Signal49
RESEARCH | RECHERCHE

Continue to the following page to access the original document.

Notice: Operating Name Change

Effective January 26, 2026, AERIC Inc./Signal49 Research discontinued use of 'The Conference Board of Canada' name, logo and branding, which had been used by AERIC Inc./Signal49 Research under license from The Conference Board, Inc. The Conference Board, Inc. and its licensees, which are not affiliated with Signal49 Research, own all right, title and interest in THE CONFERENCE BOARD name and trademarks in Canada and have the exclusive right to their use in Canada since January 26, 2026.

Le 26 janvier 2026, AERIC Inc., exerçant ses activités sous le nom Signal49 Recherche, a cessé d'utiliser le nom, le logo et l'image de marque « Le Conference Board du Canada », qu'elle utilisait auparavant sous licence consentie par The Conference Board, Inc. Au Canada, les droits, titres et intérêts relatifs au nom « The Conference Board » et aux marques de commerce afférentes appartiennent tous à The Conference Board, Inc. et aux titulaires des licenses consenties par celle-ci. Depuis le 26 janvier 2026, ces parties, qui ne sont aucunement affiliées à Signal49 Recherche, sont les seules à pouvoir utiliser ce nom et ces marques au Canada.

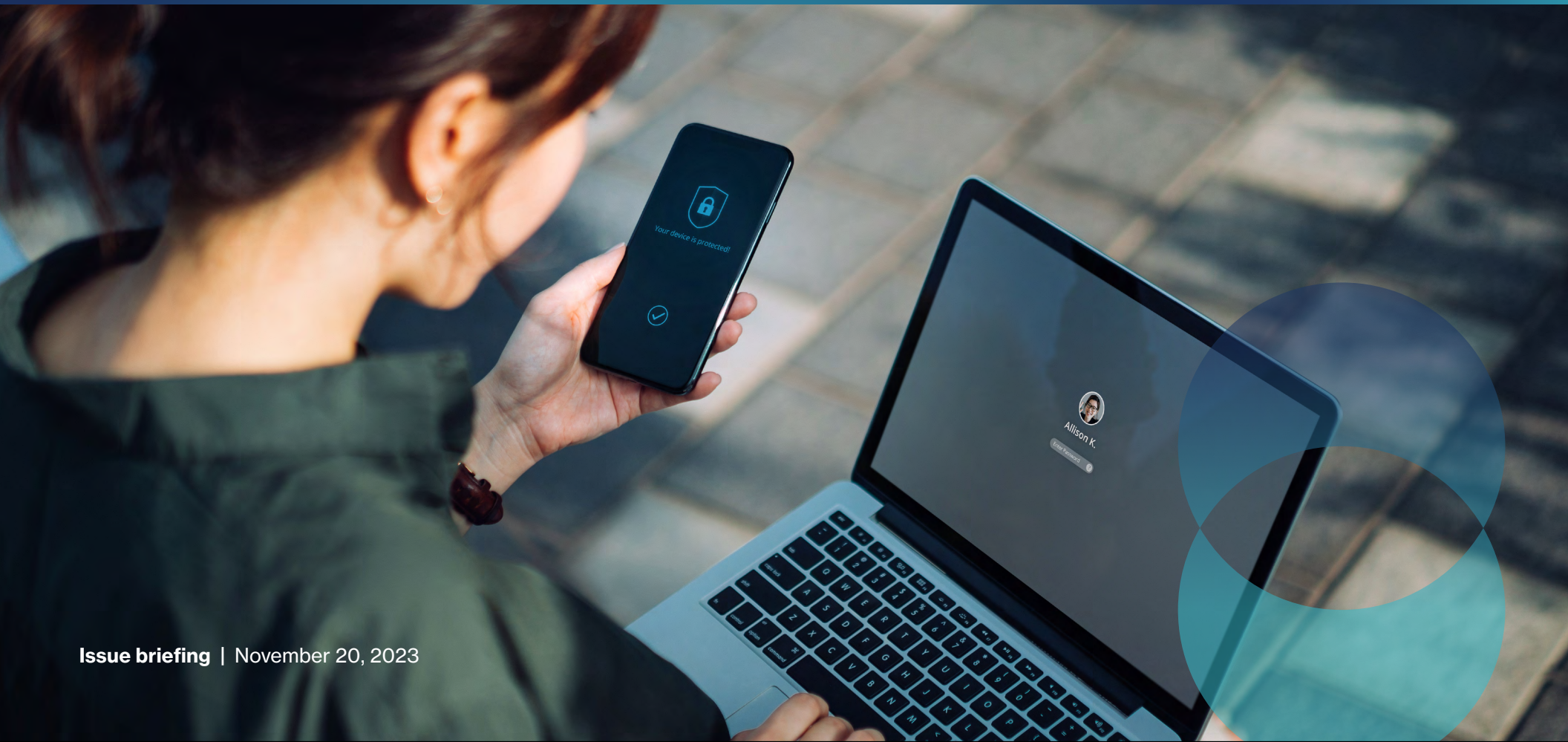
---

inFact

The Conference Board of Canada

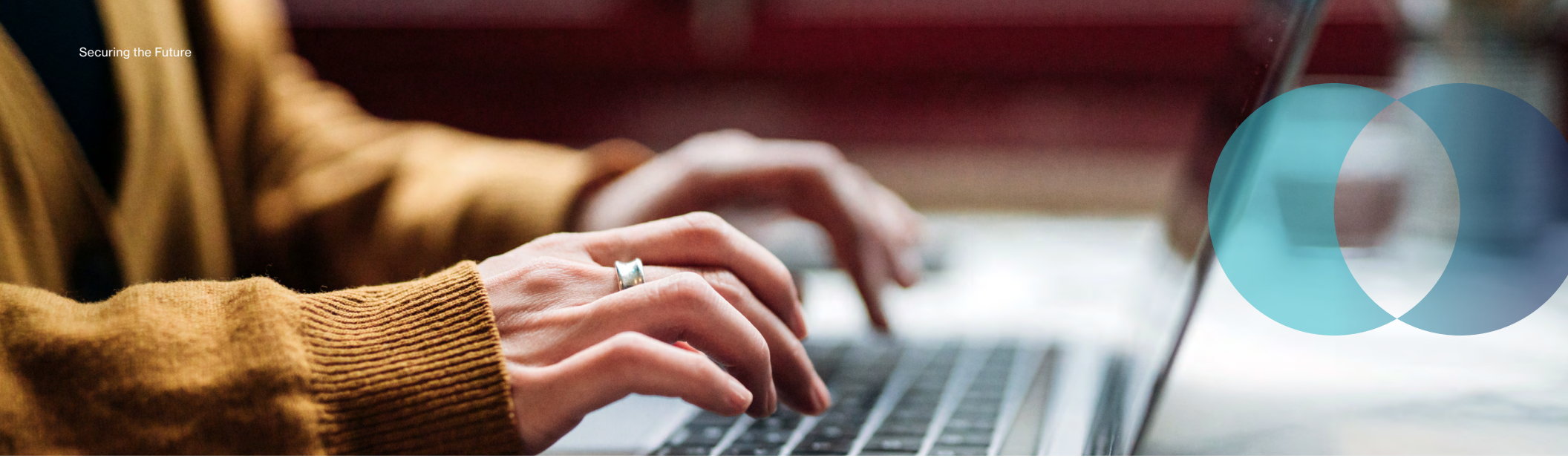
Securing the Future

Cybersecurity Skill Trends



Issue briefing | November 20, 2023

Contents



Demand for cybersecurity skills on the rise

In late 2020, hackers took down the network of the City of Saint John. They demanded $17 million in bitcoin to restore its functions, including water and sewage billing accounts. The municipality refused to pay and had to rebuild its network from scratch, at a cost of $2.9 million.[1]

This case isn't unique.

With the rise in digitalization, data has become the new gold: 85.7 per cent of Canadian organizations experienced at least one cyberattack in 2021, and the average cost of a data breach for Canadian organizations was $5.4 million in the same year.[2]

The onslaught of data breaches, cyberattacks, and cyber espionage highlights the importance of robust cybersecurity. As Canadian businesses and government entities undergo digital transformation, ensuring data integrity and network safety is paramount.

The demand for talent with cybersecurity skills is clear and only expected to grow.

1 Lyall, "Hackers demanded $17 million worth of bitcoin."
2 O'Driscoll, "Canada cyber security and cyber crime statistics."

