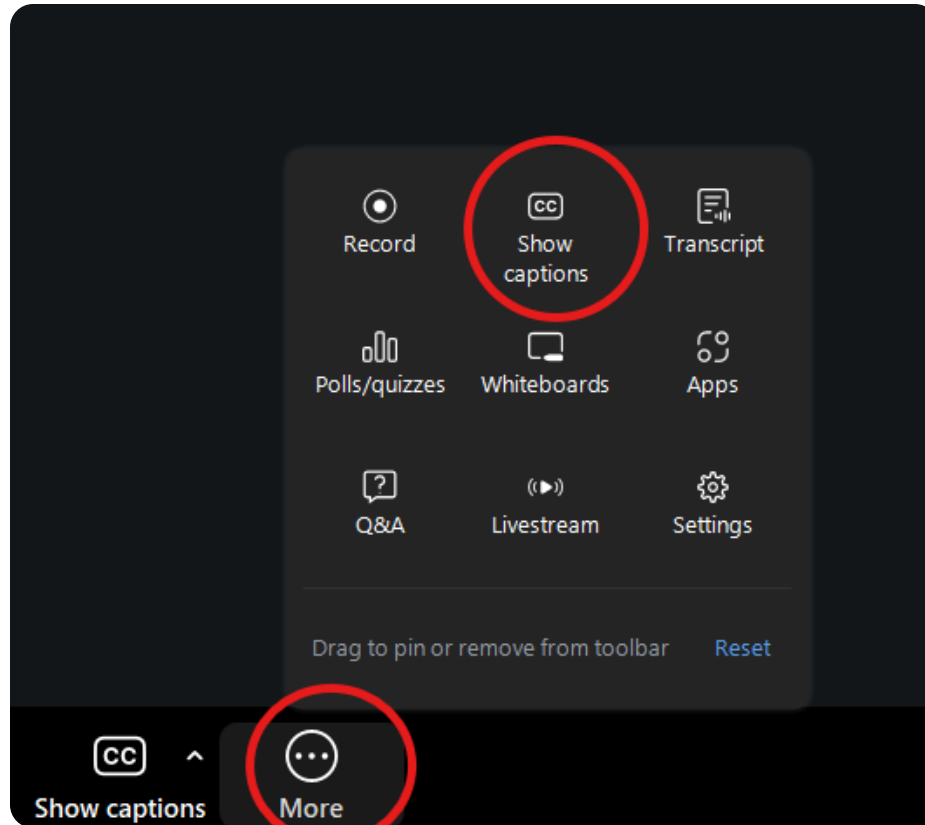


EMCEE | ANIMATRICE

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Welcome & Land Acknowledgement

**Accueil et reconnaissance
du territoire**



SPEAKER | CONFÉRENCIER

Sylvain Côté

Director of Research and
Policy | Directeur de la
recherche et des politiques

About ICTC | À propos du CTIC



The Information and Communications Technology Council (ICTC) is a neutral, not-for-profit national centre of expertise with the mission of strengthening Canada's digital advantage in the global economy.

For over 30 years, we have delivered forward-looking research, practical policy advice, and capacity building solutions for individuals and businesses. Our goal is to ensure that technology is utilized to drive economic growth and innovation and that Canada's workforce remains competitive on a global scale.

Le Conseil des technologies de l'information et des communications (CTIC) est un centre d'expertise national neutre et sans but lucratif dont la mission est de renforcer l'avantage numérique du Canada dans l'économie mondiale.

Depuis plus de 30 ans, nous fournissons des recherches prospectives, des conseils stratégiques pratiques et des solutions de développement des capacités pour les personnes et les entreprises. Notre objectif est de faire en sorte que la technologie soit utilisée pour stimuler la croissance économique et l'innovation et que la main-d'œuvre canadienne demeure concurrentielle à l'échelle mondiale.



