



Prince Edward Island

Leading Atlantic Canada in Digital Readiness

Cisco Canada Digital Readiness Index 2023



Provincial Insights Brief

DRI Score: 0.74 | Ranking: 5th

In today's world, digitally mature countries have the infrastructure, governance, labour force, digital services and technologies to support social development, economic growth and global competitiveness.

Major technology trends including mobility, 5G networks, cybersecurity, Internet of Things (IoT) and cloud solutions have compelled countries to reimagine government, enhance access to public services, promote innovation and drive technology adoption.

At Cisco, we are fuelled by our purpose to 'Power an Inclusive Future for All' by leveraging our technology, our expertise and our extended ecosystem to bridge gaps of inequity and drive change. Cisco's desire to solve global problems and create a more inclusive world through technology led to our first Global Digital Readiness Index (DRI) in 2017. In 2023, we completed the Cisco Canada Digital Readiness Index, a comprehensive analysis of Canada to help provinces and territories better understand the building blocks of digital readiness and explore opportunities to improve their relative performance.

This holistic model measures digital readiness across many components beyond technology including basic needs, human capital and the business and start-up environment. While access to technology and the infrastructure to support digital technologies is critical, if, for instance, individuals' basic needs are not met, a country cannot maximize the benefits of digital opportunity. The Cisco Canada Digital Readiness Index provides an understanding of a province or territory's level of digital readiness and what interventions and investments could help them advance.

The Cisco Canada DRI is based on data published from 2019 to fall of 2022. For more information on Canada's national digital readiness score, the full report is available [here](#).*

This guide was developed to enable provinces and territories to understand their level of digital readiness and explore areas of opportunity to reach their full potential.

Measuring Digital Readiness: DRI Components

The Cisco Canada Digital Readiness Index (DRI) employs a comprehensive framework and model based on seven different components of digital readiness including **Basic Needs**; **Business and Government Investment**; **Ease of Doing Business**; **Human Capital**; **Start-Up Environment**; **Technology Adoption**; and **Technology Infrastructure**. Unique, market-specific metrics serve as proxies for performance in each of the components.



Basic Needs

Basic needs for a population to survive and thrive

Metrics

- Life expectancy
- Low Income
- Food insecurity
- Housing affordability



Business & Government Investment

Private and public investment in innovation and technology

Metrics

- Business expenditure on R&D
- Government expenditure on R&D
- Infrastructure investment



Ease of Doing Business

Basic infrastructure/policies needed to support business continuity

Metrics

- Business density
- Business growth
- Business confidence
- Internal trade barriers



Human Capital

Skilled labour force to support digital innovation (build and maintain)

Metrics

- Labor force participation
- Youth population
- Post-secondary education
- Immigration



Start-Up Environment

Environment which fosters innovation within a community

Metrics

- Venture capital investment
- Business entries
- Access to financing



Technology Adoption

Demand for digital products/services continuity

Metrics

- Zero emission vehicle (ZEV) registrations
- Broadband subscriptions
- Online sales



Technology Infrastructure

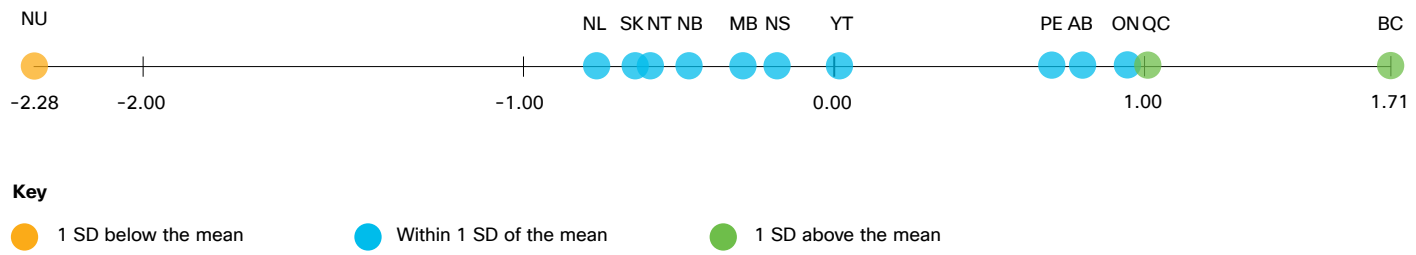
Infrastructure available to enable digital activities and connected to consumers (IoT, Cloud)

Metrics

- Broadband availability
- LTE coverage
- EV charging stations
- Internet affordability



Overall DRI Score Across Provinces and Territories



The Cisco Canada DRI examines the performance of Canada’s provinces and territories and provides a benchmark on their progress towards digital readiness¹. British Columbia tops Canada’s DRI ranking with a sizable lead, followed by Québec and Ontario, while the remainder of the provinces and territories fall closer to Canada’s national average DRI score. The exception is Nunavut, which faces unique digital readiness challenges.