Globally, there is a significant cybersecurity talent deficit. In 2022, the International Information System Security Certification Consortium (ISC2) reported a global cybersecurity workforce gap of 3.4 million workers, an increase of over 26 per cent from 2021's numbers.[3]

Cybersecurity skills

Cybersecurity involves the protection of systems, networks, and data from digital attacks. These attacks aim to access, change, or destroy sensitive information, extort money, or interrupt normal business processes. People with cybersecurity skills are trained to defend against such threats and ensure the confidentiality, integrity, and availability of data. Cybersecurity is a multi-faceted field with numerous specializations, including network administration, general cybersecurity analytics, incident response, and digital forensics.

Canada is no exception to this trend: The same study estimates that there were around 124,000 cybersecurity professionals in Canada, a large increase compared with two years earlier, but there remains a talent shortage of 25,000 professionals in the field.

This means one in six cybersecurity jobs in Canada go unfilled, representing one of the digital economy's biggest challenges.[4]

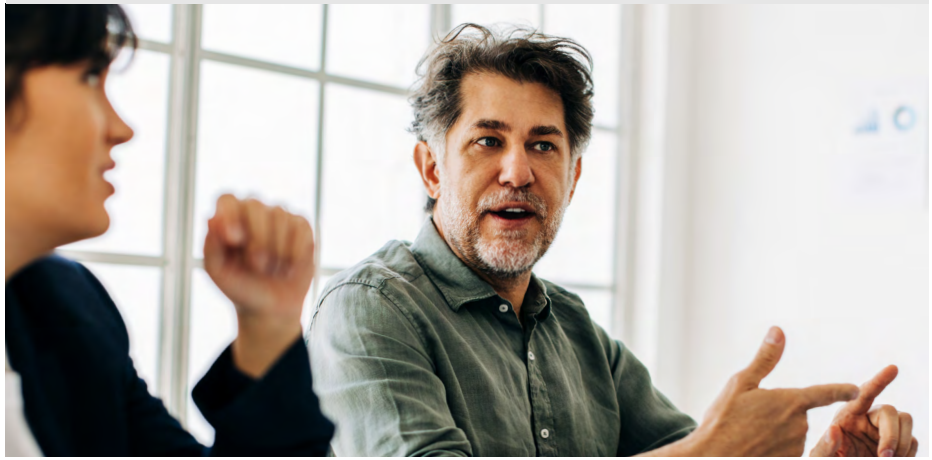
The shortage of cybersecurity talent leaves Canadian PSIs with a pivotal role to play. PSIs are crucial in preparing adept professionals equipped with cybersecurity skills to meet the labour demand.

3 Poremba, "The cybersecurity talent shortage."
4 ICTC, "One in Six Canadian Cybersecurity Roles Go Unfilled."

Employer demand for cybersecurity skills: Data insights

Job posting data

This section offers insights into the job vacancies that require cybersecurity skills, based on job posting data from Vicinity Jobs. This Canadian analytics company specializes in tracking real-time labour market trends and uses AI and natural language processing to monitor job postings based on industry, occupation, skills, education, etc. Effectively, this data provides an up-to-date snapshot of the unmet labour demand or hiring demand for cybersecurity skills in the Canadian job market.



Overview of the cybersecurity demand

High demand, higher pay

Reflecting the rising hiring demand for cybersecurity skills, Vicinity Jobs began tracking cybersecurity as a skill in May 2023. Between May and August 2023, an average of 773 job postings per month required cybersecurity skills, making up 0.3 per cent of all Canadian job postings. To put it in perspective, the volume of cybersecurity hiring demand is comparable to demand for popular computer programming and cloud computing skills such as Java, Amazon Web Services (AWS), etc.

The earning potential of professionals with cybersecurity skills is also relatively high. The average hourly wage offered to positions with a cybersecurity skills requirement is $45.20, or 70 per cent higher than the average wage of all job postings in Canada.

Cybersecurity skills on the map

Ontario, the cyber hub

The geographical distribution of hiring demand for cybersecurity skills is heavily clustered in Ontario. This province hosts more than half (54.4 per cent) of Canada's cybersecurity job postings in 2023, which is 15.5 percentage points more than its share of the population. (See Exhibit 1.)

The rest of Canada's provinces and territories, except for Nova Scotia and Nunavut, have a cybersecurity job posting share below their weight in population distribution. Some provinces, including Manitoba and Newfoundland and Labrador, have minimal job postings requiring cybersecurity skills.

Exhibit 1

Ontario is the hotspot for cybersecurity

(share of job postings with demand for cybersecurity skills in Canada, left, vs. share of population in Canada, right)