Evidence and Data-Based Research on the Digital Economy



Practical Insights
for Decision Makers



Government & industry
leaders identify current and
future opportunities and
developing strategies



Innovative
workforce solutions



Workforce ready with market
needed skills



Building business
capacity



Private sector ready to compete
nationally and internationally



SPEAKER | CONFÉRENCIER

Chris Lindstrom

Economist and Research Analyst,
ICTC | Économiste et analyste de
la recherche, CTIC

Background

- Part of ICTC's **Quarterly Digital Economy Pulse** series, examining trends in Canada's digital economy
- This edition focuses on **the people**: who works in Canada's digital economy and how to build a stronger talent pipeline
- Examines workforce **composition, representation and equity gaps**, and barriers to integrating available talent
- Combines **secondary data analysis** (Statistics Canada Labour Force Survey) with **employer interviews and ICTC survey insights**
- Aims to identify strategies to build a **more inclusive, innovative, and competitive** workforce

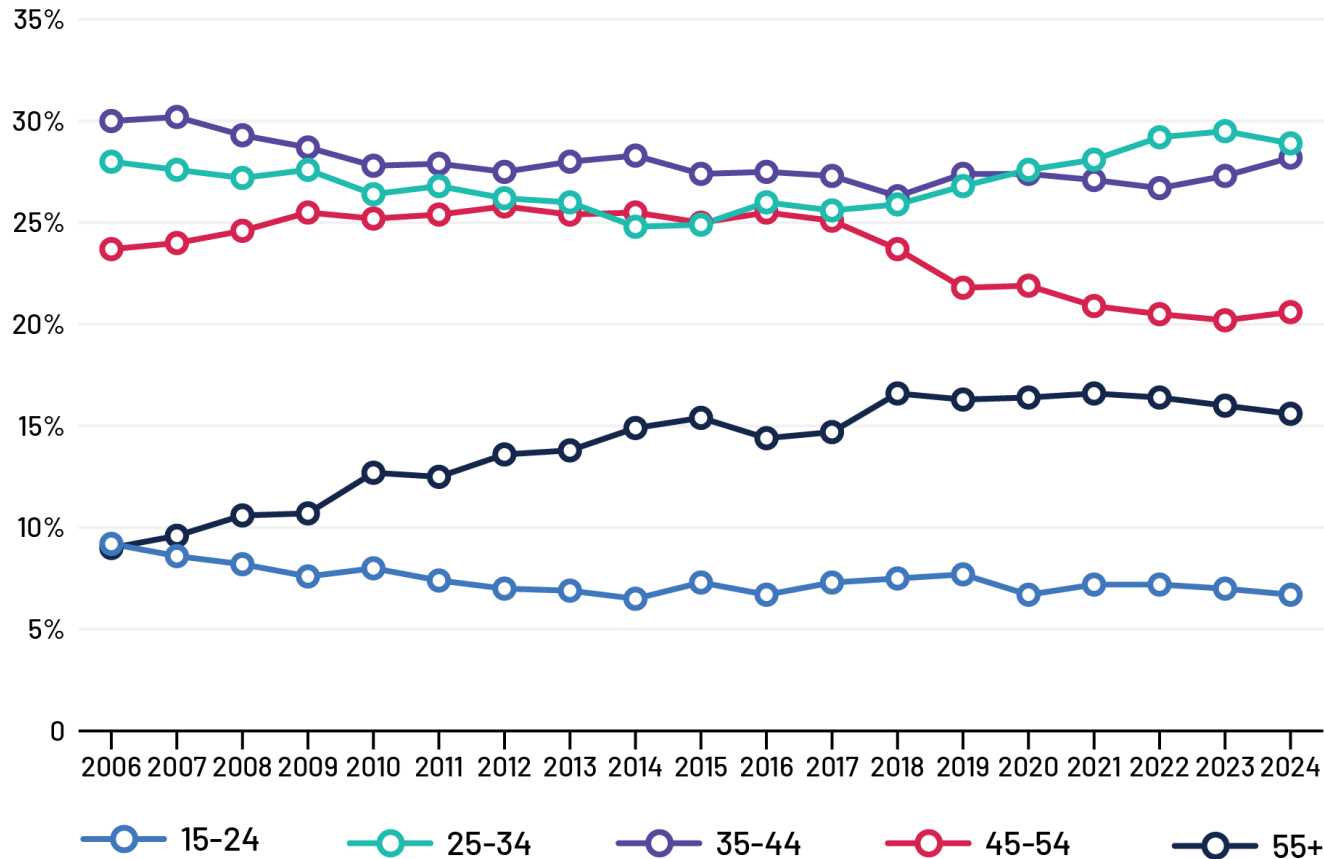
Why Workforce Development Matters

- Canada's digital economy drives **productivity, innovation, and global competitiveness**
- It depends on a diverse workforce, but faces persistent challenges around **representation, equity, and full integration of talent**
- **Three points of concern:**
 - Lack of equitable representation and compensation
 - An aging workforce not yet being replaced with adequately skilled entrants
 - Underutilization of skills and knowledge brought by newcomers

2.4M

people employed in
Canada's digital
economy

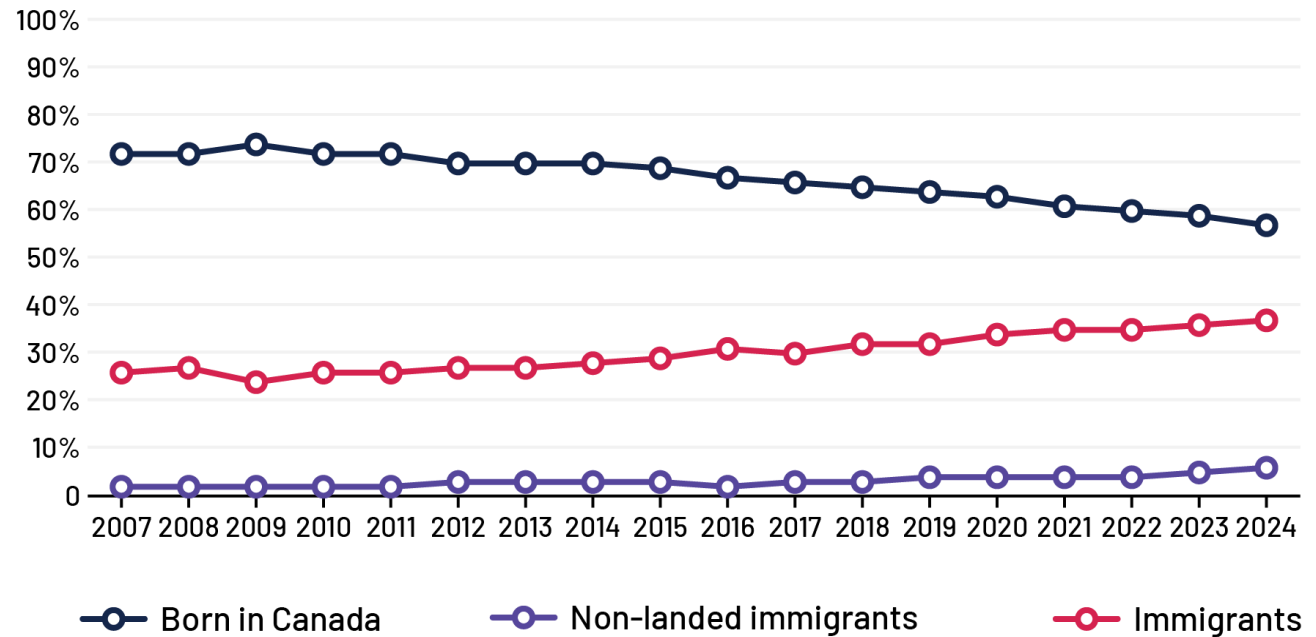
Age Composition and Youth Participation



- Young workers (15–24) fell from **9.2%** to **6.7%** of the digital economy over 20 years, while the 55+ share grew
- Youth are **about half** their share of the overall economy (6.7% versus 13.2%)
- The digital economy skews toward **25–44** relative to the general economy
- Likely driver: **rising education and experience requirements** may delay young people's entry