¹Z-scores are a way to measure how far away a particular data point is from the average (or “mean”) of a group of data points, and how unusual or “extreme” that value is compared to the rest of the group. If a score is below the mean, it is expressed as a negative number, and if above the mean, it will be a positive number.

P.E.I.'s Digital Readiness Index

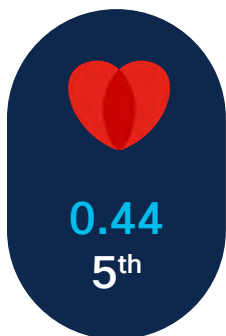
DRI Score: 0.74 | Ranking: 5th

Prince Edward Island (P.E.I.) is leading Atlantic Canada in creating the conditions for a digitally ready and inclusive society. The province has a strong business environment and has set ambitious population growth targets in recent years, which have supported P.E.I.'s high net migration rates. To continue to build on its strengths and support a more digitally ready province, the Government of P.E.I. should prioritize supporting innovation in the agriculture sector, growing a skilled labour force and further digitizing services for its residents.

P.E.I.'s DRI score placed it fifth in Canada driven by strong performance in Ease of Doing Business, Human Capital and Technology Infrastructure.

DRI Scores: A breakdown by component

The following section will explore how P.E.I. scored in each of the DRI's seven components and what metrics drove performance.



Basic needs are an indicator of the health of a society.

- P.E.I. scores well in the Basic Needs component with consistently above average metrics in life expectancy, income, food security and housing affordability.
- However, macroeconomic conditions are rapidly changing, and this study may not accurately capture the housing cost increases in the province.



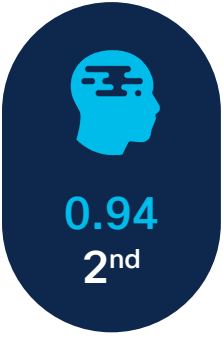
The capacity of government and businesses to invest in their future is a key factor in enabling digital readiness.

- This is P.E.I.'s weakest component and greatest area of opportunity to improve.
- The province has the lowest infrastructure investment per capita in the country, weak business research and development (R&D) and average government R&D.



An environment where businesses can invest and grow with ease and confidence is a core foundation to digital readiness.

- Overall, P.E.I. ranks second in Ease of Business with the country's second highest business density and fourth highest business confidence.
- However, the province's score is held back by slightly lower than average internal trade barriers.



Human Capital – a society’s ability to build and maintain a skilled labour force – is intrinsic to digital innovation and readiness.

- P.E.I.’s first rank in immigration is a major success story and has been the main contributor in turning around its demographic decline.
- While the province continues to have a small youth population percentage, population trends are moving in a positive direction.



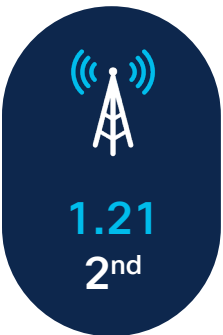
Start-ups are an important source of innovation and economic growth.

- P.E.I. has the second highest business entries in Canada which has boosted its scores in this component.
- However, businesses in the province have much less venture capital investment and slightly below average access to financing compared to other provinces.



Technology Adoption serves as a proxy for the population’s willingness and ability to use new and emerging technologies.

- P.E.I. has the second highest broadband subscription rate in the country.
- However, the province has one of the lowest percentages of online sales in Canada, which impacts the score in this component.



Modern technology infrastructure is key to economic growth and the delivery of services.

- P.E.I. has the best LTE coverage in Canada due to its geography and previous infrastructure investments. The province has the third highest number of EV charging stations per capita.
- These are strong indicators that P.E.I. has the capacity to implement new technologies as they arise.

P.E.I.'s Opportunities

A Path Forward

The Cisco Canada DRI identifies strengths and opportunities for P.E.I. to further improve its digital readiness.



Incentivizing digital innovation in agriculture

Agriculture is a major source of economic activity for P.E.I., with the fishing and agriculture sectors boosting provincial GDP by \$737 million and supporting 7,500 jobs as of 2019.² Supporting digital advancements in agriculture is imperative for the province's digital readiness and economic success, and both the provincial and federal governments have increased investments to support innovation and technology adoption in this sector.