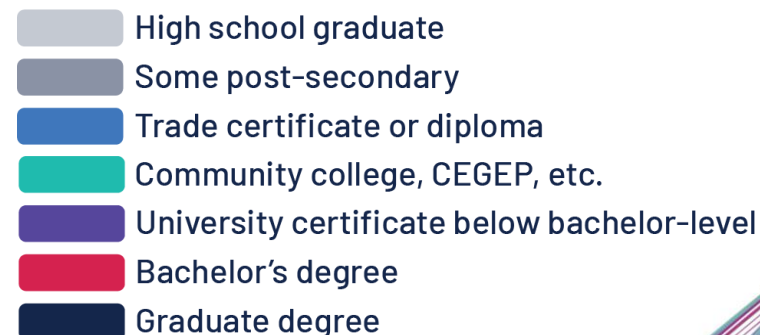
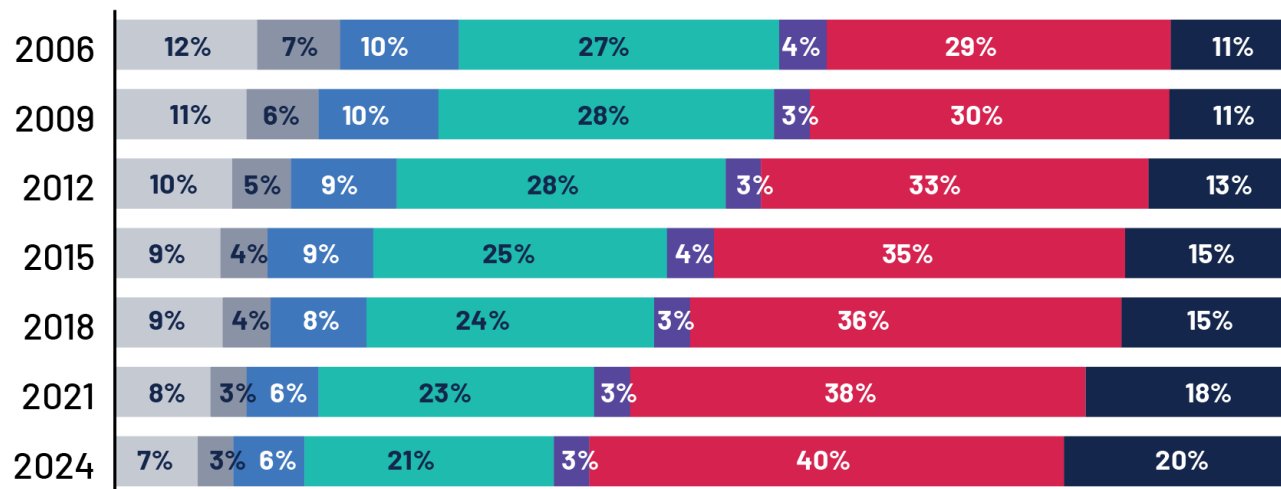
Immigrant Representation and Integration

- Immigrants were **37%** of the digital economy workforce in 2024 (885,800 people), up from 26% in 2007
- Non-landed immigrants (temporary foreign workers) rose from **2% to 6%**
- Many internationally educated professionals remain **underemployed** despite strong technical skills
- **Barriers:** preference for “Canadian experience” and inconsistent credential recognition
- Two paths forward: **employer-side** hiring and onboarding changes, and **newcomer-focused** programs



Education and Skills Requirements

- Education levels keep rising: **graduate degrees 11% to 20%**; bachelor's degrees 29% to 40% (2006–2024)
- Employers treat post-secondary education as a **baseline**, then look for experience, certifications, and micro-credentials
- Requirements **vary by role**: quantum computing leans on PhDs; some software and games roles hire from bootcamps
- Software developer and engineer employment is growing **faster** than user-technician roles, raising average experience needs



Workforce Development

- The central challenge is addressing both **unemployment and underemployment** of potential tech workers
- Two groups stand out: **youth** facing high unemployment, and **internationally educated professionals** whose skills go underused

Three levers frame the response:

1

**Work-integrated
learning (WIL)**

2

**Employer-led
upskilling**

3

**Integrating
internationally
educated professionals**

Supporting Students and New Graduates

- Young entrants face a long runway of **co-ops, internships, and experiential learning** before meeting hiring criteria
- **WIL programs** build employer relationships and real-world experience; employers rank co-op experience highest
- **“Synthetic” WIL** (self-directed projects in an innovation hub, supervised by an entrepreneur in residence) scales more readily where smaller employers lack supervisory capacity, though its impact is not yet measured

1/3

**WIL students return
to their co-op
employer for a job
after graduation**

Structured Upskilling and Reskilling

- Employer-led upskilling helps staff move from entry-level into **higher-experience, in-demand** roles
- Upskilling is a **more common** response to skill gaps than automation or offshoring
- Common approaches: training, **mentorship and buddying**, funded certificates and micro-credentials, and reskilling to retain workers
- Automation's full workforce impact is **not yet understood**: employers are still watching tools like Microsoft Copilot, with full effects of AI-assisted development expected by 2030

Gender Representation and Equity Gaps

32.6%

women in the digital
economy (2024)

1.4%

Indigenous-identifying
workers in tech (2021)

\$20K

tech gender
pay gap (2021)

- Women's share has barely moved: up just **2.1 points** since 2006 (30.5% to 32.6%)
- The pay gap is **widening** — up from a \$7,200 gap in 2016
- Racialized tech workers earned **\$14,200 less**; Indigenous tech workers faced a **\$14,800** salary gap

Beyond the Aggregate: A Second Gap

ICTC's *Closing the Gap: Overcoming Barriers to Leadership for Women in Canada's Digital Economy* report finds that women's representation falls sharply above mid-level roles

23%

women executives across the
Canadian economy (2016–2020)

9%

women in executive and senior
management in the ICT sector

54.5% → 45.3%

women in "next-up" roles, direct
reports to senior management
(2022 to 2025)

Entry and attrition compound the pattern

- 62.3% of women STEM graduates never enter STEM careers
- Over a 10-year period, 13.7% of women left STEM compared with 8.3% of men

Source: ICTC, *Closing the Gap: Overcoming Barriers to Leadership for Women in Canada's Digital Economy*

Barriers to Gender Diversity in Canada's Digital Economy

Biased Perception of Leadership Traits

- Persistent stereotypes define leadership with "masculine" traits
- 39% report gender bias in promotions

The Motherhood Bias

- Women with children perceived as less committed or available
- Leads to missed promotions, stalled careers, and wage penalties

Lack of Role Models and Mentors

- Few women in senior roles makes mentoring less available
- Lack of visible paths discourages aspiring women leaders

Organizational Culture and Exclusion

- Male-dominated networking and exclusion from key events
- 46% cite stereotypes and microaggressions as attrition drivers



Read the full report:

Digital Economy Pulse: Workforce Development in Canada, June 2026





SPEAKER | CONFÉRENCIÈRE

Vanessa Thomas

Senior Program Coordinator,
ICTC | Coordinatrice Principale
de Programmes , CTIC

Two Programs, One Mission

ICTC's Women in Technology portfolio, funded by Women and Gender Equality Canada (WAGE)

ACTIVE • 2024-2027

Advancing Women's Leadership (AWL)

Equips organizations and leaders across five provinces with the tools, mentorship, and coaching to build more inclusive leadership pathways.

Mentorship

Assessment Tool

Executive Coaching

Workshops

COMPLETED • MARCH 2026

Changing the Narrative (CTN)

Supported women-owned social enterprises, with a focus on Black women and OLMC women, through mentorship, pitch readiness, and investment confidence.

Mentorship

Pitch Events

Knowledge
Mobilization Sessions

Networking

Advancing Women's Leadership – The Program

WHY IT MATTERS

- Women remain underrepresented in executive and senior leadership roles across Canada's digital economy.
- AWL was designed to help organizations address those barriers through structured, evidence-based support.