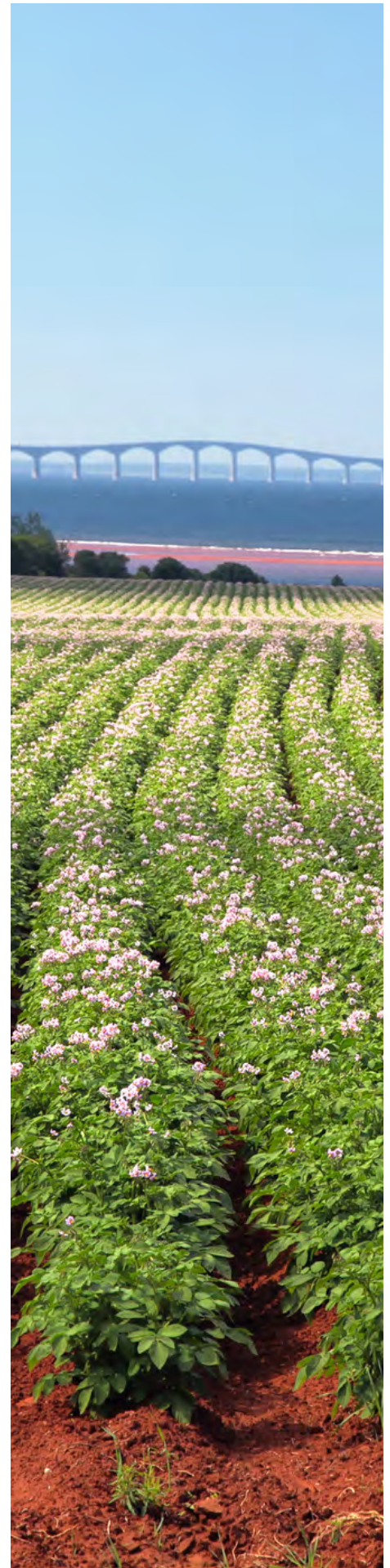
The Government of P.E.I.'s Agriculture Research and Innovation Program (ARIP) supports farm-level research, innovation and technology adoption projects that can lead to increased competitiveness, productivity and profitability of P.E.I.'s agriculture industry. Meanwhile, the federal government invested \$16 million in 2022 into the province's Potato Stabilization and Innovation Initiative (PSII) to support the modernization of SME operations through investments in areas including digitization and automation.

PEI's bioscience cluster has tripled in size since 2005 and has attracted companies and institutes focused on research, development and commercialization of agriculture products. The provincial and federal governments, in partnership with P.E.I.'s agriculture and bioscience industries, could facilitate the adoption of technology that supports agriculture businesses in adapting to changing economic and climate activities. Continuing to incentivize farms to embrace emerging technologies can also help create and protect jobs in the agriculture industry across the island.



Supporting a strategy for ambitious population growth and skilled labour force retention

With an aging population, it is imperative that P.E.I. avert significant economic challenges through training and retaining skilled professionals to maximize labour force participation. P.E.I. has impressive net migration numbers – including inter-provincial and territorial migration and immigration – and has made significant gains in population growth since 2017. This was supported by the province's *Population Action Plan*, a strategy to grow its population and strengthen its labour force.



While this strategy expired in 2022, it provides the provincial government an opportunity to set new population growth, labour force and retention targets.

A new population strategy aligned with digital readiness would position P.E.I. as a welcoming and inclusive destination for Canadian migrants and immigrants. The provincial government has an opportunity to work with business and community partners to provide skills training programs and employment supports, with the hopes of retaining more newcomers.



Increasing digitization of government services

As economies become increasingly digitized, it is important that governments keep pace with private and non-profit sectors to meet citizen expectations around service delivery. P.E.I. has taken steps toward the digitization of public services that are focused on the user experience, with a long-term vision to enable residents to access all government services through a single digital account. The Government of P.E.I. has also supported the use of digital services in the healthcare system, including working towards a province-wide electronic medical record system.

The Government of P.E.I. should consider creating a standalone ministry responsible for digital government or a provincial digital service that could strengthen capacity for public digital service transformation. A provincial digital service could play a supporting role in building capacity at the local level.



² <https://crtc.gc.ca/eng/publications/reports/policyMonitoring/2020/cmr4.htm#a2.3>

³ <https://yukon.ca/sites/yukon.ca/files/ybs/fin-yukon-employment-annual-review-2021.pdf>

⁴ <https://www150.statcan.gc.ca/t1/tb1/en/tv.action?pid=9810041401&pickMembers%5B0%5D=1.170&pickMembers%5B1%5D=5.1&pickMembers%5B2%5D=4.1&pickMembers%5B3%5D=3.5&pickMembers%5B4%5D=2.1>

Conclusion

Prince Edward Island is well positioned to realize the benefits of digitization. The province leads the country in net migration and can capitalize on this ability by attracting and developing talent. With one of Canada's highest business density rankings, P.E.I. has the pre-requisites to maintain a strong business environment.

To do so, it must improve its infrastructure investment per capita – the lowest in Canada – and its comparatively weak business and government R&D. By putting innovation and investment at the forefront, the province can strengthen core industries including bioscience and agriculture.