WHAT IT DOES

- Provides organizations with an Equitable Leadership Assessment Tool to benchmark gender-equity maturity.
- Delivers mentorship, workshops, webinars, coaching, and practical resources to support organizational change.

HOW WE'RE DOING

- Exceeded the national participation target by 31%, engaging 654 organizations.
- Nearly 80% of organizations reported implementing or enhancing a gender-equity initiative.

AWL

"Creating More Seats at the Decision-Making Table"

Program objective:

Increase women's representation in leadership by strengthening mentorship, leadership development, knowledge exchange, and organizational capacity.

AWL – Impact to Date

National results since launch, across British Columbia, Alberta, Manitoba, Ontario & Quebec



654

organizations engaged

target: 500



111

mentors connected

target: 100



507

webinar participants

across 14 sessions



15

ecosystem partnerships

national & regional

What Participants Told Us

80%+

rated sessions relevant
and practical

79%

implemented or enhanced
a gender-equity initiative

74%

increased belief in the
value of diverse leadership

Changing the Narrative – The Program

WHY IT MATTERS

- **Women make up nearly half of Canada's workforce**, yet only about 30 % of digital economy employment and **roughly 17% of private-sector business ownership**.
- Women entrepreneurs continue to face barriers to mentorship, investment, and professional networks.
- These barriers are often greater for Black women and women from Official Language Minority Communities.

WHAT IT DID

- Connected entrepreneurs with mentorship, practical learning, networking opportunities, and provincial pitch events.
- Strengthened investment readiness and business growth through ecosystem partnerships.

HOW IT WENT

- **Supported 563 women-owned businesses**, exceeding the original target.
- Helped participants build confidence, expand networks, and strengthen investment readiness.

CTN

“Unleashing the Full Potential of Women-Owned Enterprises”

Program objective:

Strengthen mentorship pathways, facilitate knowledge exchange, expand professional networks, and increase visibility through pitch opportunities.

Changing the Narrative – Final Impact

National results, program completed March 2026



563

businesses supported

target: 500



108

mentors engaged

target: 100



5

pitch events held

328 registered



22

ecosystem partnerships

national & regional

What Participants Told Us

"The biggest gain that I get, of course, is knowledge – but it's also the motivation to see, hey, I'm not alone."

– CtN Participant

"I don't think I would have had the confidence to apply for bigger pitch competitions if I hadn't done the ICTC pitch and then won."

– Melissa Kober Meier, Founder & CEO, Mekomi Solutions Inc.

AWL: The 2026–27 Extension

ICTC's initial evaluation found that many organizations, especially smaller and rural firms, struggled to translate awareness into sustained structural change. The extension responds directly, with five new activity streams designed to move organizations from reflection to action.



From Assessment to Action

Guided sessions turning assessment results into real plans



Executive Coaching

Small-group strategy support for implementation



Mentorship Connect

Bi-weekly virtual touchpoints with mentors



Allyship Development

Workshops equipping men to champion equity



Living Lab & Summit

10 organizations piloting inclusive practices

136

organizations already engaged toward our goal of 175 – with a deliberate focus on rural and remote communities across all five provinces.

Extension period: April 1, 2026 – March 31, 2027

How Research Becomes Programming

Every new ICTC program or activity traces back to what our own program evaluations told us organizations still needed



Be Part of the Change

For Organizations



Register your organization for AWL



Complete the Equitable Leadership Assessment Tool – under 20 minutes, at etalentcanada.ca



Connect with mentors and peer organizations through upcoming virtual sessions



For Individuals & Partners



Become a mentor: Support emerging women leaders by sharing your experience and expertise.



Partner with us: Collaborate on future initiatives that advance women's participation in Canada's digital economy.



Contact the Women in Tech team: womenintech@ictc-ctic.ca

Thank you

Vanessa Thomas | Senior Program Coordinator, ICTC

Q&A

Questions-réponses



Information and
Communications
Technology Council

Conseil des technologies
de l'information
et des communications



www.ictc-ctic.ca